



SUICIDE, SUSPECTED SUICIDE AND ATTEMPTED SUICIDE ON THE AUSTRALIAN 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 million¹.

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.

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

- 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

- Most fatalities on the Australian heavy rail network are as a result of suicide or suspected suicide.
- 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.
- Nationally and in each state except South Australia, the rate of suicide/suspected suicide per 100,000 of the population is less in 2021 (Australia 0.21/100,000) than it was in 2010 (0.34/100,000).
- The proportion of suicide and suspected suicide deaths on rail of total deaths by suicide has decreased nationally and in each state between 2010 (Australia 3.06%) and 2021 (1.85%).
- Of the suicides (2001-2017) and consistent with the wider community suicide trends, three quarters of those that died were men. However, those who choose rail to take their own life are younger, with 42% aged 30 years and under.
- Between 2016-2021:
 - There were almost as many attempted suicides (402) as suspected suicides (438)
 - 69% of occurrences occurred from midday onwards
 - 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, 90% survived and 65% had no injury.

SUICIDE IN AUSTRALIA

- Suicide is rare and preventable.
- However, it is the leading cause of death for Australians aged between 15-45 years¹.
- 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 suicide². It is estimated that each suicide death affects up to 135 people³.
- In 2020 suicide accounted for 1.9%² of all deaths.
- 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 disorders³. 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 partner⁴.
- 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 10th leading cause of death for males and the 22nd leading cause for females².
- The median age of death due to suicide was 43.5 years, compared to 81.7 years for all causes of death². 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 day³ and many more people will experience suicidal distress.
- 28% of suicides occur in public places including on rail tracks and from rail stations⁵. 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.

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

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

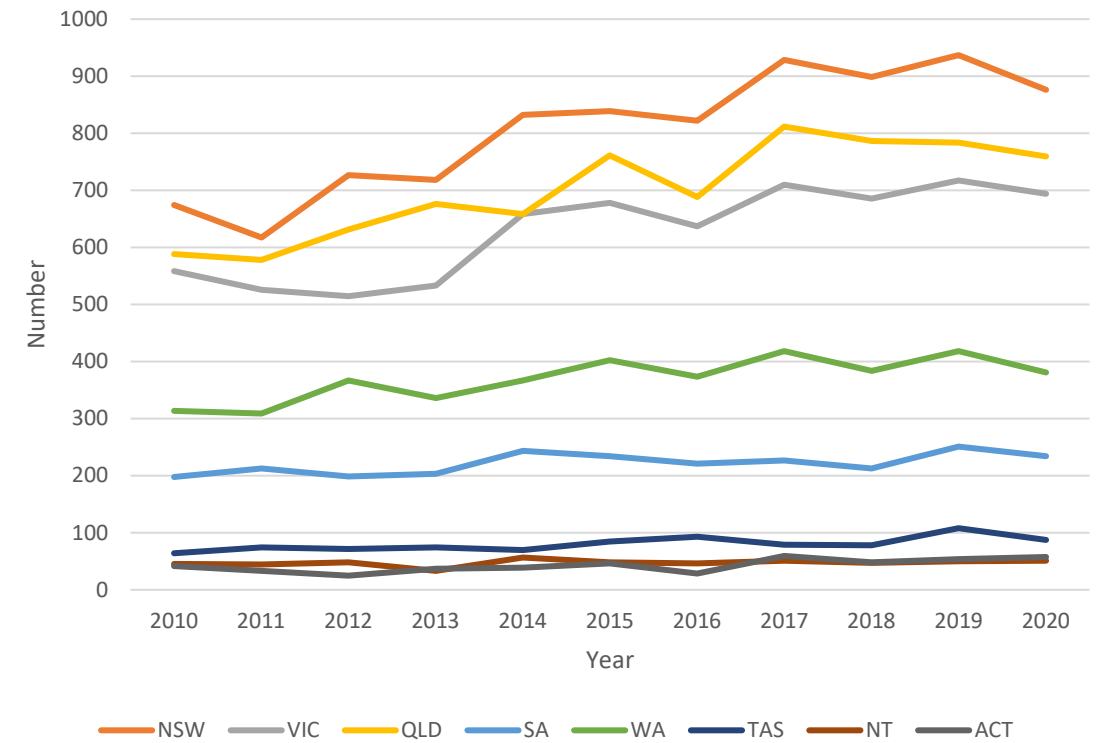
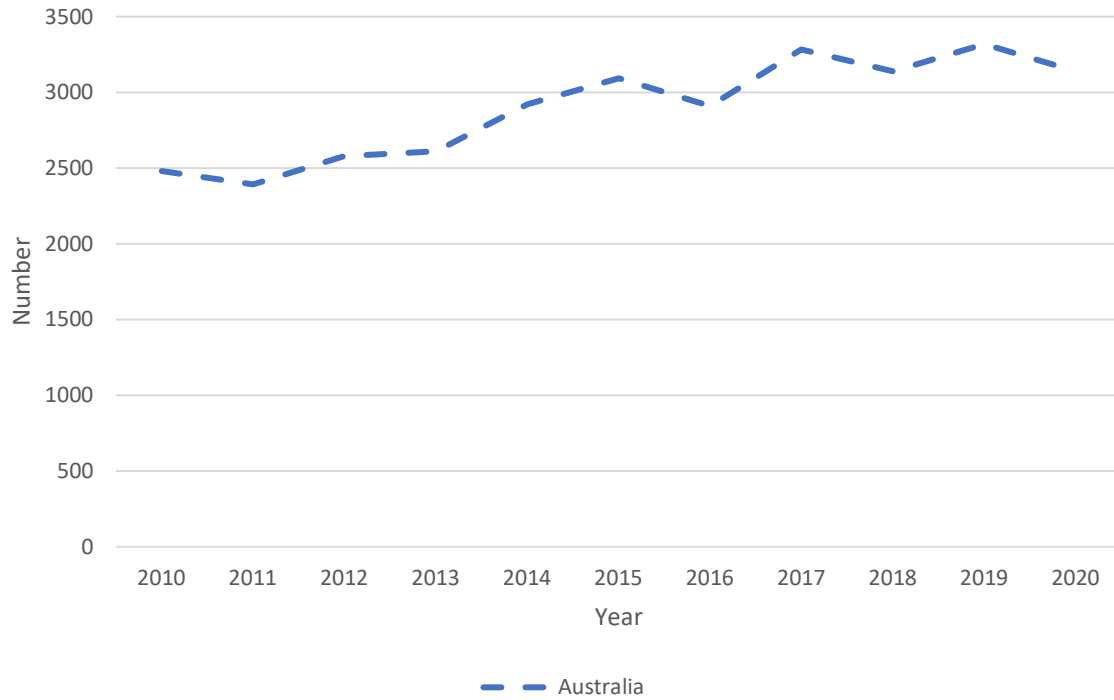
3. Suicide Prevention Australia, University of New England, 2016, The ripple effect: understanding the exposure and impact of suicide in Australia

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

5. 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.

SUICIDE IN AUSTRALIA

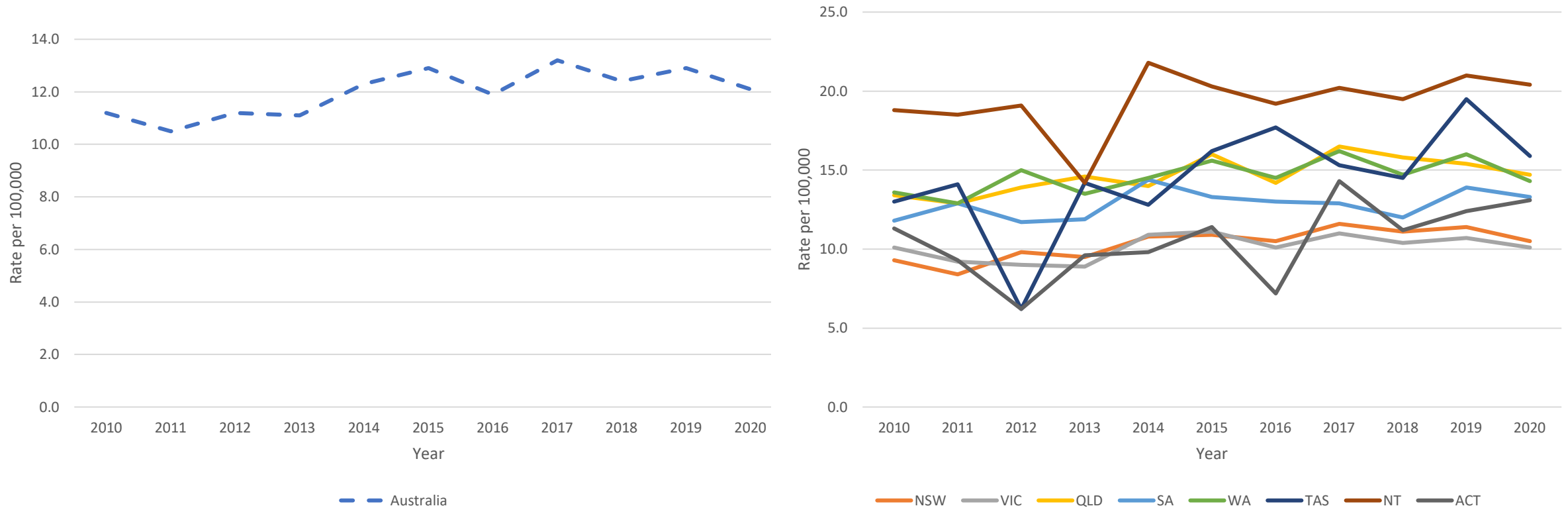
1,2



1. Australian Bureau of Statistics, 2021, Causes of Death, Australia , <https://www.abs.gov.au/statistics/health/causes-death/causes-death-australia/2020>
 2. 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>

AGE STANDARDISED DEATH RATES FOR SUICIDE IN AUSTRALIA

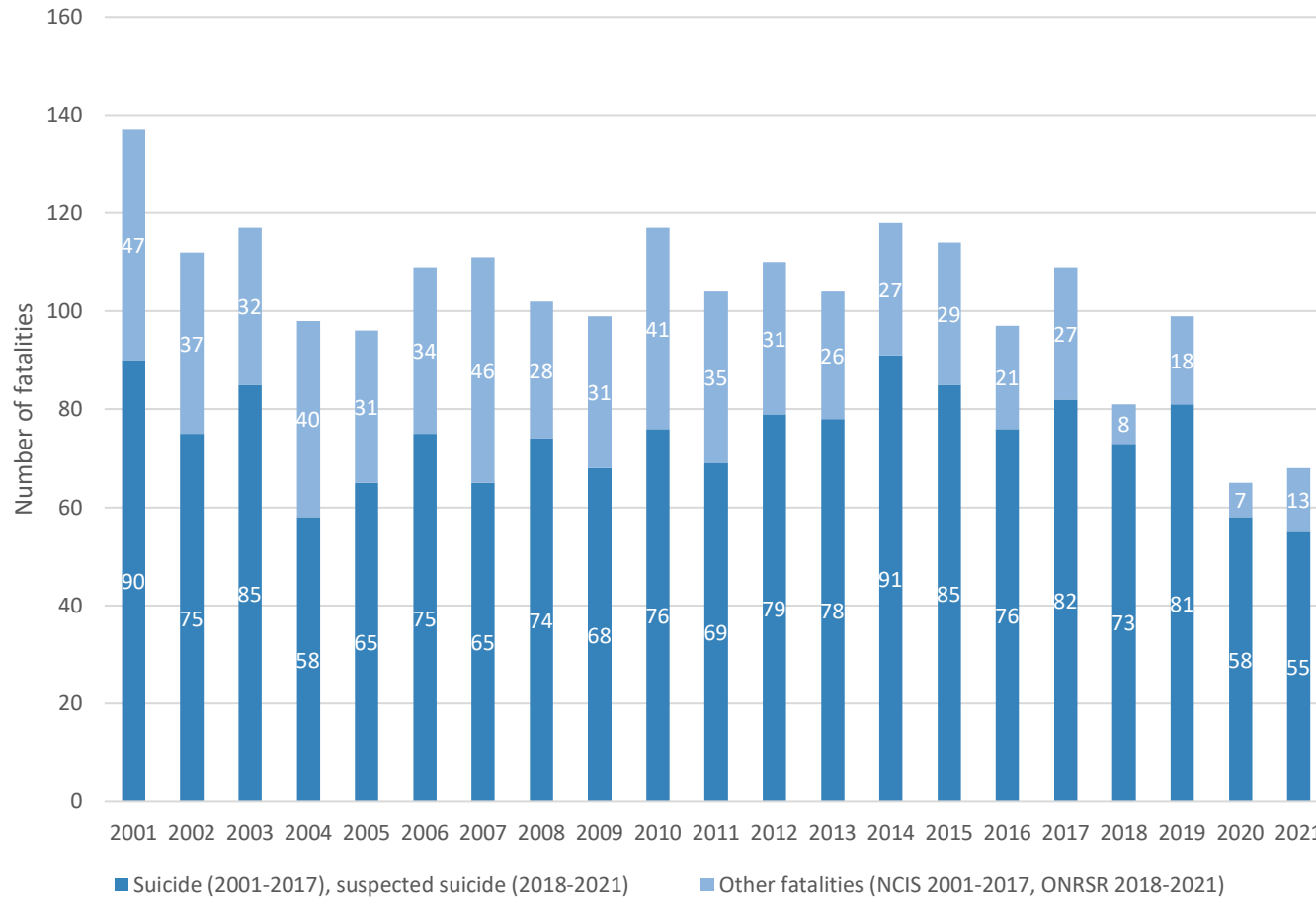
2010-2020^{1,2}



1. Australian Bureau of Statistics, 2021, Causes of Death, Australia , <https://www.abs.gov.au/statistics/health/causes-death/causes-death-australia/2020>

2. 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>

FATALITIES ON THE AUSTRALIAN HEAVY RAIL NETWORK 2001-2021^{1,2,3}



In this period there were 2,167 fatalities - 1,558 suicides or suspected suicides and 609 other fatalities. This is a total annual average of 103 fatalities per year (74 suicides & suspected suicides and 29 other fatalities), or 2 each week.

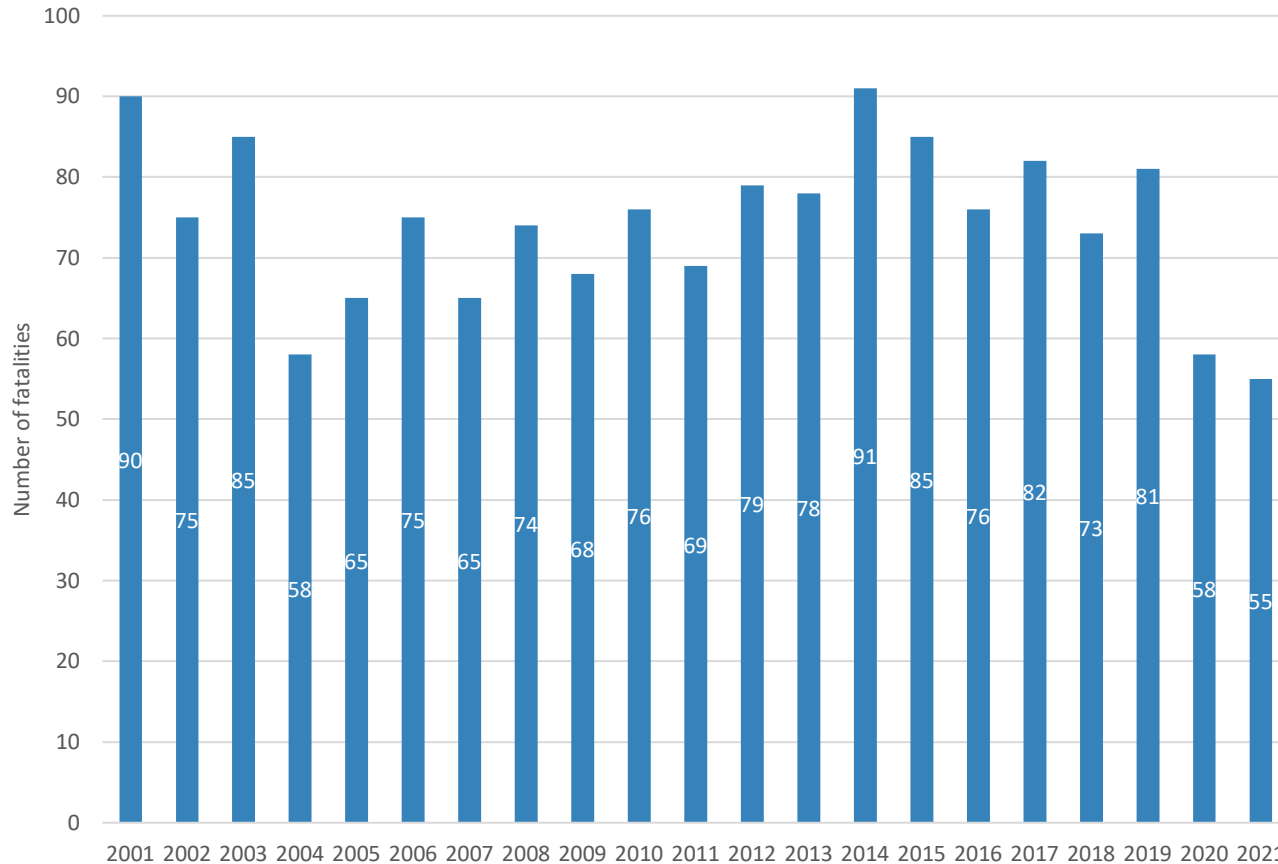
STATE DISTRIBUTION OF FATALITIES



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 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).

SUICIDES (2001-2017)¹ & SUSPECTED SUICIDES (2018-2021)^{2,3} ON THE AUSTRALIAN HEAVY RAIL NETWORK



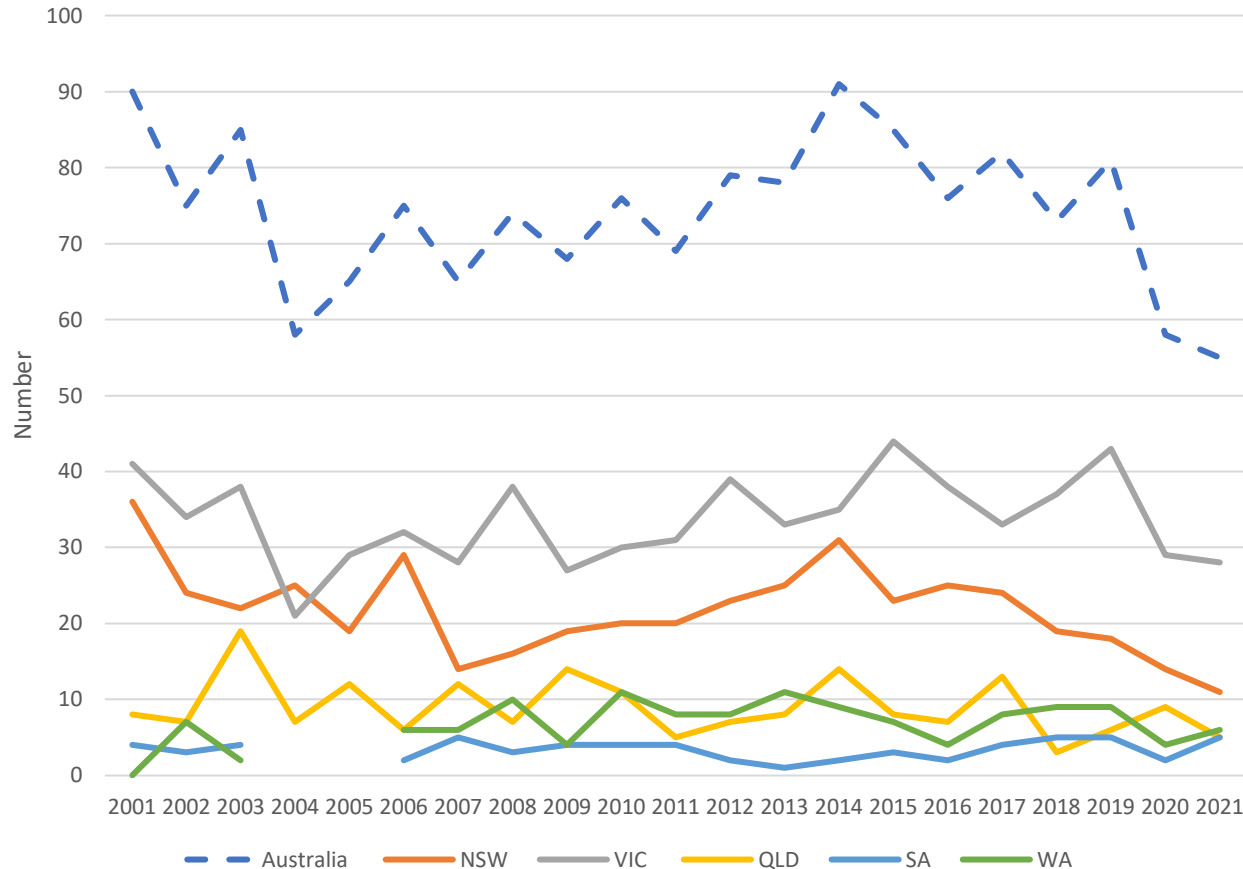
In this period there were 1,558 suicides & suspected suicides, an average of 74 per year and equivalent to 71% of all fatalities.

STATE DISTRIBUTION OF SUICIDES & SUSPECTED SUICIDES⁴



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 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 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. 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 graph. This graph also excludes 1 suicide in the ACT in 2001 and 1 suicide in TAS in 2011 however these are included in the Australian totals.

SUICIDES (2001-2017)^{1,2} & SUSPECTED SUICIDES (2018-2021)^{3,4} ON THE AUSTRALIAN HEAVY RAIL NETWORK BY STATE⁵



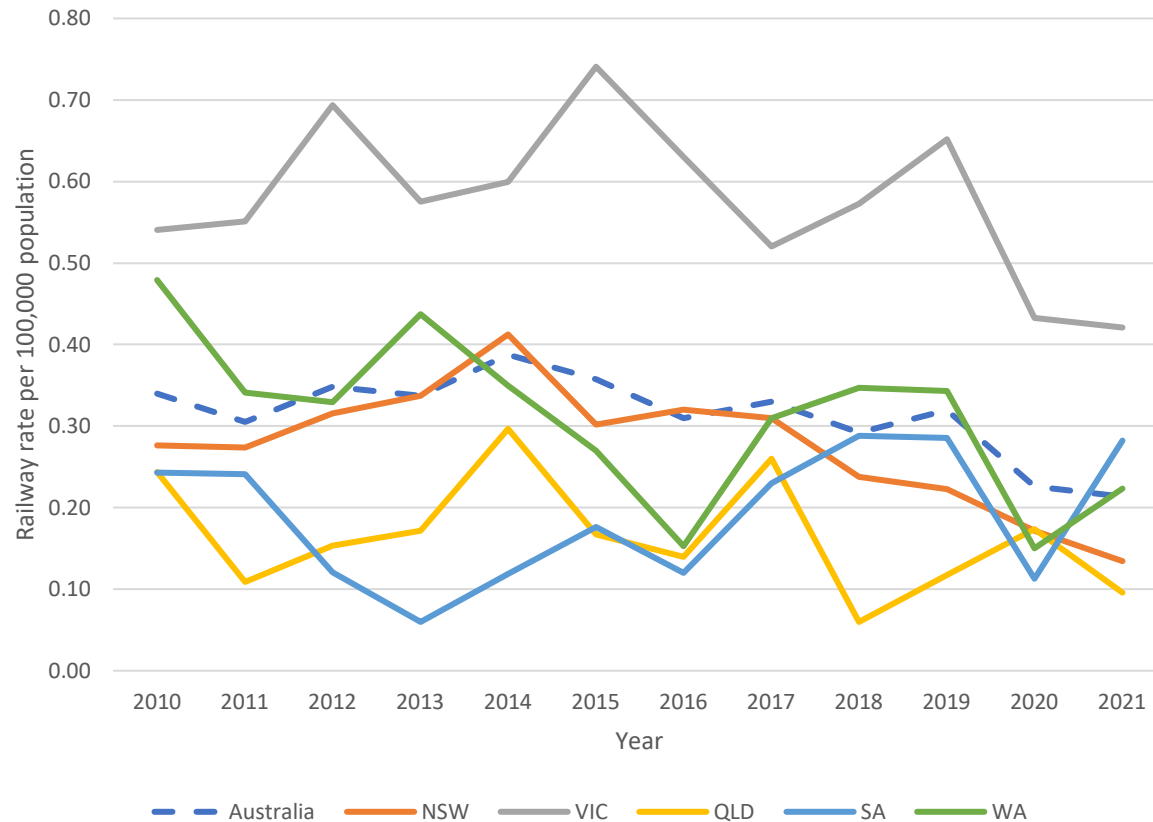
In this period there were 1,558 suicides & suspected suicides, an average of 74 per year and equivalent to 71% of all fatalities.

STATE DISTRIBUTION OF SUICIDES & SUSPECTED SUICIDES⁵



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.
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RATE OF SUICIDE (2010-2017)^{1,2} AND SUSPECTED SUICIDE (2018-2021)³ ON THE AUSTRALIAN HEAVY RAIL NETWORK PER 100,000 POPULATION⁴ BY STATE

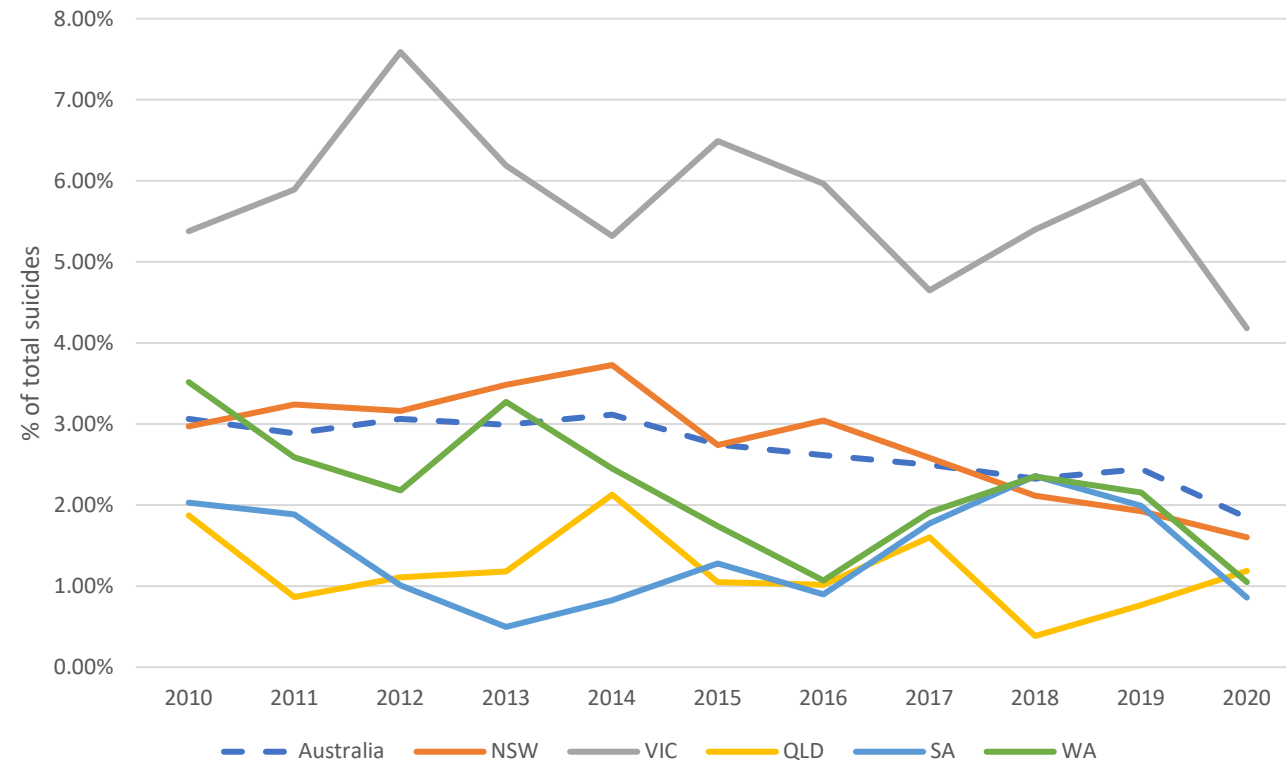


Nationally, and in each state except SA, the rate of suicide/suspected suicide is less in 2021 than it was in 2010.

	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](#)

PROPORTION OF SUICIDES (2010-2017)^{1,2} & SUSPECTED SUICIDES (2018-2020)³ OCCURRING ON THE AUSTRALIAN HEAVY RAIL NETWORK OF TOTAL INTENTIONAL SELF-HARM DEATHS⁴ BY STATE



The proportion of suicide and suspected suicide deaths on rail of total deaths by suicide has decreased nationally and in each state between 2010 and 2020.

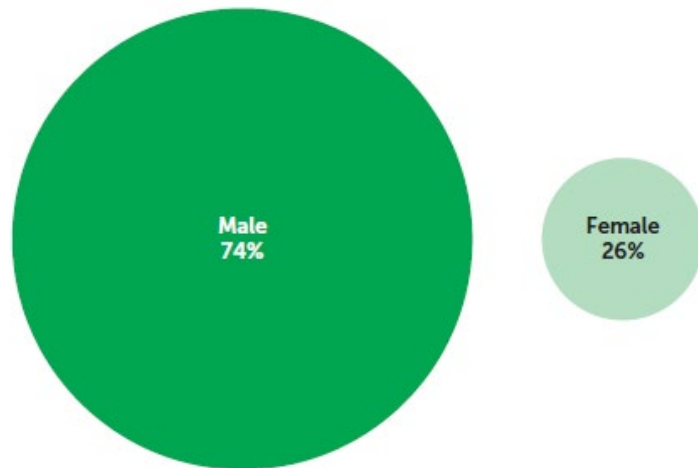
	2010	2019	2020
Australia	3.06%	2.44%	1.85%
NSW	2.97%	1.92%	1.60%
VIC	5.38%	6.00%	4.18%
QLD	1.87%	0.77%	1.19%
SA	2.03%	1.99%	0.85%
WA	3.51%	2.15%	1.05%

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 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 AUSTRALIAN HEAVY RAIL NETWORK – GENDER OF INDIVIDUAL 2001-2017

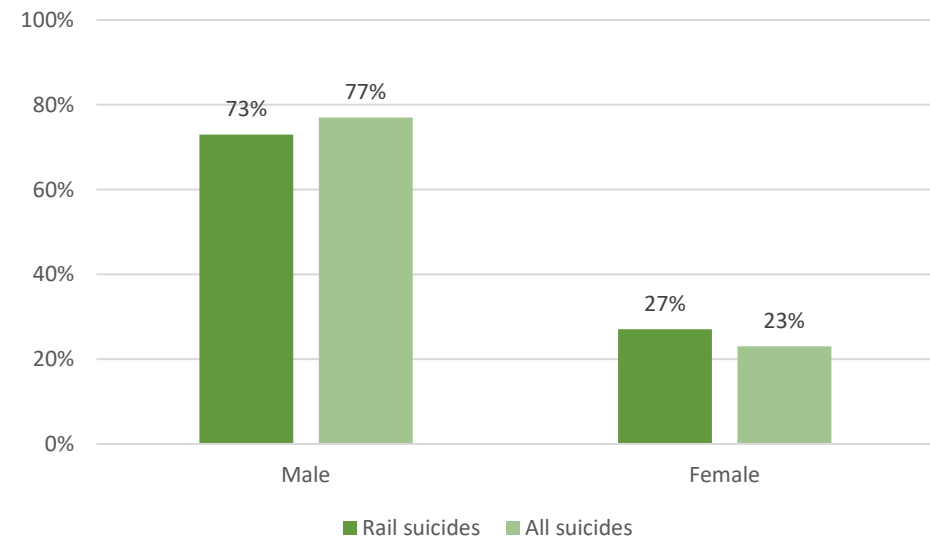
Almost 3 in 4 suicides on rail are male

2001-2017¹



Total 1,291

2002-2017²

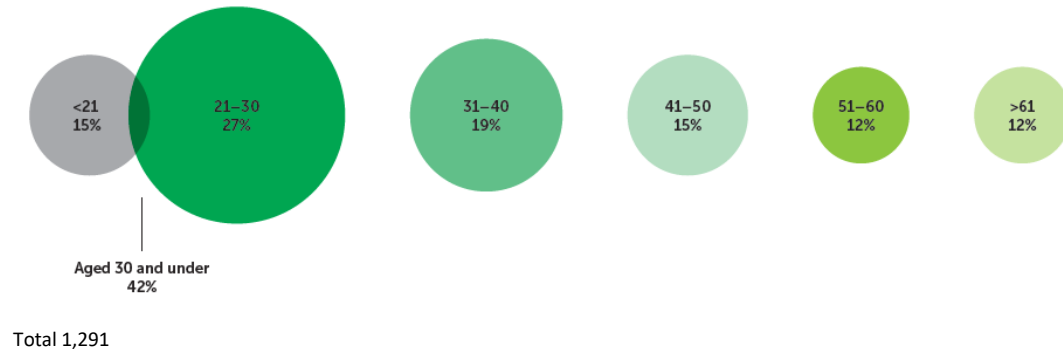


1. National Coronial Information System, 2020 Intentional Self-harm deaths at Australian railway locations 2000–2017, (DR20-31 and DR20-31A), November, Melbourne Australia.
2. National Coronial Information System, Pirkis, J & Clapperton, A, 2020, Suicide in public places project.

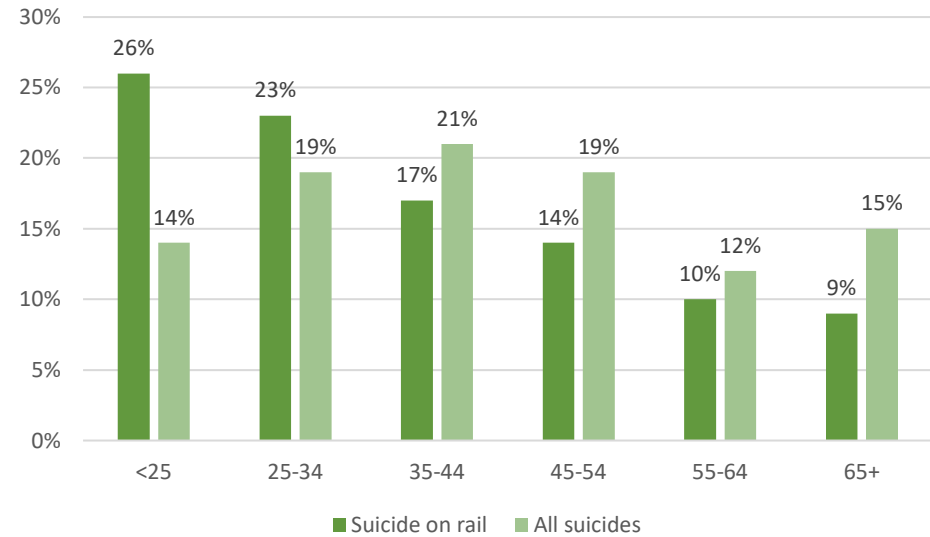
SUICIDE ON THE AUSTRALIAN HEAVY RAIL NETWORK – AGE OF THE DECEASED 2001-2017

Individuals who choose rail are younger than those in the general suicide population.

2001-2017¹



2002-2017²



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. National Coronial Information System, Pirkis, J & Clapperton, A, 2020, Suicide in public places project

SUICIDE ON THE AUSTRALIAN HEAVY RAIL NETWORK – EMPLOYMENT STATUS OF THE DECEASED 2001-2017

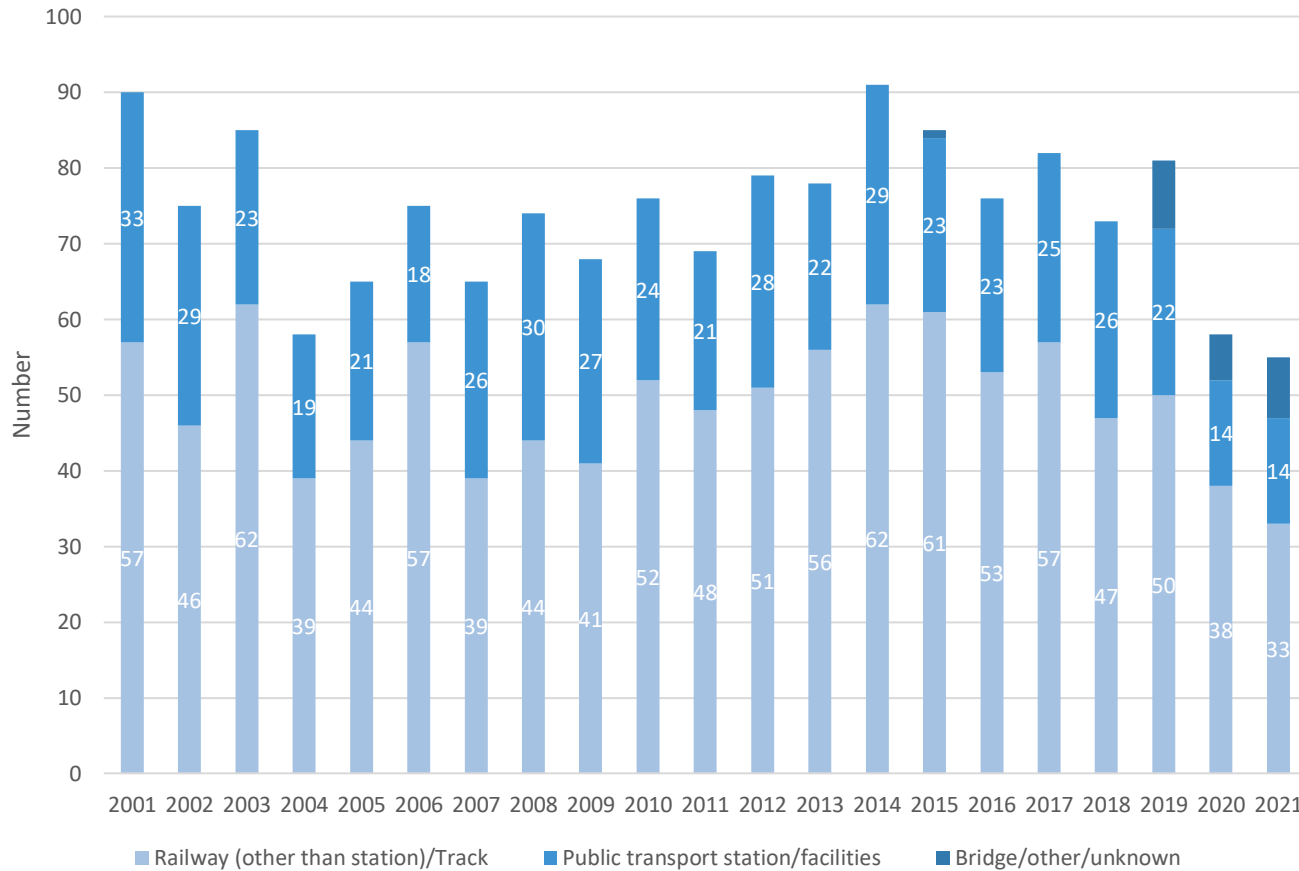
Other research has found that people who die by suicide on the rail network are more likely to be single or never married, and unemployed or not in the labour force². However, the information from this dataset is insufficient to draw conclusions.



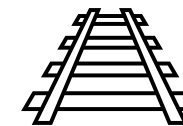
Total 1,291

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

SUICIDE (2001-2017)¹ & SUSPECTED SUICIDE (2018-2021)² ON THE AUSTRALIAN HEAVY RAIL NETWORK BY LOCATION



67% (1,037) fatalities occurred on the track between stations



32% (497) fatalities occurred at a station



11 had an unknown location. Between 2018-2021, 13 deaths occurred from a railway bridge.

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 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.

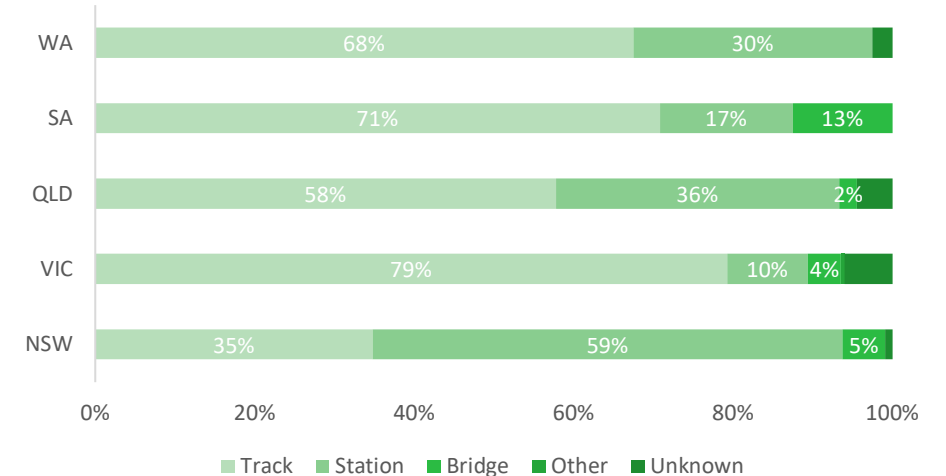
SUICIDE (2014-2017)¹ & SUSPECTED SUICIDE (2016-2021)² ON THE AUSTRALIAN HEAVY RAIL NETWORK BY LOCATION BY STATE

More suicides and suspected suicides occur on the track (between stations) than from at 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

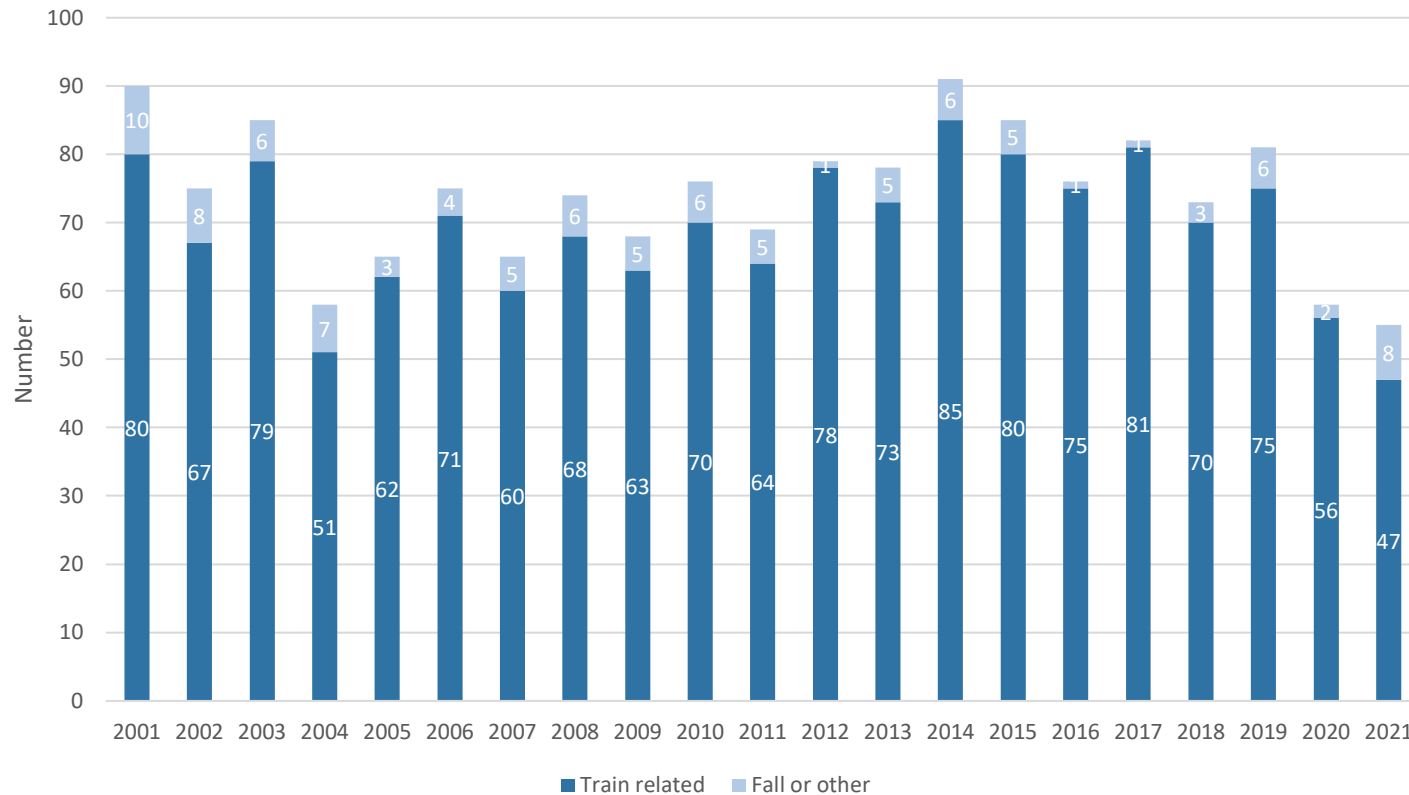
	VIC		NSW		QLD		WA		SA		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%
Station	21	14%	57	60%	21	54%	5	21%	<5	27%	107	34%
Open track	103	69%	35	37%	16	41%	14	58%	6	55%	174	55%
Level or ped crossing	24	16%	<5	*	<5	*	5	21%	<5	*	35	11%
Overpass	<5	*	0	0	<5	*	0	0	0	0	<5	*

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)¹ & SUSPECTED SUICIDE (2018-2021)² FATAL INJURY ON THE AUSTRALIAN HEAVY RAIL NETWORK



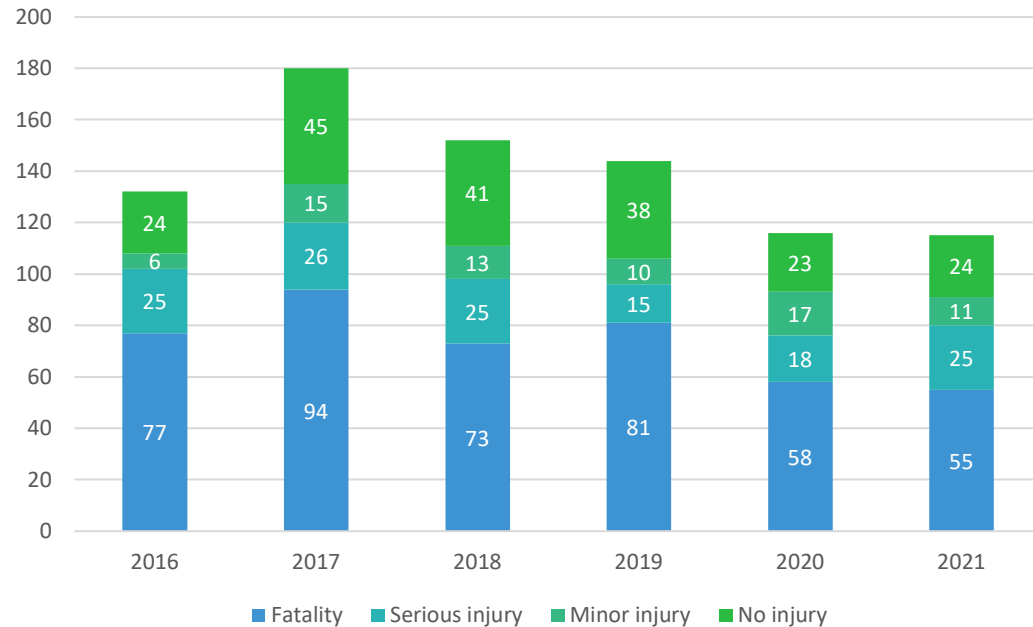
Over this period 93% (1,455) fatalities were train related.

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 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 AUSTRALIAN HEAVY RAIL NETWORK 2016-2021¹

In this period:

- There were 840 suspected and attempted suicides resulting in 438 fatalities, 134 serious injuries, 73 minor injuries and 195 incidents with no injury
- 86% of all fatalities on the rail network are suspected suicides
- There was an average of 73 suspected suicides each year
- There was almost as many attempted suicides (402) as suspected suicides (438)
- 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.



	Suspected suicide	Attempted suicide	Total
NSW	112	133	245
VIC	217	130	347
QLD	45	49	94
SA	24	18	42
WA	40	72	112
Total	438	402	840

There were no suspected or attempted suicides in ACT, NT or TAS.

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 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

SUSPECTED AND ATTEMPTED SUICIDE ON THE AUSTRALIAN HEAVY RAIL NETWORK 2016-2021¹

	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

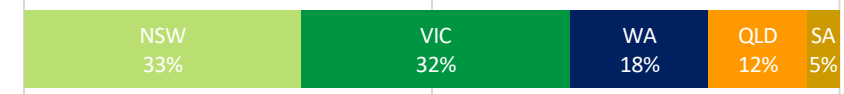
STATE DISTRIBUTION OF SUSPECTED SUICIDES



STATE DISTRIBUTION OF SUSPECTED & ATTEMPTED SUICIDES



STATE DISTRIBUTION OF ATTEMPTED SUICIDES

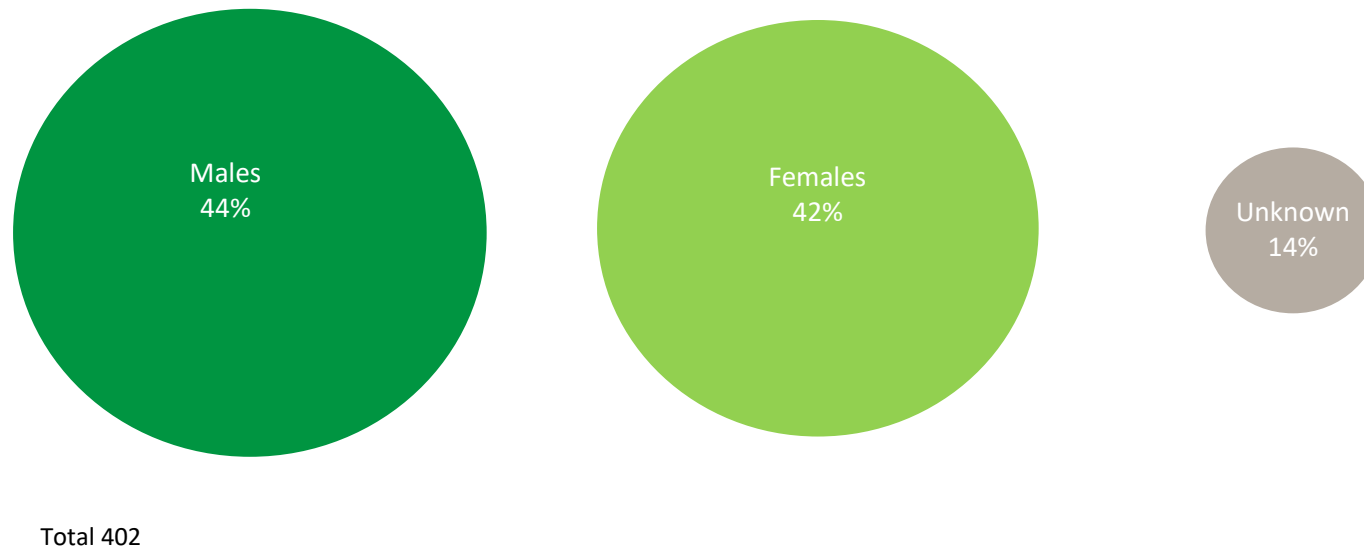


1. Office of the National Rail Safety Regulator, Occurrence extract-fatalities, serious injuries, minor injuries, attempted suicide no consequence July 2015–December 2021. The requirements for operator reporting of notifiable occurrences are set out in the Reporting Requirements for Notifiable Occurrences.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

Note: NCIS report less 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 AUSTRALIAN HEAVY RAIL NETWORK - GENDER 2016-2021¹

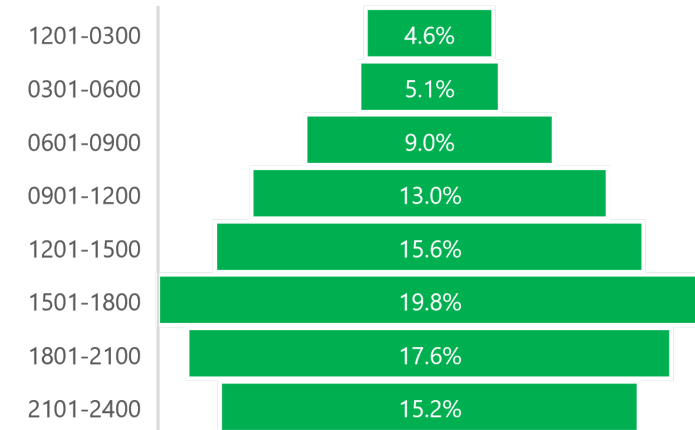
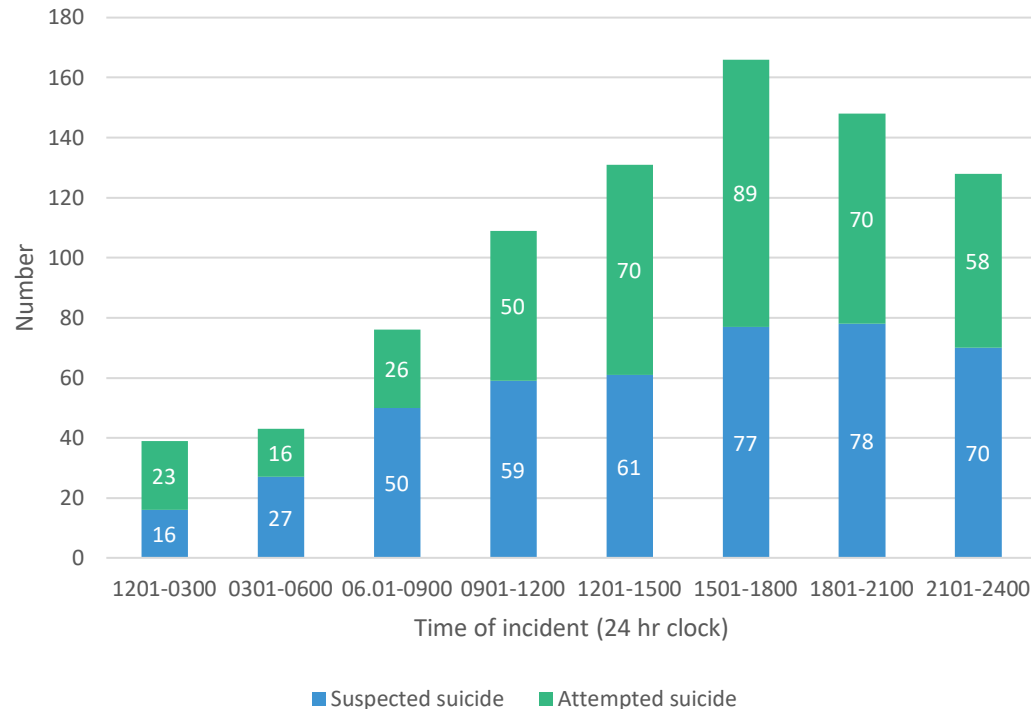
Australia wide for the period 2001-2017, 74% of suicides on the rail network were male which is consistent with the general population trend. The national data for suspected suicides 2016-2021 includes too many unknowns for it to be useful. Of the attempted suicides, 44% were male, 42% were female and 14% unknown.



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 AUSTRALIAN HEAVY RAIL NETWORK – TIME OF DAY 2016-2021¹

69% of incidents occurred from midday onwards with more occurring between 3 – 6pm than any other period.



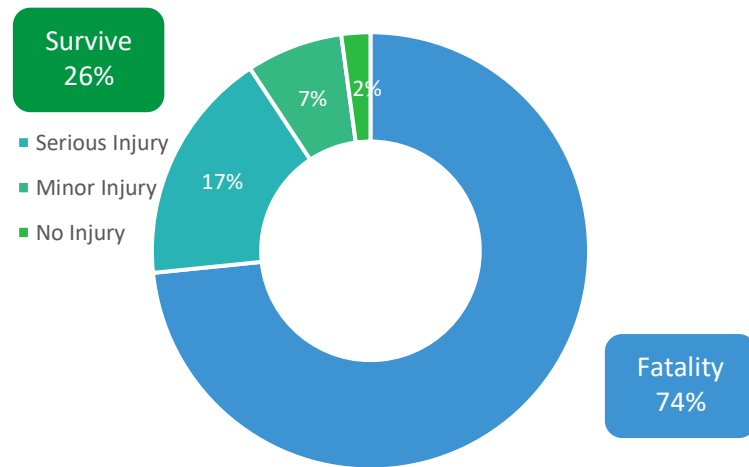
1. Office of the National Rail Safety Regulator, Occurrence extract-fatalities, serious injuries, minor injuries, attempted suicide no consequence July 2015–December 2021. The requirements for operator reporting of notifiable occurrences are set out in the Reporting Requirements for Notifiable Occurrences.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

Note: Percentages equal 101 due to rounding.

SUSPECTED & ATTEMPTED SUICIDE ON THE AUSTRALIAN HEAVY RAIL NETWORK – OUTCOME INDIVIDUAL STRUCK BY TRAIN 2016-2021¹

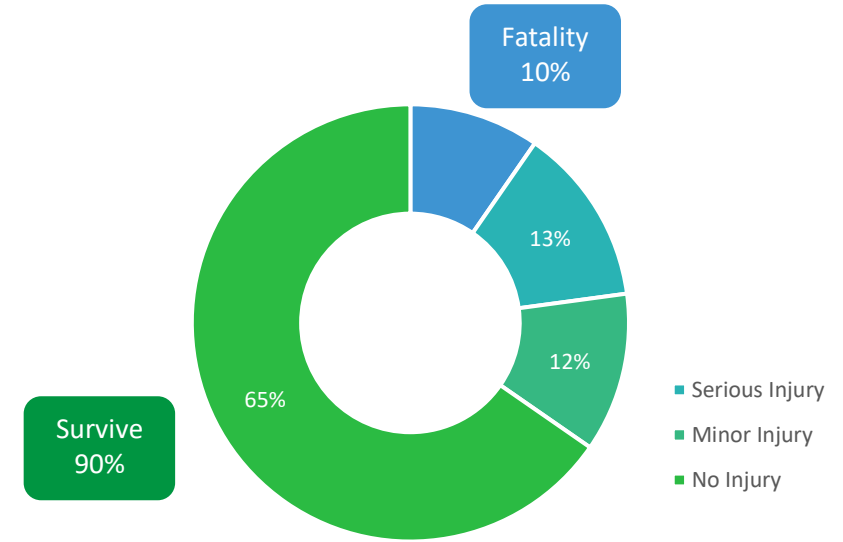
- In 1 in 4 attempted suicides the individual will survive a suicide attempt after being struck by a train or involved in a train related incident.
- If the individual is not struck by a train, 90% survived and 65% had no injury

INDIVIDUAL STRUCK BY TRAIN



Total 560

INDIVIDUAL NOT STRUCK BY TRAIN



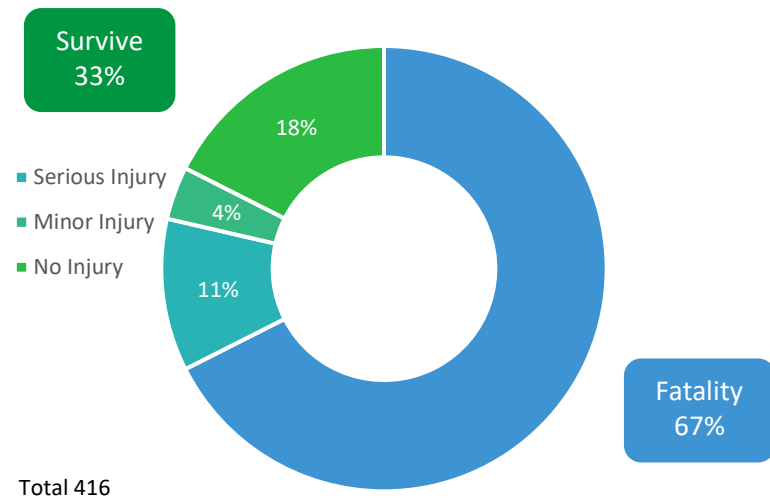
Total 280

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.

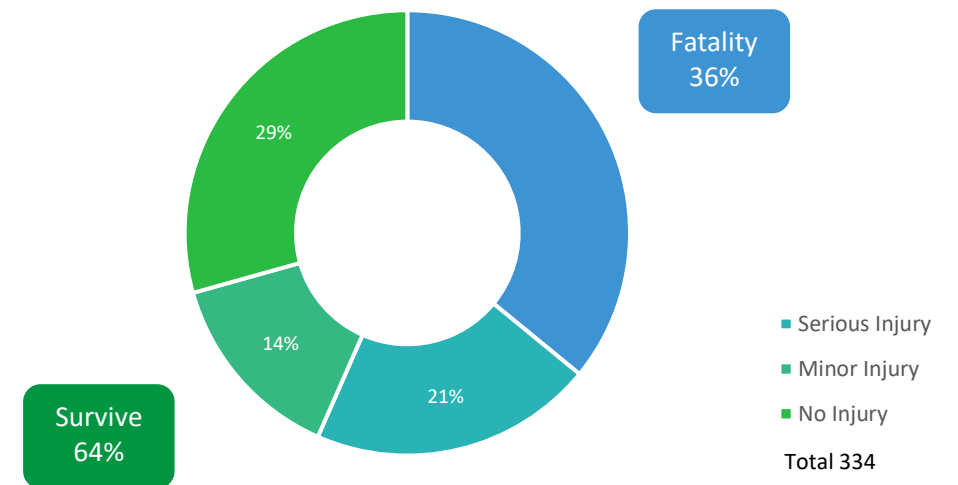
SUSPECTED & ATTEMPTED SUICIDE ON THE AUSTRALIAN HEAVY RAIL NETWORK– OUTCOME BY LOCATION 2016-2021¹

- Almost 7 in 10 attempted suicides that occur on the track result in a fatality.
- Just over 6 in 10 attempted suicides that occur from a station, the individual survives.

OUTCOME OF INCIDENTS THAT OCCUR ON THE TRACK²

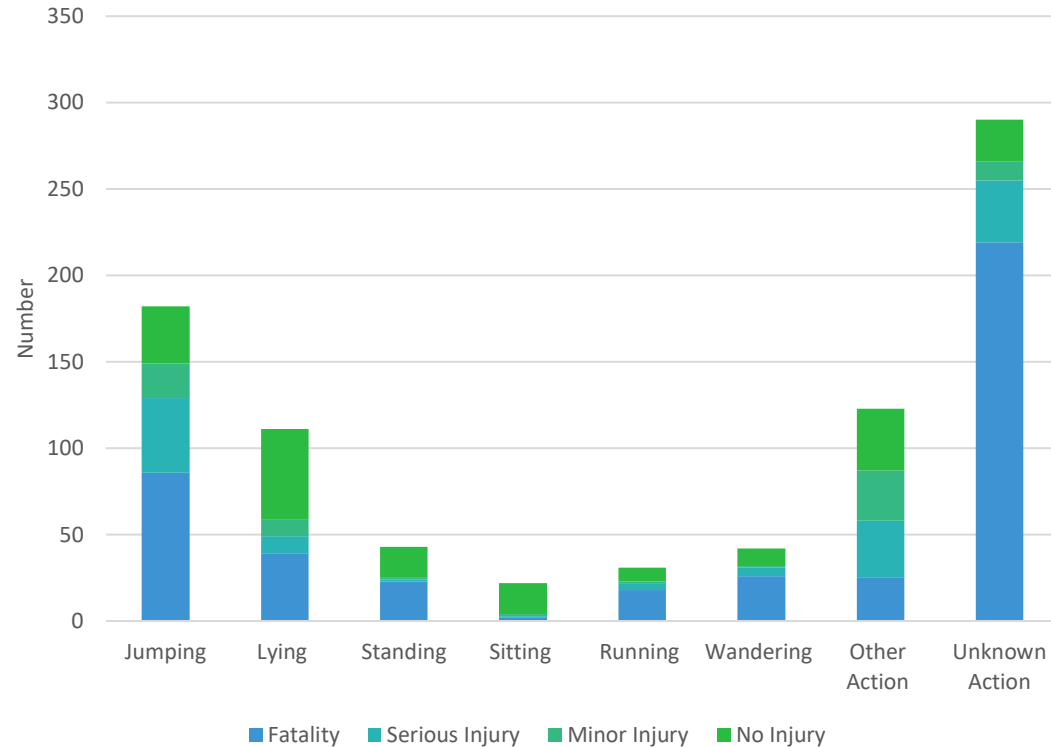


OUTCOME OF INCIDENTS THAT OCCUR FROM A STATION²



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 90 occurrences that occurred at a bridge, other location or unknown location – 37 fatalities, 19 serious injuries, 10 minor injuries and 24 no injuries.

SUSPECTED & ATTEMPTED SUICIDE ON THE AUSTRALIAN HEAVY RAIL NETWORK – OUTCOME BY BEHAVIOUR 2016-2021¹



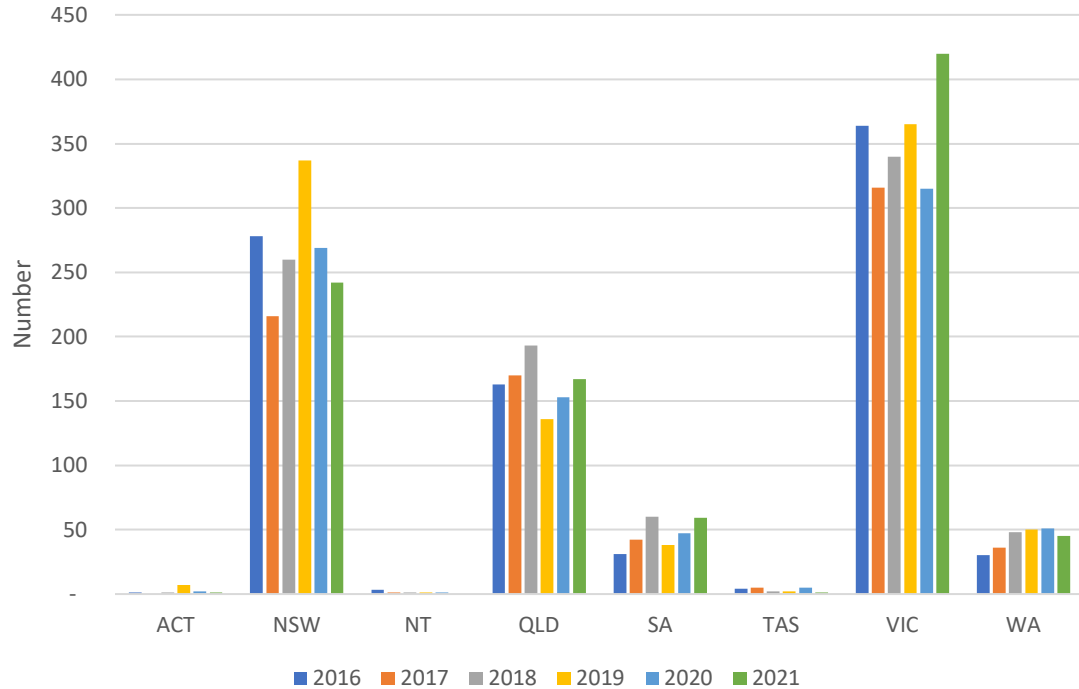
Understanding patterns of behaviour prior to an attempted suicide is important as different intervention strategies can be developed for different behaviours². For example, when individuals jump directly into the path of a train there is generally less time to enact response measures compared with cases where individuals are stationary or wandering on tracks and intervention mechanisms such as approaching the individual or slowing the train can be deployed³.

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*.

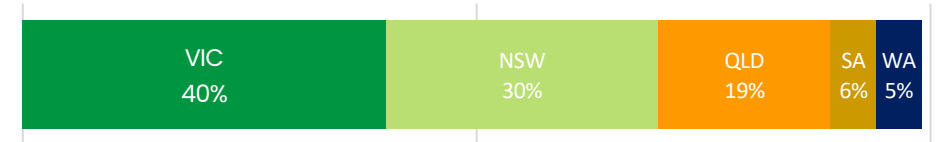
NEAR MISS WITH TRESPASSER 2016-2021¹

In this period there were 5,279 near misses with a trespasser, an average of 880 per year. Some of these trespassers may have been considering attempting suicide.



	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
2016	1	278	3	163	31	4	364	30
2017	-	216	1	170	42	5	316	36
2018	1	260	1	193	60	2	340	48
2019	7	337	1	136	38	2	365	50
2020	2	269	1	153	47	5	315	51
2021	1	242	-	167	59	1	420	45
TOTAL	12	1,602	7	982	277	19	2,120	260
AVERAGE	2	267	1	164	46	3	353	43

DISTRIBUTION OF NEAR MISS WITH TRESPASSER BY STATE



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.



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