



# SUICIDE, SUSPECTED SUICIDE AND ATTEMPTED SUICIDE ON THE VICTORIAN HEAVY RAIL NETWORK 2001-2021

SEPTEMBER 2022 (V2)

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# INTRODUCTION

This report has been prepared by the TrackSAFE Foundation to increase knowledge and inform prevention activities in order to reduce fatalities, injuries and near misses on the Australian heavy rail network.

The TrackSAFE Foundation, established by the Australasian Railway Association and UGL in 2012, is Australia's only harm prevention charity focused on reducing deaths, injuries and near misses on the rail network. TrackSAFE also works to improve the wellbeing of rail employees.

Every life lost and injury on the rail network is a tragedy and the impacts on family, friends, communities, rail and recovery staff and witnesses can be profound. These incidents together with thousands of near hits each year can cause trauma and work-related stress and illness to rail and recovery staff.

They also cause disruption and delays to hundreds of services each year impacting customers and economic efficiency. The average annual economic burden of railway safety incidents in Australia during the period 2007-2015 was estimated to be approximately \$360.1 million<sup>1</sup>.

Working closely with rail organisations, the TrackSAFE Foundation is actively engaged in a wide range of rail safety activities including public awareness campaigns and facilitation of the annual Rail Safety Week. To prevent suicides on the rail network, it advocates for fencing and other barriers to reduce access to the rail corridor, encourages individuals to seek help before and at the time of crisis and is currently exploring bystander intervention options. It also promotes the responsible reporting of suspected and attempted suicides by the media.

In partnership with Lifeline Australia, TrackSAFE implements public awareness campaigns to encourage individuals to contact Lifeline on 13 11 14 whether they are in crisis or just needing someone to talk to. The [Pause.Call.Be Heard](#) signage is used widely in the rail corridor as well as being delivered digitally in bursts to those in and near the corridor.

More information on TrackSAFE's prevention activities is available via its [website](#).

This Victorian report complements an Australia wide report that is available [here](#).

Some people may find the content of this report confronting or distressing. The information included here places an emphasis on data, and as such, can appear to depersonalise the pain and loss behind the statistics. If this material raises concerns for you contact Lifeline on 13 11 14.

1. RISSB 2015 AS 7644. 2015. Rail Corridor Access Infrastructure Standard p4.

# NOTES ON THE DATA IN THIS REPORT

- The TrackSAFE Foundation has prepared a similar report to this for Australia as a whole which may provide some additional useful information.
- Fatality, injury and near miss data in this report has been sourced from either the National Coronial Information System (NCIS) or the Office of the National Rail Safety Regulator (ONRSR).
- Where data is described as 'suicide', the data has been sourced from a report commissioned by the TrackSAFE Foundation from the NCIS for the period 2000-2017. Information about the limitations of this data can be provided by TrackSAFE.
- Where a fatality is described as 'suspected suicide', the data has been obtained by ONRSR and includes incidents notified to the Regulator by rail operators as required by the Rail Safety National Law National Regulations. These incidents are notified to ONRSR shortly after the incident. The Coroner may make a different determination about the cause of death.
- The number of suicides in 2016 & 2017 (76 & 82 respectively) as determined by Coroners' and included in the NCIS report is lower than the suspected suicides reported in the ONRSR database (77 & 94 respectively).
- There is some variability in the time period used for the analysis included in this report due to the form and availability of data.
- Some of the information presented in this report for 2016-2021 has been interpreted and coded from free-form text in the ONRSR database by TrackSAFE. This includes sex, location and action.
- TrackSAFE has calculated the railway suicide/suspected suicide rate per 100,000 population using Australian Bureau of Statistics (ABS) annual June population estimates. The ABS advises that care should be taken comparing 2019 suicide data with previous years as some ABS data has been subject to quality improvement processes and revisions.
- Two amendments were made to the ONRSR occurrence database by TrackSAFE. A 2017 Victorian tram incident that resulted in a serious injury is excluded and suspected suicide fatality in NSW in 2016 was misclassified as a minor injury.

# SUMMARY

- Between 2001-2021 there were 1,588 suicides (2001-2017) and suspected suicides (2018-2021) on the Australian heavy rail network, an average of 74 per year and equivalent to 71% of all fatalities. More occurred in Victoria than in any other state (45%) followed by 29% in New South Wales, 12% in Queensland, 9% in Western Australia and 5% in South Australia. Nationally, 67% (1,037) of suicides and suspected suicides occurred on the track between stations and 32% (497) occurred at a station.
- Between 2001-2021 there were 954 fatalities on the Victorian heavy rail network, 708 suicides or suspected suicides (74%) and 246 other fatalities (26%). This is a total average of 46 fatalities per year, 34 suicides and suspected suicides and 12 other fatalities, or almost 4 every month.
- Of the suicides and suspected suicides, 82% occurred on the track between stations, this is compared to 67% for Australia as a whole.
- There has been a decrease in the rate of suicide/suspected suicide on the rail network per 100,000 of the population from 0.54/100,000 in 2010 to 0.42/100,000 in 2021.
- There has been a decrease in the proportion of suicide and suspected suicide deaths on rail of total deaths by suicide from 5.38% in 2010 to 4.18% in 2021.
- Of the suicides (2001-2017) and consistent with the wider community suicide trends, almost three quarters of those that died were men. However, those who choose rail to take their own life are younger, with 44% aged 30 years and under.
- Between 2016-2021 and based on notifications to the Office of the National Rail Safety Regulator:
  - 217(92%) of a total of 235 fatalities were suspected suicides
  - there were 347 suspected and attempted suicides resulting in 217 fatalities, 54 serious injuries, 24 minor injuries and 52 incidents with no injury
  - 70.9% of occurrences occurred from midday onwards
  - In almost 1 in 4 attempted suicides, the individual will survive a suicide attempt after being struck by a train or involved in a train related incident
  - If the individual is not struck by a train, 83% survived and 60% had no injury
  - 74% of attempted suicides that occur on the track result in a fatality and 71% of attempted suicides that occur from a station, the individual survives.

# SUICIDE IN AUSTRALIA

- Suicide is rare and preventable.
- However, it is the leading cause of death for Australians aged between 15-45 years<sup>1</sup>.
- The number of people dying by suicide has increased from 2,480 in 2010 to 3,139 in 2020, or around 9 lives lost per day to suicide<sup>2</sup>. It is estimated that each suicide death affects up to 135 people<sup>3</sup>.
- In 2020 suicide accounted for 1.9%<sup>2</sup> of all deaths in Australia.
- In Victoria, the number of people dying by suicide has increased from 558 in 2010 to 694 in 2020<sup>4</sup>.
- The cause of suicidal behaviour is complex and multifaceted. In 2020, some of the comorbidity factors occurring with suicide include: 40.3% mood disorders, including depression, 29.3% drug and alcohol use, 23.5% suicide ideation, 23.2% problems with relationships, 23.1% chronic psychoactive substance use disorders<sup>3</sup>. The psychosocial risk factors associated with suicide were age dependent and differed throughout the lifespan. This includes a personal history of self-harm, disruption of family by separation and divorce and problems in relationship with spouse or partner<sup>4</sup>.
- Male suicides make up three-quarters of all suicides. In 2020 there were 2,384 male deaths (18.6 per 100,000) and 755 female deaths (5.8 per 100,000).
- Suicide is the 10<sup>th</sup> leading cause of death for males and the 22<sup>nd</sup> leading cause for females<sup>2</sup>.
- The median age of death due to suicide was 43.5 years, compared to 81.7 years for all causes of death<sup>2</sup>. However, the median age of death by suicide of Aboriginal and Torres Strait Islander peoples was 31.3 years.
- For every death by suicide, it is estimated that there may be another 30 attempted suicides each day<sup>3</sup> and many more people will experience suicidal distress.
- 28% of suicides occur in public places including on rail tracks and from rail stations<sup>5</sup>. The proportion of deaths by suicide that have occurred at a rail location of total deaths by suicide has declined over the last decade, from 3.06% in 2010 to 1.85% in 2020 and in Victoria, 5.38% in 2010 to 4.18% in 2020.

1. <https://www.blackdoginstitute.org.au/resources-support/suicide-self-harm/facts-about-suicide-in-australia/>

2. <https://www.suicidepreventionaust.org/news/statsandfacts>

3. Suicide Prevention Australia, University of New England, 2016, The ripple effect: understanding the exposure and impact of suicide in Australia

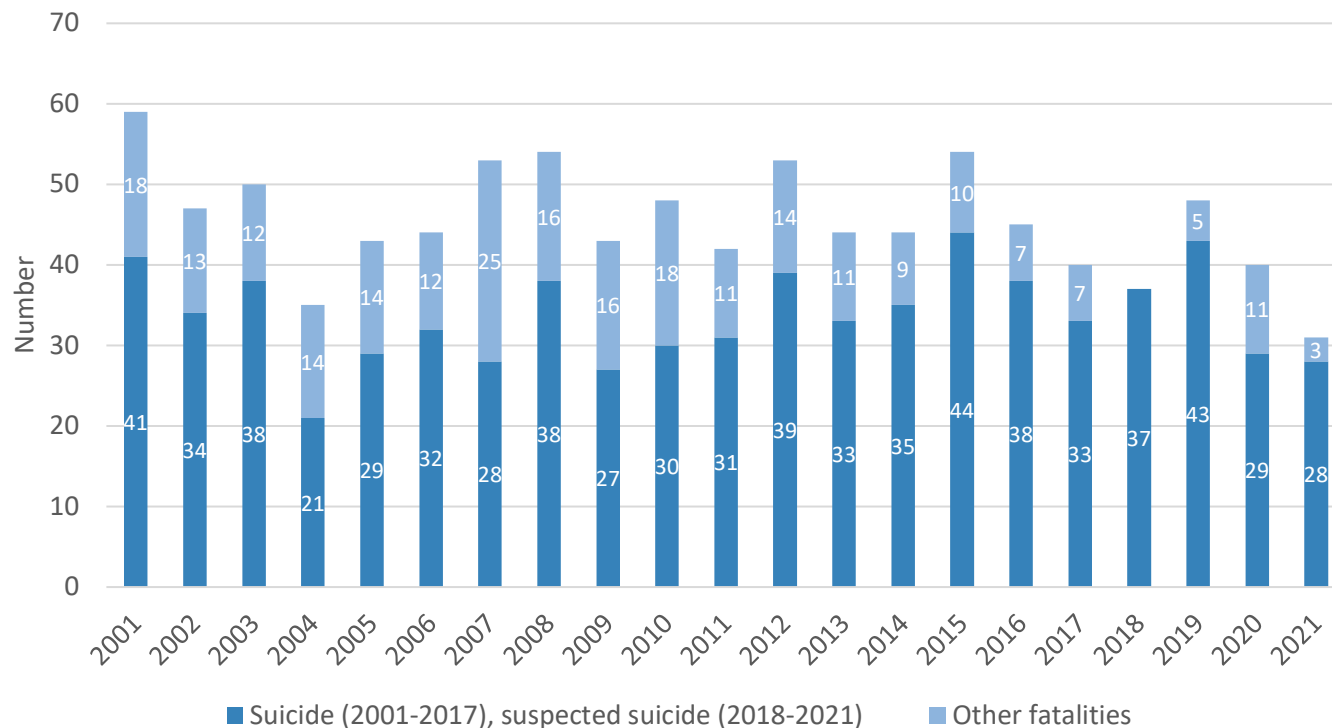
4. <https://www.abs.gov.au/statistics/health/causes-death/causes-death-australia/latest-release#intentional-self-harm-deaths-suicide-in-Australia>. See notes from the ABS on issues with the Victorian data.

5. <https://mindframe.org.au/suicide/data-statistics/abs-data-summary-2020>

6. Too, LS, Spittal, MJ, Bugeja, L, McClure, R, Milner, A, 2016, Individual and community factors for railway suicide: a matched case-control study in Victoria, Australia, Social Psychiatry and Psychiatric Epidemiology, 51:849-856.

# FATALITIES ON THE VICTORIAN HEAVY RAIL NETWORK

## 2001-2021<sup>1,2,3</sup>



In this period there were 954 fatalities – 708 (74%) suicides or suspected suicides and 246 (26%) other fatalities. This is a total annual average of 46 fatalities per year (34 suicides & suspected suicides and 12 other fatalities), or almost 4 per month.

### STATE DISTRIBUTION OF FATALITIES



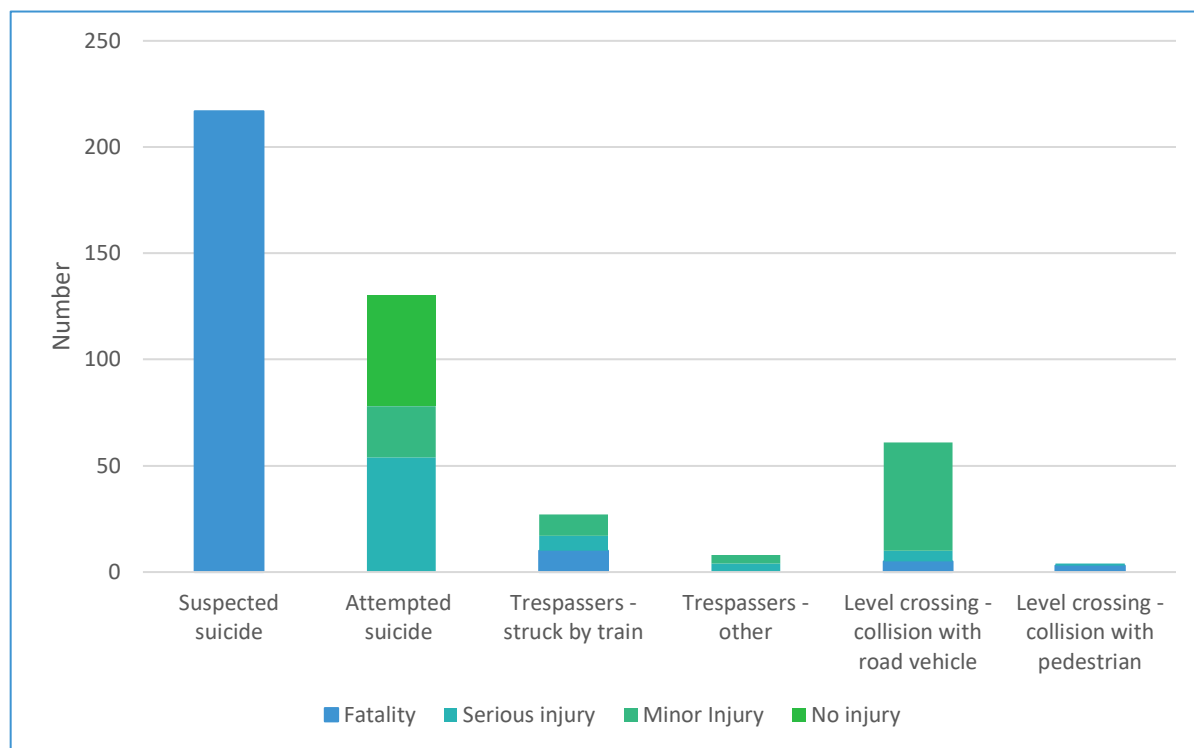
In addition, there were 5 fatalities in TAS, 7 in the NT and 2 in the ACT.

1. National Coronial Information System, 2020 Intentional Self-harm deaths at Australian railway locations 2000–2017, (DR20-31 and DR20-31A), November, Melbourne Australia (for 2001-2017 suicide data), National Coronial Information System, 2021, Non-intentional self-harm deaths at Australian railway locations 2000-2017 (DR20-43), February, Melbourne Australia (for 2001-2017 other fatality data).
2. Office of the National Rail Safety Regulator, Occurrence extract-fatalities, serious injuries, minor injuries, attempted suicide no consequence July 2015–December 2021 (for 2018-2021 data). The requirements for operator reporting of notifiable occurrences are set out in the Reporting Requirements for Notifiable Occurrences. See [here](#) for information about notifiable occurrences to ONRSR
3. NCIS report less Australian suicides in 2016 & 2017 compared to ONRSR suspected suicides (76 and 82 report by NCIS for 2016 and 2017 respectively compared to 77 and 94 suspected suicides reported by ONRSR).

# FATALITIES & INJURIES BY CAUSE ON THE VICTORIAN HEAVY RAIL NETWORK 2016-2021<sup>1</sup>

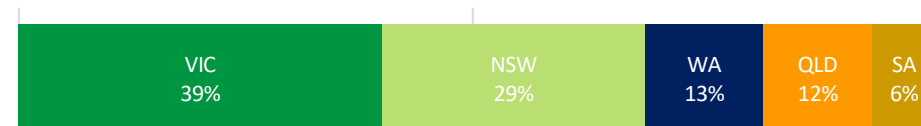
In this period there were:

- 447 fatalities, injuries and attempted suicides with no injury reported to the Office of the National Rail Safety Regulator, an average of 75 per year.
- 92% of fatalities were suspected suicides.



	Fatality	Serious injury	Minor Injury	No injury	Total
Suspected suicide	217				217
Attempted suicide		54	24	52	130
Trespassers - struck by train	10	7	10		27
Trespassers - other	0	4	4		8
Level Xing - collision with road vehicle	5	5	51		61
Level Xing - collision with pedestrian	3	1	0		4
<b>Total</b>	<b>235</b>	<b>71</b>	<b>89</b>	<b>52</b>	<b>447</b>

## STATE DISTRIBUTION OF OCCURENCES



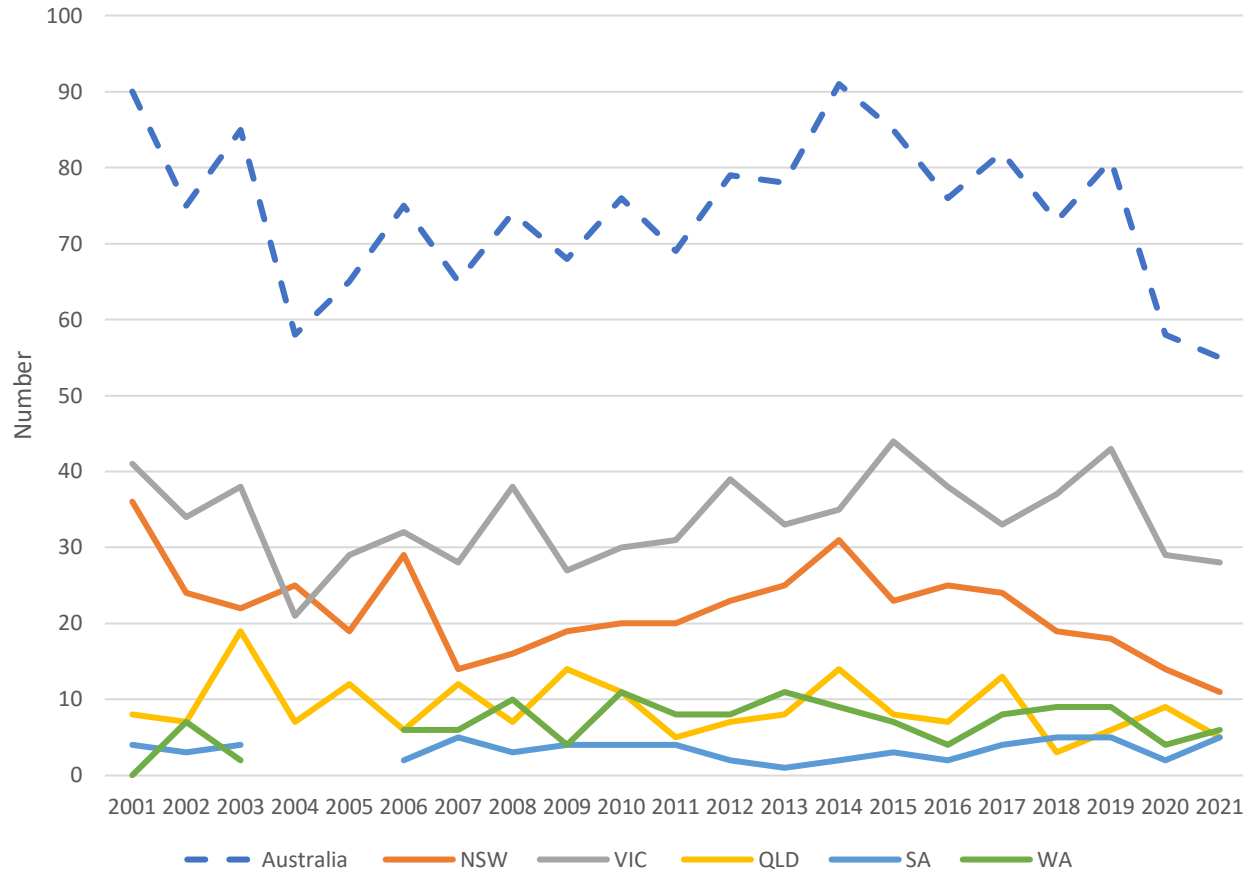
There were 2 injury incidents in NT, 1 in TAS and 0 in ACT

1. Office of the National Rail Safety Regulator, Occurrence extract-fatalities, serious injuries, minor injuries, attempted suicide no consequence July 2015–December 2021. The requirements for operator reporting of notifiable occurrences are set out in the Reporting Requirements for Notifiable Occurrences. See [here](#) for information about notifiable occurrences.

Note: NCIS report less Australian suicides in 2016 & 2017 compared to ONRSR suspected suicides (76 and 82 report by NCIS for 2016 and 2017 respectively compared to 77 and 94 suspected suicides reported by ONRSR). National Coronal Information System, 2020 Intentional Self-harm deaths at Australian railway locations 2000–2017, (DR20-31 and DR20-31A), November, Melbourne Australia



# SUICIDES (2001-2017)<sup>1,2</sup> & SUSPECTED SUICIDES (2018-2021)<sup>3,4</sup> ON THE AUSTRALIAN HEAVY RAIL NETWORK BY STATE<sup>5</sup>



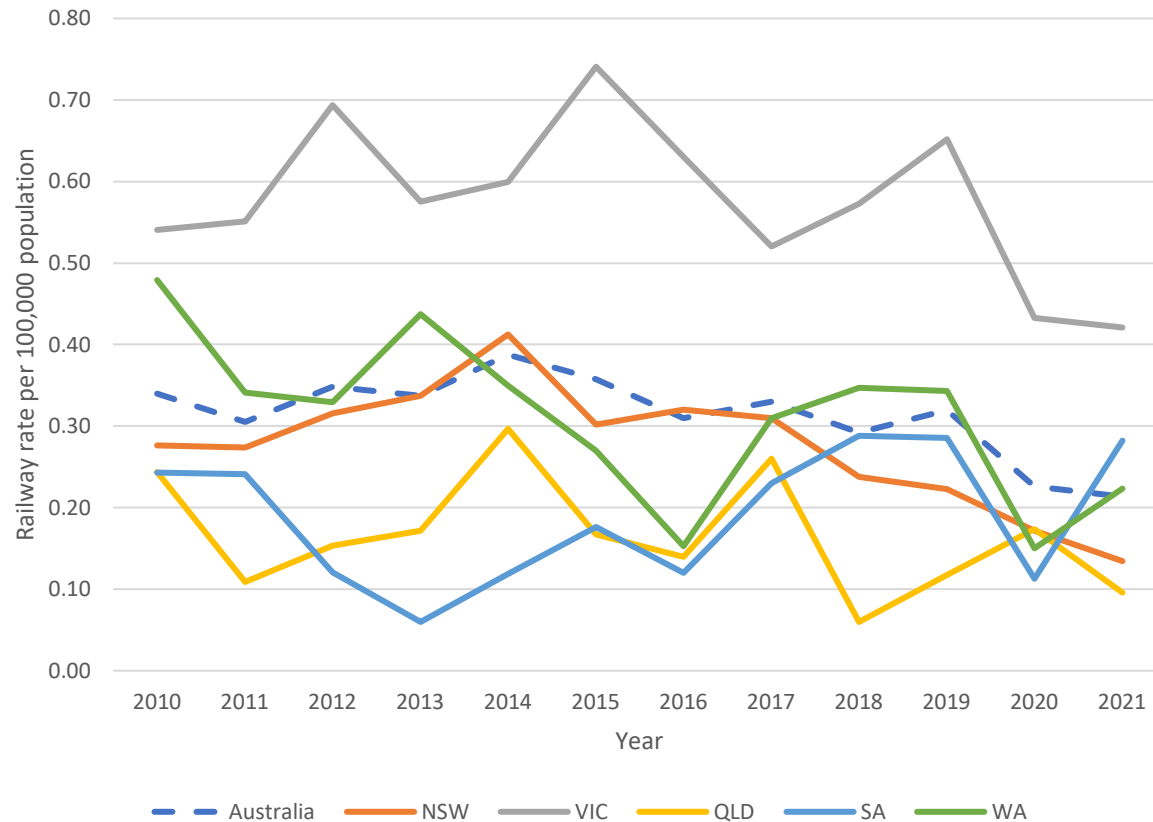
In this period there were 1,558 suicides & suspected suicides, an average of 74 per year and equivalent to 71% of all fatalities.

## STATE DISTRIBUTION OF SUICIDES & SUSPECTED SUICIDES<sup>5</sup>



1. National Coronial Information System, 2020 Intentional Self-harm deaths at Australian railway locations 2000–2017, (DR20-31 and DR20-31A), November, Melbourne Australia.
2. ONRSR data used for SA & WA in 2016 as NCIS report <4
3. Office of the National Rail Safety Regulator, Occurrence extract-fatalities, serious injuries, minor injuries, attempted suicide no consequence July 2015–December 2021 (for 2016-2021 data). The requirements for operator reporting of notifiable occurrences are set out in the Reporting Requirements for Notifiable Occurrences. See [here](#) for information about notifiable occurrences to ONRSR.
4. NCIS report less Australian suicides in 2016 & 2017 compared to ONRSR suspected suicides (76 and 82 reported by NCIS for 2016 and 2017 respectively compared to 77 and 94 suspected suicides reported by ONRSR).
5. In 2004 & 2005 there were a total of 5 deaths by suicide in SA & WA. This 5 is included in the Australian totals but is excluded from the state distribution graphs. These graphs also excludes 1 suicide in the ACT in 2001 and 1 suicide in TAS 2011 however these are included in the Australian totals.

# RATE OF SUICIDE (2010-2017)<sup>1,2</sup> AND SUSPECTED SUICIDE (2018-2021)<sup>3</sup> ON THE AUSTRALIAN HEAVY RAIL NETWORK PER 100,000 POPULATION<sup>4</sup> BY STATE

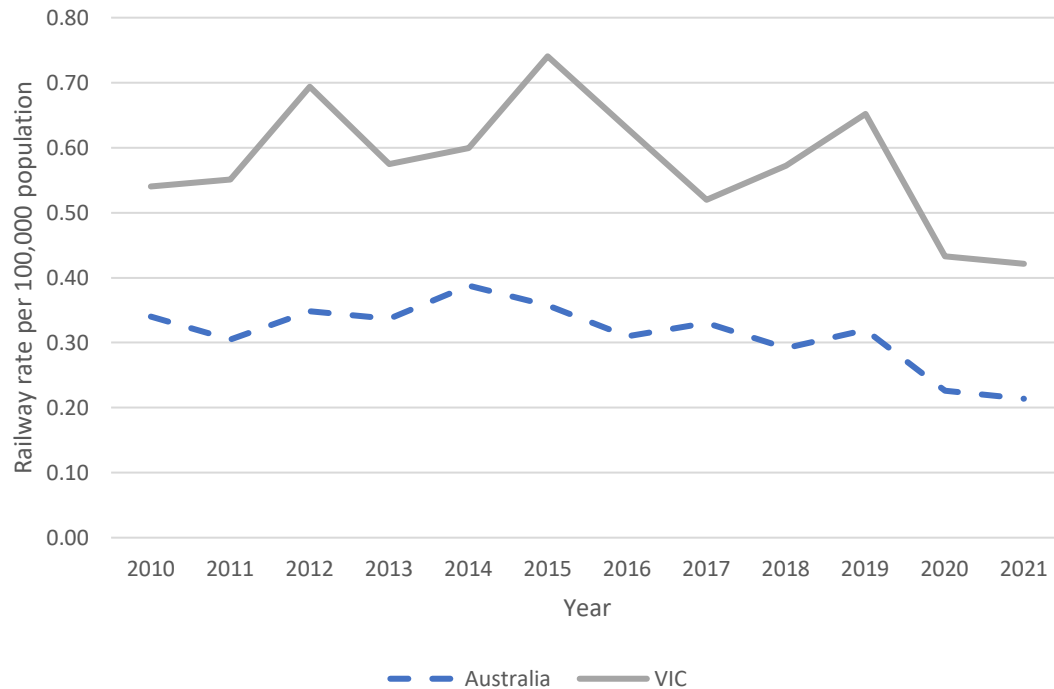


	2010	2019	2021
Australia	0.34	0.32	0.21
NSW	0.28	0.22	0.13
VIC	0.54	0.65	0.42
QLD	0.24	0.12	0.10
SA	0.24	0.29	0.28
WA	0.48	0.34	0.22

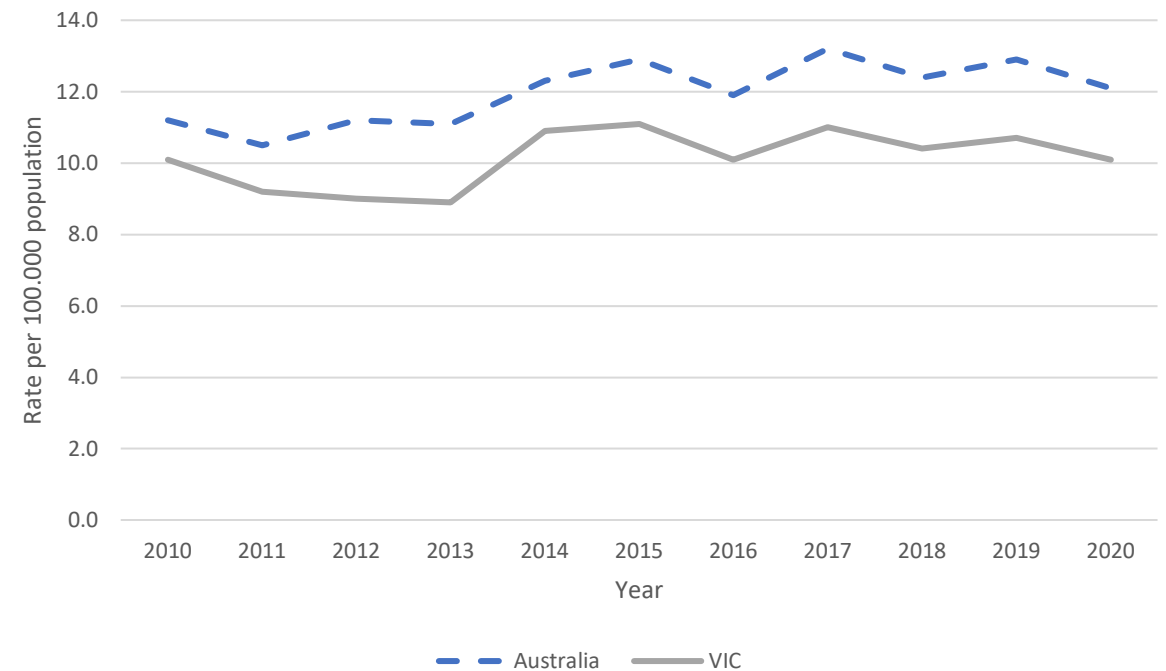
1. National Coronial Information System, 2020 Intentional Self-harm deaths at Australian railway locations 2000–2017, (DR20-31 and DR20-31A), November, Melbourne Australia.
2. ONRSR data used for SA & WA in 2016 as NCIS report <4
3. Office of the National Rail Safety Regulator, Occurrence extract-fatalities, serious injuries, minor injuries, attempted suicide no consequence July 2015–December 2021. The requirements for operator reporting of notifiable occurrences are set out in the Reporting Requirements for Notifiable Occurrences. See [here](#) for information about notifiable occurrences to ONRSR. NCIS report less suicides in 2016 & 2017 compared to ONRSR suspected suicides (76 and 82 reported by NCIS for 2016 and 2017 respectively compared to 77 and 94 suspected suicides reported by ONRSR).
4. Australian Bureau of Statistics, Australian Demographic Statistics, [Estimated resident population, June each year](#)

# RATE OF SUICIDE (2010-2017)<sup>1,2</sup> AND SUSPECTED SUICIDE (2018-2021)<sup>3</sup> ON THE AUSTRALIAN HEAVY RAIL NETWORK PER 100,000 POPULATION<sup>4</sup> - VICTORIA

## SUICIDE & SUSPECTED SUICIDE RATE ON RAIL

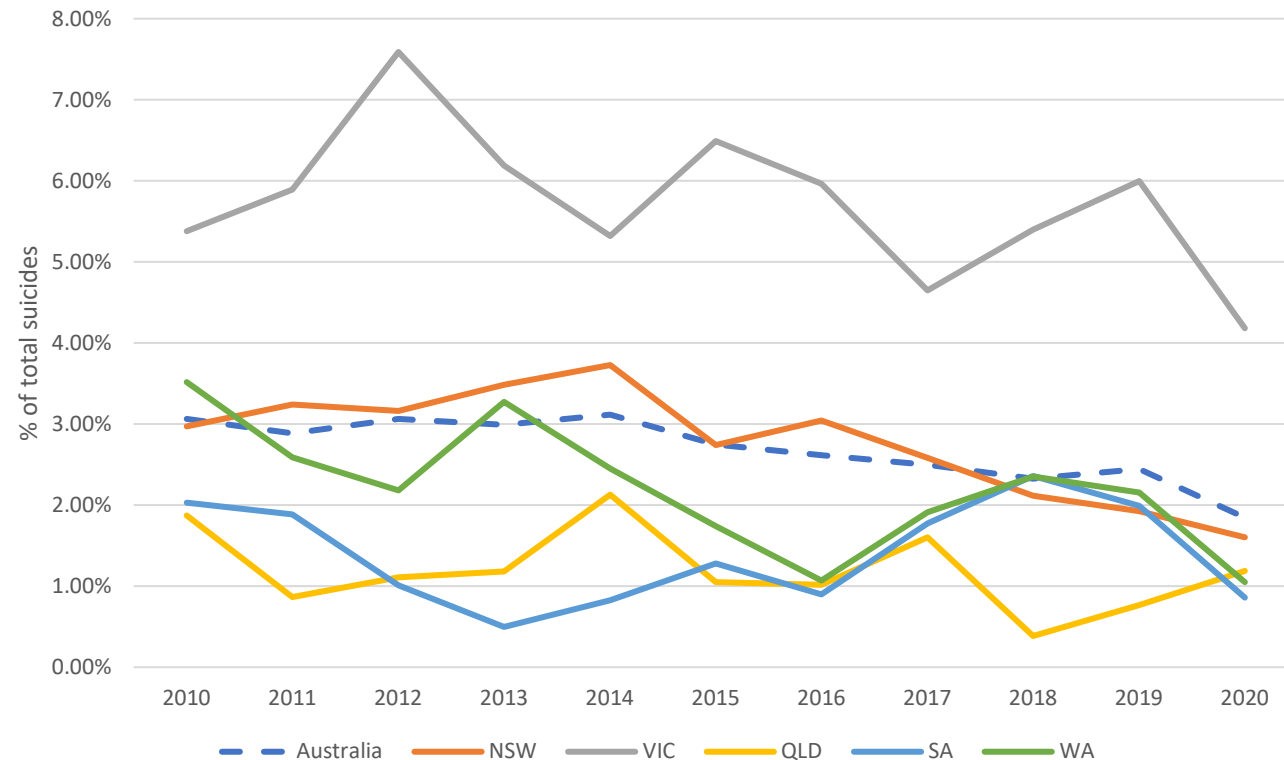


## AGE STANDARDISED DEATH RATES FOR SUICIDE<sup>5,6</sup>



1. National Coronial Information System, 2020 Intentional Self-harm deaths at Australian railway locations 2000–2017, (DR20-31 and DR20-31A), November, Melbourne Australia.
2. ONRSR data used for SA & WA in 2016 as NCIS report <4
3. Office of the National Rail Safety Regulator, Occurrence extract-fatalities, serious injuries, minor injuries, attempted suicide no consequence July 2015–December 2021. The requirements for operator reporting of notifiable occurrences are set out in the Reporting Requirements for Notifiable Occurrences. See [here](#) for information about notifiable occurrences to ONRSR. NCIS report less Australian suicides in 2016 & 2017 compared to ONRSR suspected suicides (76 and 82 reported by NCIS for 2016 and 2017 respectively compared to 77 and 94 suspected suicides reported by ONRSR).
4. Australian Bureau of Statistics, Australian Demographic Statistics, [Estimated resident population, June each year](#)
5. Australian Bureau of Statistics, 2021, Causes of Death, Australia, <https://www.abs.gov.au/statistics/health/causes-death/causes-death-australia/2020>
6. Australian Bureau of Statistics, 2020, Causes of Death, Australia <https://www.abs.gov.au/statistics/health/causes-death/causes-death-australia/2019#intentional-self-harm-suicides-key-characteristics>

# PROPORTION OF SUICIDES (2010-2017)<sup>1,2</sup> & SUSPECTED SUICIDES (2018-2020)<sup>3</sup> OCCURRING ON THE AUSTRALIAN HEAVY RAIL NETWORK OF TOTAL INTENTIONAL SELF-HARM DEATHS<sup>4</sup> BY STATE



The proportion of suicide and suspected suicide deaths on rail of total deaths by suicide has decreased nationally and in each state.

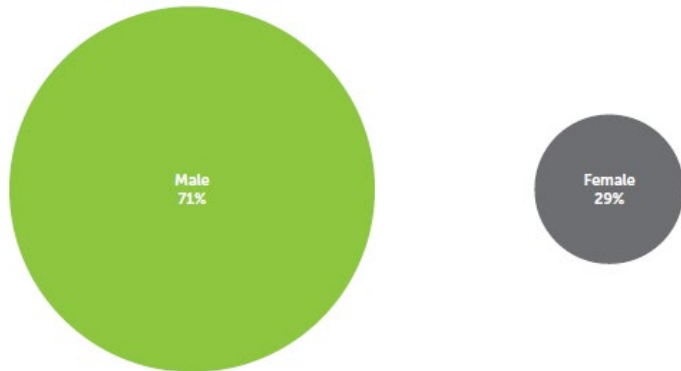
	2010	2019	2020
Australia	3.06%	2.44%	1.85%
NSW	2.97%	1.92%	1.60%
VIC	5.38%	6.00%	4.18%
QLD	1.87%	0.77%	1.19%
SA	2.03%	1.99%	0.85%
WA	3.51%	2.15%	1.05%

1. National Coronial Information System, 2020 Intentional Self-harm deaths at Australian railway locations 2000–2017, (DR20-31 and DR20-31A), November, Melbourne Australia
2. ONRSR data used for SA & WA in 2016 as NCIS report <4
3. Office of the National Rail Safety Regulator, Occurrence extract-fatalities, serious injuries, minor injuries, attempted suicide no consequence July 2015–December 2021 (for 2016-2021 data). The requirements for operator reporting of notifiable occurrences are set out in the Reporting Requirements for Notifiable Occurrences. See [here](#) for information about notifiable occurrences to ONRSR. NCIS report less Australian suicides in 2016 & 2017 compared to ONRSR suspected suicides (76 and 82 reported by NCIS for 2016 and 2017 respectively compared to 77 and 94 suspected suicides reported by ONRSR).
4. Australian Bureau of Statistics, [Cause of Death](#). 2021 data not available until October 2022

# SUICIDE ON THE VICTORIAN HEAVY RAIL NETWORK – GENDER AND AGE 2001-2017<sup>1</sup>

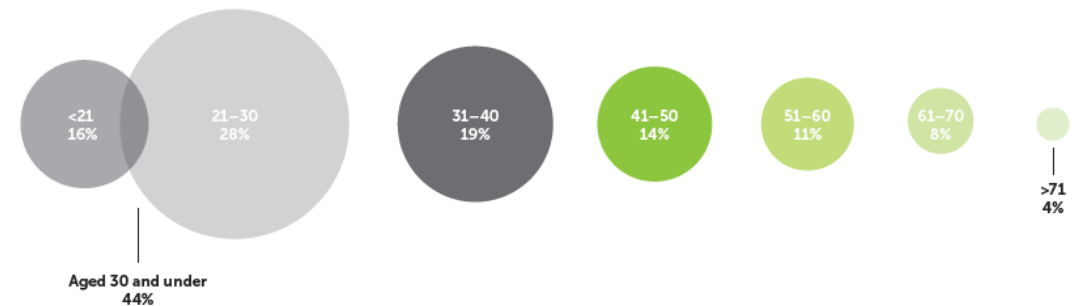
Consistent with the community trend and national rail trend, almost 3 in 4 suicides on rail are by men and those that who choose rail are on average younger than those in the general suicide population.

## GENDER



Total 571

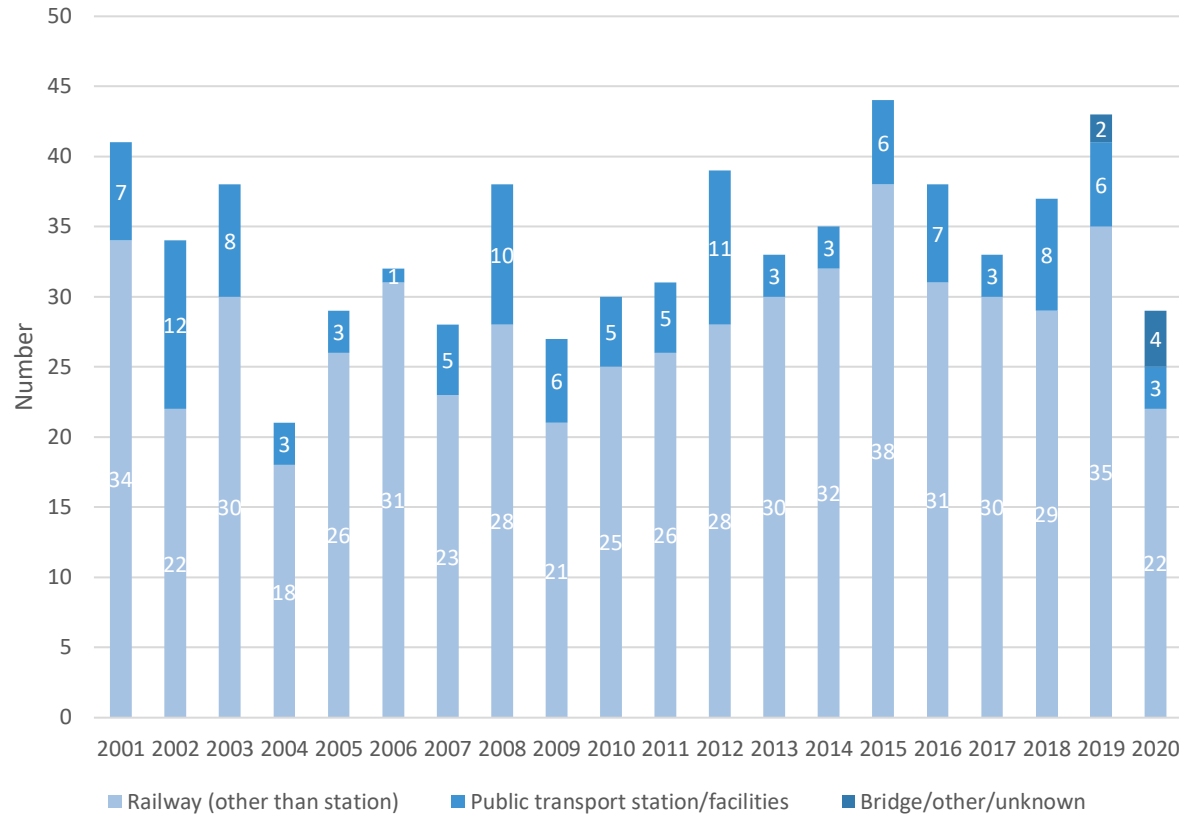
## AGE



Total 570 + 1  
unknown age

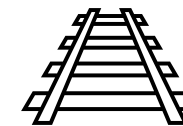
1. National Coronial Information System, 2020 Intentional Self-harm deaths at Australian railway locations 2000–2017, (DR20-31 and DR20-31A), November, Melbourne Australia.

# SUICIDE (2001-2017)<sup>1</sup> & SUSPECTED SUICIDE (2018-2021)<sup>2</sup> ON THE VICTORIAN HEAVY RAIL NETWORK BY LOCATION



82% (579) deaths occurred on the track between stations

17% (117) deaths occurred at a station



12 occurred at a bridge, other location or were unknown.

1. National Coronial Information System, 2020 Intentional Self-harm deaths at Australian railway locations 2000–2017, (DR20-31 and DR20-31A), November, Melbourne Australia.  
 2. Office of the National Rail Safety Regulator, Occurrence extract-fatalities, serious injuries, minor injuries, attempted suicide no consequence July 2015–December. NCIS report less Australian suicides in 2016 & 2017 compared to ONRSR suspected suicides (76 and 82 reported by NCIS for 2016 and 2017 respectively compared to 77 and 94 suspected suicides reported by ONRSR). Incidents coded by TrackSAFE. ‘Track’ has been used as short-hand for the incident occurred between stations in the rail corridor. ‘Station’ indicates that the incident occurred from a platform, overpass or other location at the station. If the person accessed the track via a station, the incident is reported as ‘track’. The requirements for operator reporting of notifiable occurrences are set out in the Reporting Requirements for Notifiable Occurrences. See [here](#) for information about notifiable occurrences to ONRSR.

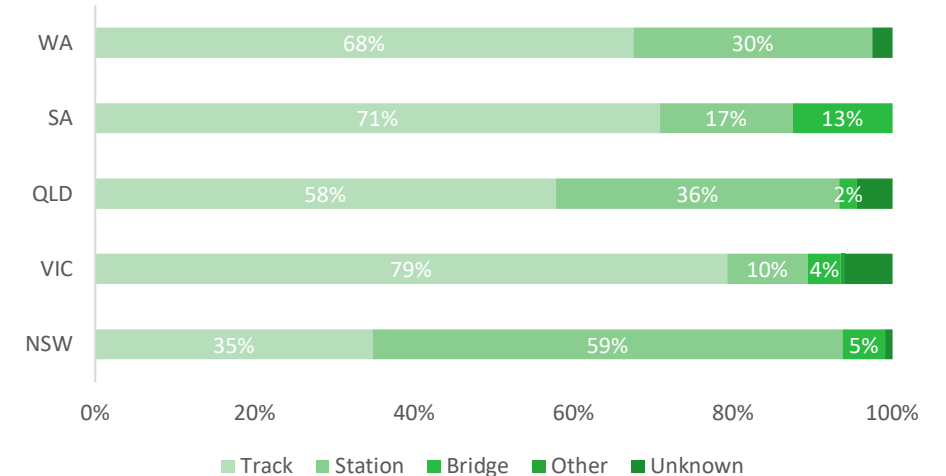
# SUICIDE (2014-2017)<sup>1</sup> & SUSPECTED SUICIDE (2016-2021)<sup>2</sup> ON THE AUSTRALIAN HEAVY RAIL NETWORK BY LOCATION BY STATE

More suicides and suspected suicides occur on the track (between stations) than from a station. Between 2016-2021, 64% of suspected suicides occurred on the track and 27% from the station. In all states except NSW, more incidents occurred on the track. In NSW, 59% of incidents occurred from the station.

## 2014-2017

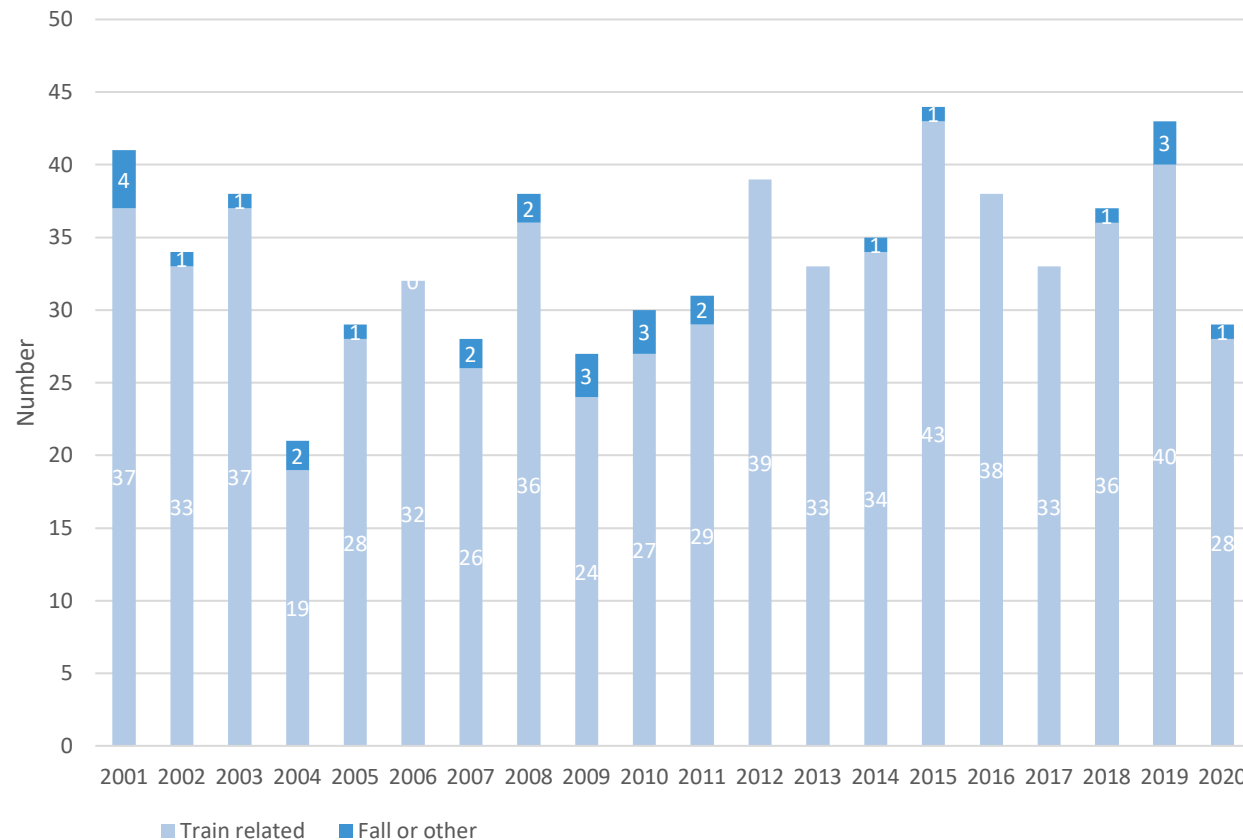
	VIC		NSW		QLD		WA		SA		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%
Station	21	14%	57	60%	21	54%	5	21%	<5	27%	107	34%
Open track	103	69%	35	37%	16	41%	14	58%	6	55%	174	55%
Level or ped crossing	24	16%	<5	*	<5	*	5	21%	<5	*	35	11%
Overpass	<5	*	0	0	<5	*	0	0	0	0	<5	*

## 2016-2021



1. National Coronial Information System, Pirkis, J & Clapperton, A, 2020, Suicide in public places project
2. Office of the National Rail Safety Regulator, Occurrence extract-fatalities, serious injuries, minor injuries, attempted suicide no consequence July 2015–December 2021 (for 2016-2021 data). Incidents coded by TrackSAFE 'Track', 'Station', 'Bridge/Other/Unknown'. The requirements for operator reporting of notifiable occurrences are set out in the Reporting Requirements for Notifiable Occurrences. See here for information about notifiable occurrences to ONRSR.

# MECHANISM OF SUICIDE (2001-2017)<sup>1</sup> & SUSPECTED SUICIDE (2018-2021)<sup>2</sup> FATAL INJURY ON THE VICTORIAN HEAVY RAIL NETWORK



Over this period 95% (675) fatalities were train related.

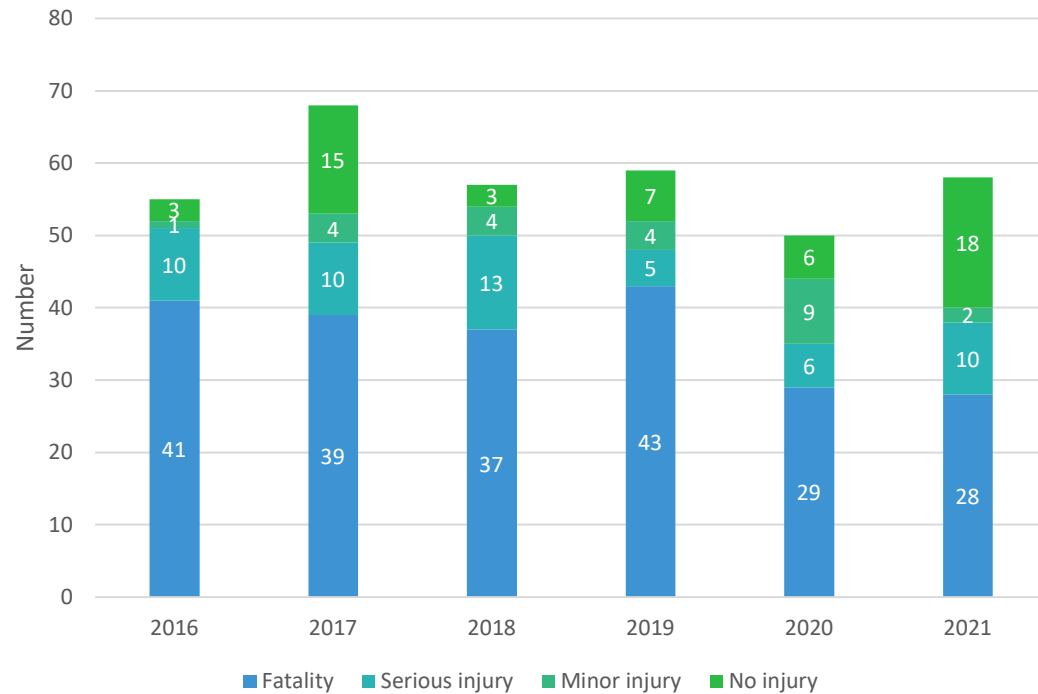
1. National Coronial Information System, 2020 Intentional Self-harm deaths at Australian railway locations 2000–2017, (DR20-31 and DR20-31A), November, Melbourne Australia.
2. Office of the National Rail Safety Regulator, Occurrence extract-fatalities, serious injuries, minor injuries, attempted suicide no consequence July 2015–December 2021. NCIS report less Australian suicides in 2016 & 2017 compared to ONRSR suspected suicides (76 and 82 reported by NCIS for 2016 and 2017 respectively compared to 77 and 94 suspected suicides reported by ONRSR). Incidents coded by TrackSAFE 'Struck by train', 'Other'. The requirements for operator reporting of notifiable occurrences are set out in the Reporting Requirements for Notifiable Occurrences. See [here](#) for information about notifiable occurrences to ONRSR.



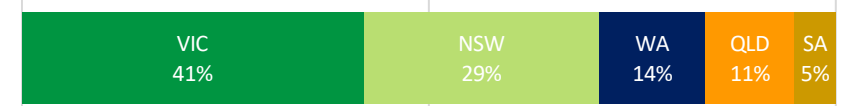
# SUSPECTED AND ATTEMPTED SUICIDE ON THE VICTORIAN HEAVY RAIL NETWORK 2016-2021<sup>1</sup>

In this period:

- there were 347 suspected and attempted suicides resulting in 217 fatalities, 54 serious injuries, 24 minor injuries and 52 incidents with no injury
- 50% of all suspected suicide fatalities and 41% of all suspected and attempted suicides occurred in Victoria, likely because of its open network
- there was an average of 36 suspected suicides and 22 attempted suicides each year
- in addition to the attempted suicides included in this data that meet the reporting threshold and are notified to the ONRSR, rail operators advise that there are additional attempted suicides and threats of self-harm that do not meet the regulatory reporting requirements.



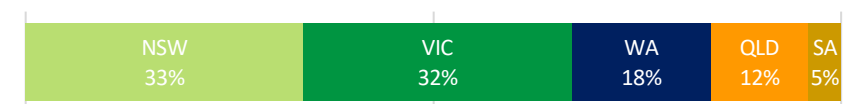
## STATE DISTRIBUTION OF SUSPECTED & ATTEMPTED SUICIDES



## STATE DISTRIBUTION OF SUSPECTED SUICIDES



## STATE DISTRIBUTION OF ATTEMPTED SUICIDES



1. Office of the National Rail Safety Regulator, Occurrence extract-fatalities, serious injuries, minor injuries, attempted suicide no consequence July 2015–December 2021. The requirements for operator reporting of notifiable occurrences are set out in the Reporting Requirements for Notifiable Occurrences. See [here](#) for information about notifiable occurrences to ONRSR.

Note: NCIS report less Australian suicides in 2016 & 2017 compared to ONRSR suspected suicides (76 and 82 report by NCIS for 2016 and 2017 respectively compared to 77 and 94 suspected suicides reported by ONRSR). National Coronial Information System, 2020 Intentional Self-harm deaths at Australian railway locations 2000–2017, (DR20-31 and DR20-31A), November, Melbourne Australia (for suicide deaths 2016-2017)

# SUSPECTED AND ATTEMPTED SUICIDE ON THE AUSTRALIAN HEAVY RAIL NETWORK 2016-2021<sup>1</sup>

	NSW		QLD		SA		VIC		WA		TOTAL	
	Suspected suicide	Attempted suicide	Suspected suicide	Attempted suicide	Suspected suicide	Attempted suicide	Suspected suicide	Attempted suicide	Suspected suicide	Attempted suicide	Suspected suicide	Attempted suicide
2016	23	28	7	4	2	3	41	14	4	7	77	56
2017	27	29	15	12	5	4	39	29	8	12	94	86
2018	19	27	3	7	5	3	37	20	9	22	73	79
2019	18	15	6	7	5	6	43	16	9	19	81	63
2020	14	15	9	12	2	1	29	21	4	9	58	58
2021	11	19	5	7	5	1	28	30	6	3	55	60
TOTAL	112	133	45	49	24	18	217	130	40	72	438	402

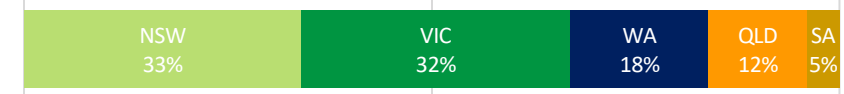
## STATE DISTRIBUTION OF SUSPECTED SUICIDES



## STATE DISTRIBUTION OF SUSPECTED & ATTEMPTED SUICIDES



## STATE DISTRIBUTION OF ATTEMPTED SUICIDES

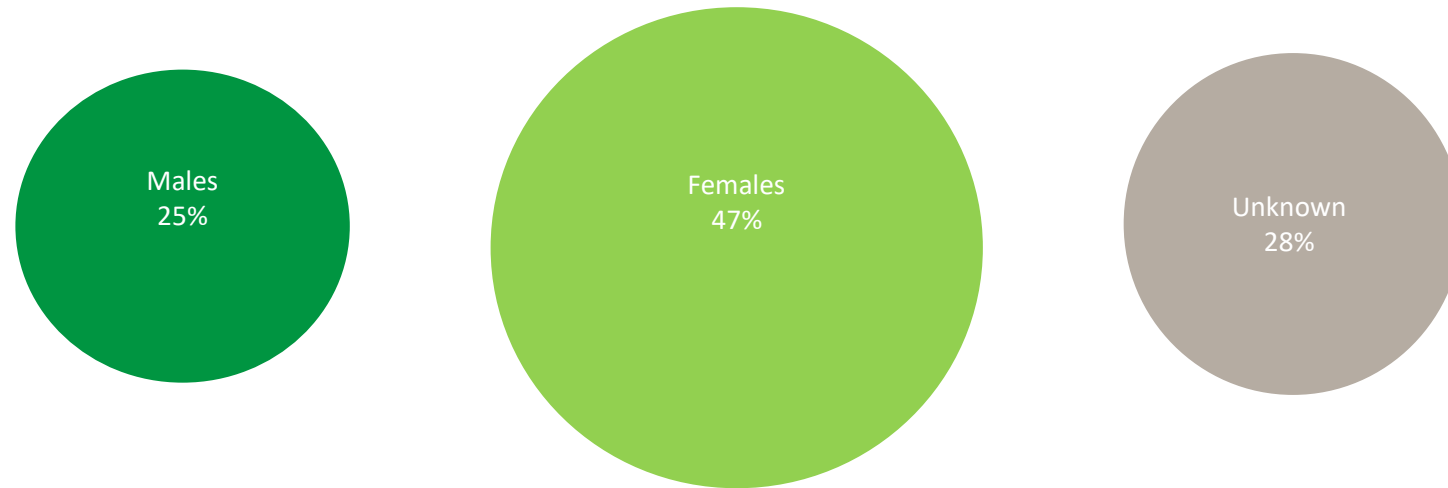


1. Office of the National Rail Safety Regulator, Occurrence extract-fatalities, serious injuries, minor injuries, attempted suicide no consequence July 2015–December 2021. The requirements for operator reporting of notifiable occurrences are set out in the Reporting Requirements for Notifiable Occurrences. See [here](#) for information about notifiable occurrences.

Note: NCIS report less Australian suicides in 2016 & 2017 compared to ONRSR suspected suicides (76 and 82 reported by NCIS for 2016 and 2017 respectively compared to 77 and 94 suspected suicides reported by ONRSR). National Coronial Information System, 2020 Intentional Self-harm deaths at Australian railway locations 2000–2017, (DR20-31 and DR20-31A), November, Melbourne Australia (for suicide deaths 2016-2017)

# ATTEMPTED SUICIDE ON THE VICTORIAN HEAVY RAIL NETWORK - GENDER 2016-2021<sup>1</sup>

Caution should be exercised with this information due to the high level of unknown gender data.

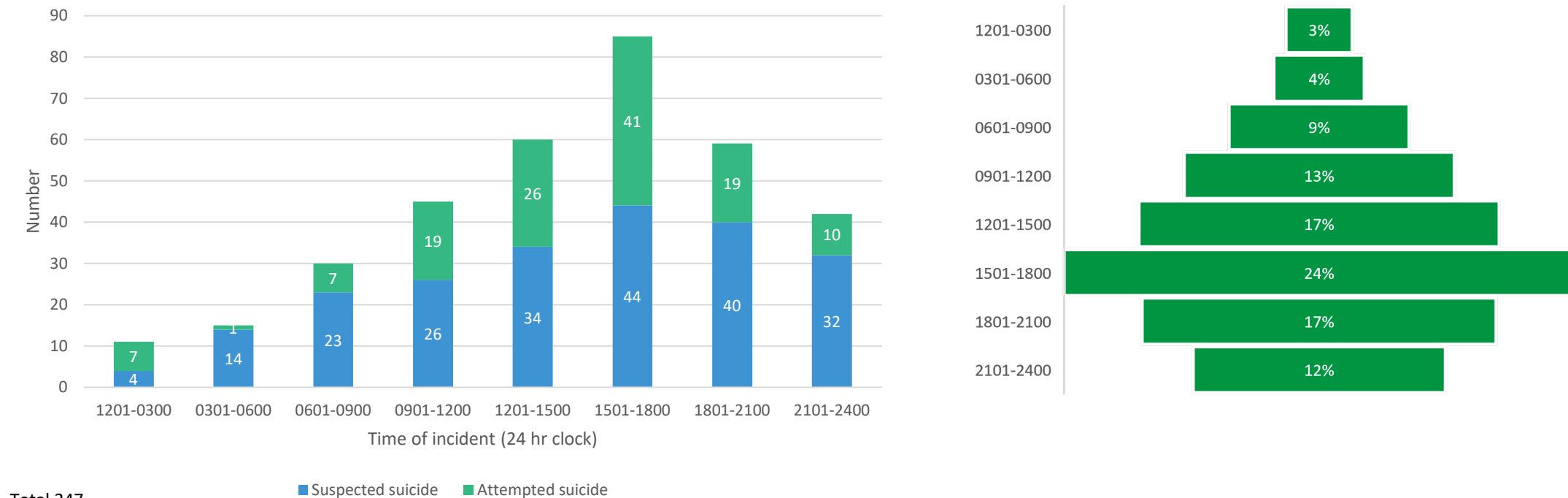


Total 130

1. Office of the National Rail Safety Regulator, Occurrence extract-fatalities, serious injuries, minor injuries, attempted suicide no consequence July 2015–December 2021. The requirements for operator reporting of notifiable occurrences are set out in the Reporting Requirements for Notifiable Occurrences. See [here](#) for information about notifiable occurrences to ONRSR.

# SUSPECTED & ATTEMPTED SUICIDES ON THE VICTORIAN HEAVY RAIL NETWORK – TIME OF DAY 2016-2021<sup>1</sup>

71% of incidents occurred from midday onwards with more occurring between 3 – 6pm (24%) than any other period.



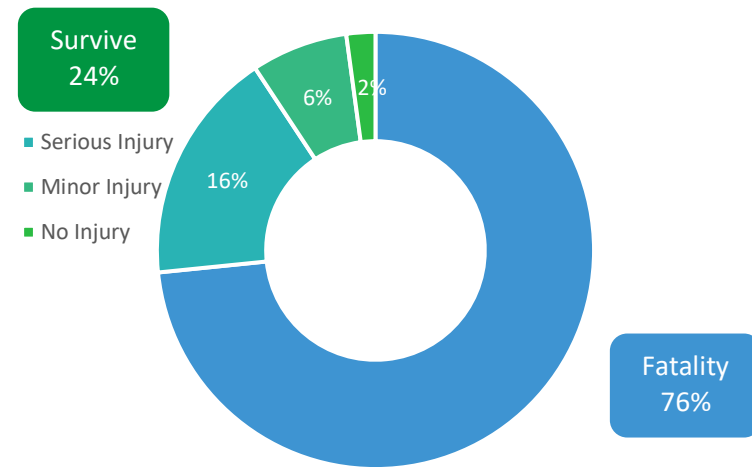
1. Office of the National Rail Safety Regulator, Occurrence extract-fatalities, serious injuries, minor injuries, attempted suicide no consequence July 2015–December 2021. The requirements for operator reporting of notifiable occurrences are set out in the Reporting Requirements for Notifiable Occurrences. See [here](#) for information about notifiable occurrences to ONRSR.

Note: Percentages equal 101 due to rounding.

# SUSPECTED & ATTEMPTED SUICIDE ON THE VICTORIAN HEAVY RAIL NETWORK – OUTCOME INDIVIDUAL STRUCK BY TRAIN 2016-2021<sup>1</sup>

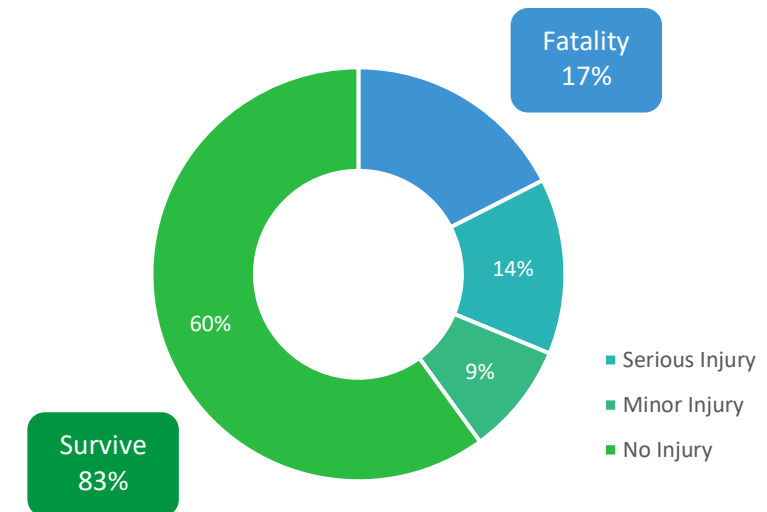
- The Victorian trend is broadly in line with the national trend.
- In 1 in 4 attempted suicides the individual will survive a suicide attempt after being struck by a train or involved in a train related incident. If the individual is not struck by a train, 83% survived and 60% had no injury

## INDIVIDUAL STRUCK BY TRAIN



Total 267

## INDIVIDUAL NOT STRUCK BY TRAIN



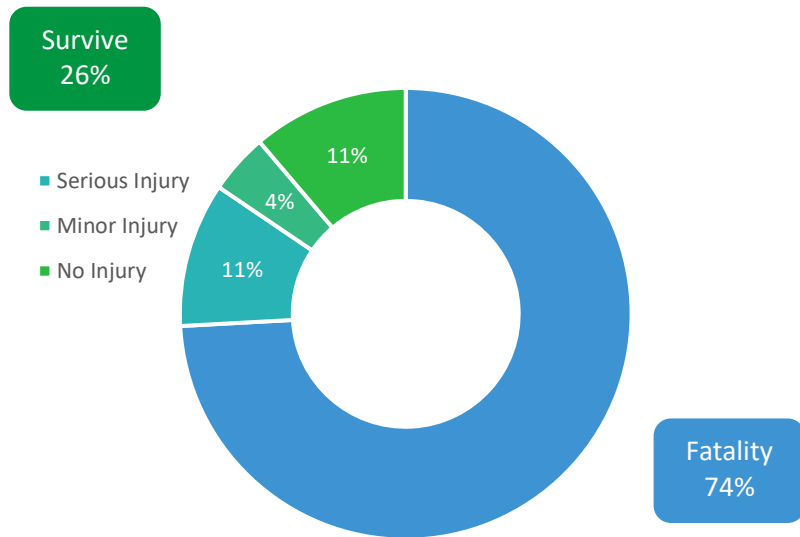
Total 80

1. Office of the National Rail Safety Regulator, Occurrence extract-fatalities, serious injuries, minor injuries, attempted suicide no consequence July 2015–December 2021. The requirements for operator reporting of notifiable occurrences are set out in the Reporting Requirements for Notifiable Occurrences. See [here](#) for information about notifiable occurrences to ONRSR.

# SUSPECTED & ATTEMPTED SUICIDE ON THE VICTORIAN HEAVY RAIL NETWORK– OUTCOME BY LOCATION 2016-2021<sup>1</sup>

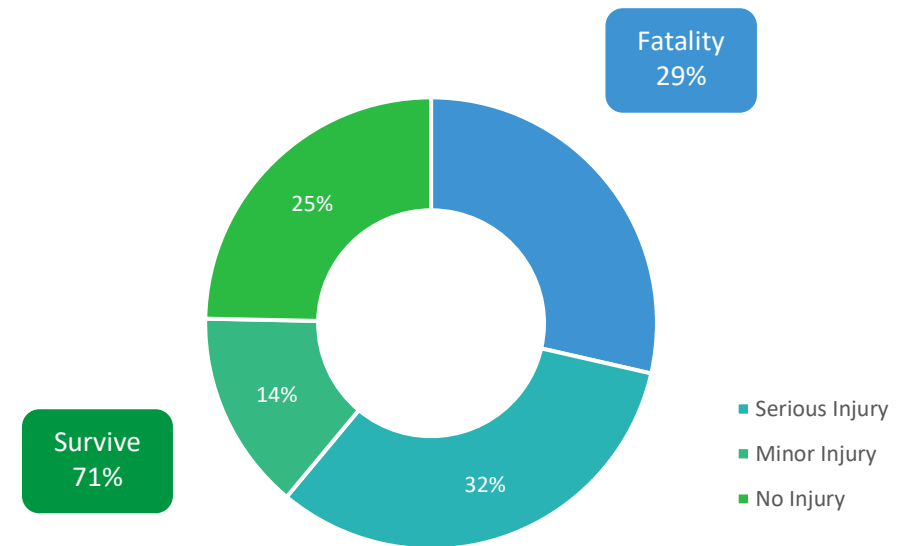
- The Victorian trend is broadly in line with the national trend.
- 74% of attempted suicides that occur on the track result in a fatality.
- 71% of attempted suicides that occur from a station, the individual survives.

## OUTCOME OF INCIDENTS THAT OCCUR ON THE TRACK<sup>2</sup>



Total 232

## OUTCOME OF INCIDENTS THAT OCCUR FROM A STATION<sup>2</sup>

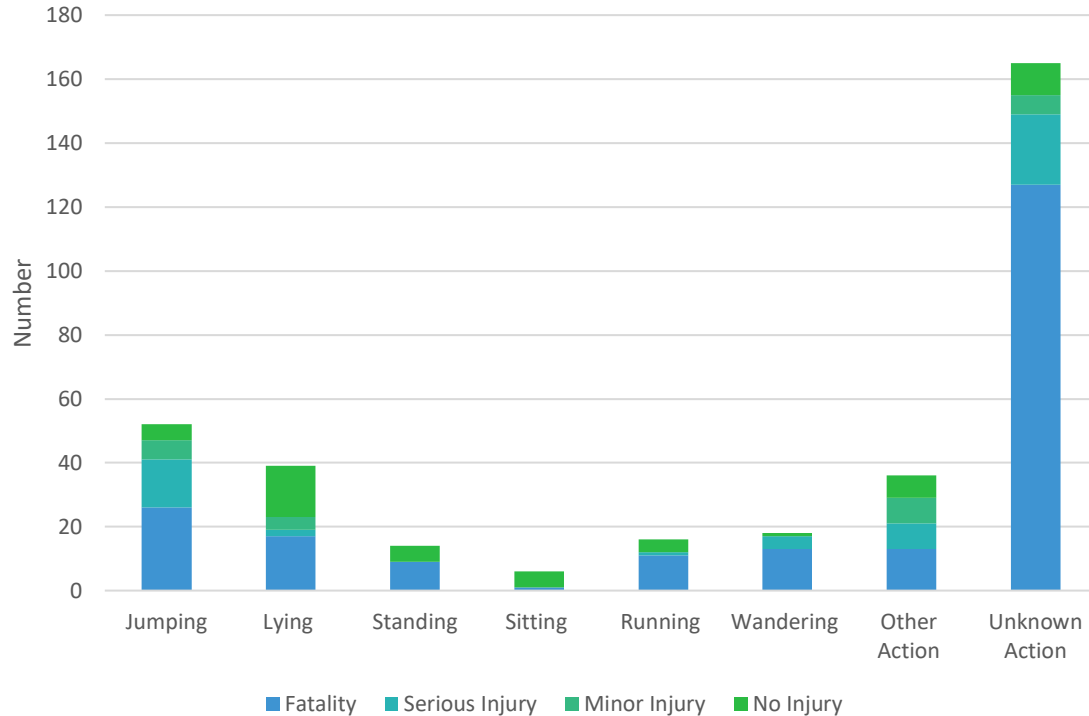


Total 77

1. Office of the National Rail Safety Regulator, Occurrence extract-fatalities, serious injuries, minor injuries, attempted suicide no consequence July 2015–December 2021. The requirements for operator reporting of notifiable occurrences are set out in the Reporting Requirements for Notifiable Occurrences. See [here](#) for information about notifiable occurrences to ONRSR.

2. These graphs do not include 38 occurrences that occur at a bridge, other location or unknown location – 23 fatalities, 5 serious injuries, 13 minor injuries and 7 no injuries.

# SUSPECTED & ATTEMPTED SUICIDE ON THE VICTORIAN HEAVY RAIL NETWORK – OUTCOME BY BEHAVIOUR 2016-2021<sup>1</sup>



Understanding patterns of behaviour prior to an attempted suicide is important as different intervention strategies can be developed for different behaviours<sup>2</sup>. For example, when individuals jump directly into the path of a train there is generally less time to enact response measures compared with cases where individuals are stationary or wandering on tracks and intervention mechanisms such as approaching the individual or slowing the train can be deployed<sup>3</sup>.

Unfortunately the information available is insufficient to be useful.

1. Office of the National Rail Safety Regulator, Occurrence extract-fatalities, serious injuries, minor injuries, attempted suicide no consequence July 2015–December 2021. Coding of data in accordance with Appendix in Gregor, S, Beavan, G, Culbert, A, Kan John, P, Viet Ngo, N, Keating, B, Sum, R & Radwan, I, 2019, Patterns of pre-crash behaviour in railway suicides and the effect of corridor fencing: a natural experiment in New South Wales, *International Journal of Injury Control and Safety Promotion*. The requirements for operator reporting of notifiable occurrences are set out in the Reporting Requirements for Notifiable Occurrences. See [here](#) for information about notifiable occurrences to ONRSR.

2. Radbo, Svedung & Andersson, 2005, Suicides and other fatalities from train-person collisions on Swedish railroads: A descriptive epidemiologic analysis as a basis for systems-oriented prevention. *Journal of Safety Research*, 36(5), 423-428.

3. Gregor, S, Beavan, G, Culbert, A, Kan John, P, Viet Ngo, N, Keating, B, Sum, R & Radwan, I, 2019, Patterns of pre-crash behaviour in railway suicides and the effect of corridor fencing: a natural experiment in New South Wales, *International Journal of Injury Control and Safety Promotion*.

# LOCATION OF INCIDENT BY VICTORIAN LOCAL GOVERNMENT AREA – 2000-2017<sup>1</sup>

LGA of incident	2013–2017	Total 2000–2017
Kingston (C )	14	47
Brimbank (C )	12	28
Casey (C )	12	30
Maroondah (C )	9	28
Knox (C )	8	22
Darebin (C )	7	29
Frankston (C )	7	24
Glen Eira (C )	7	20
Moreland (C )	7	22
Bayside (C )	6	16
Greater Dandenong (C )	6	24
Melton (C )	6	8
Whittlesea (C )	6	12
Banyule (C )	5	13
Cardinia (C )	5	16
Hume (C )	5	11
Maribyrnong (C )	5	11
Melbourne (C )	5	22
Monash (C )	5	31
Stonnington (C )	5	16
Baw Baw (S)	4	8
Latrobe (C )	4	9

LGA of incident	2013–2017	Total 2000–2017
Boroondara (C )	<4	11
Greater Bendigo (C )	<4	9
Greater Geelong (C )	<4	10
Hobsons Bay (C )	<4	8
Macedon Ranges (S )	<4	<4
Mitchell (S)	<4	<4
Moonee Valley (C )	<4	<4
Mornington Peninsula (S )	<4	<4
Nilumbik (S)	<4	9
Port Phillip (C )	<4	7
Wangaratta (RC )	<4	<4
Warrnambool (C )	<4	<4
Wellington (S)	<4	<4
Whitehorse (C )	<4	17
Wyndham (C )	<4	5
Yarra (C )	<4	12
Not available	4	14
<b>Total</b>	<b>183</b>	<b>589</b>

Source: NCIS. The data presented in this and the next table are not mutually inclusive. E.G. the state/territory or LGA where the incident occurred does not necessarily relate to the deceased person's state/territory or LGA of residence.

'C' denotes City Council, 'A' denotes Area and 'R' denotes Regional Council

1. National Coronial Information System, 2020 Intentional Self-harm deaths at Australian railway locations 2000–2017, (DR20-31 and DR20-31A), November, Melbourne Australia. The exact number per year is not reported if it is less than 4.



# RESIDENCE OF VICTORIAN RESIDENT BY VICTORIAN LOCAL GOVERNMENT AREA – 2000-2017<sup>1</sup>

LGA of residence	2013–2017	Total 2000–2017
Casey (C )	16	33
Kingston (C )	14	38
Hume (C )	10	11
Frankston (C )	9	28
Maroondah (C )	8	26
Brimbank (C )	7	25
Melton (C )	7	10
Knox (C )	6	22
Whittlesea (C )	6	13
Darebin (C )	5	32
Moreland (C )	5	22
Glen Eira (C )	5	18
Boroondara (C )	5	17
Port Phillip (C )	5	16
Greater Dandenong (C )	4	22
Banyule (C )	4	15
Cardinia (S )	4	12
Maribyrnong (C )	4	10
Baw Baw (S )	4	8
Hobsons Bay (C )	4	8
Monash (C )	<4	23
Bayside (C )	<4	21
Stonnington (C )	<4	12

LGA of residence	2013–2017	Total 2000–2017
Melbourne (C )	<4	11
Whitehorse (C )	<4	11
Greater Bendigo (C )	<4	10
Greater Geelong (C )	<4	10
Manningham (C )	<4	9
Yarra (C )	<4	8
Latrobe (C )	<4	7
Moonee Valley (C )	<4	7
Nillumbik (S )	<4	7
Yarra Ranges (S )	<4	6
Mornington Peninsula (S )	<4	4
Wellington (S )	<4	4
Ballarat (C )	<4	<4
Benalla (RC )	<4	<4
Golden Plains (S )	<4	<4
Macedon Ranges (S )	<4	<4
Mitchell (S )	<4	<4
Warrnambool (C )	<4	<4
Not available	8	18
<b>Total</b>	<b>183</b>	<b>585</b>

Source: NCIS. The data presented in this and the previous table are not mutually inclusive. E.G. the state/territory or LGA where the incident occurred does not necessarily relate to the deceased person's state/territory or LGA of residence.

'C' denotes City Council, 'A' denotes Area and 'R' denotes Regional Council

1. National Coronial Information System, 2020 Intentional Self-harm deaths at Australian railway locations 2000–2017, (DR20-31 and DR20-31A), November, Melbourne Australia. The exact number per year is not reported if it is less than 4.



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