

A decorative graphic at the top of the page features a dark green silhouette of a train with several rectangular cars, moving from left to right. To the right of the train, there is a stylized city skyline with various building shapes. The entire graphic is set against a white background.

# SUICIDE, SUSPECTED SUICIDE AND ATTEMPTED SUICIDE ON THE WESTERN 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 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 Queensland 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

- 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 193 fatalities on the Western Australian heavy rail network, 133 suicides or suspected suicides (75%) and 60<sup>1</sup> other fatalities (25%). This is a total average of 9 fatalities per year.
- Of the Western Australian suicides and suspected suicides, 68% occurred on the track between stations and 30% at a station and 2% other location or unknown.
- There has been a decrease in the Western Australian rate of suicide/suspected suicide on the rail network per 100,000 of the population from 0.48/100,000 in 2010 to 0.22/100,000 in 2021.
- There has been a decrease in the proportion of suicide and suspected suicide deaths on the Western Australian rail network of total deaths by suicide from 3.51% in 2010 to 1.05% in 2021.
- In Western Australia between 2016-2021 and based on notifications to the Office of the National Rail Safety Regulator:
  - 40 (80%) of a total of 50 fatalities were suspected suicides
  - there were 95 other occurrences reported including 72 attempted suicides (11 serious injuries, 7 minor injuries and 54 no injuries) and 9 serious injuries and 14 minor injuries
  - 75% of suspected and attempted suicides occurred from midday onwards, with more (28%) occurring between 6 - 9pm
  - in 45% of the attempted suicides, the individual was struck by a train, with 80% resulting in a fatality. Of those that were not struck by a train, all survived
  - 61% of attempted suicides that occur on the track result in a fatality and 78% of attempted suicides that occur from a station, the individual survives.

1. This includes between 1-3 fatalities that occurred in various years between July 2000 – December 2001, the exact annual number is not reported.

# 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 Western Australia, the number of people dying by suicide has increased from 313 in 2010 to 381 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 Western Australia, 3.51% in 2010 to 1.05% 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>

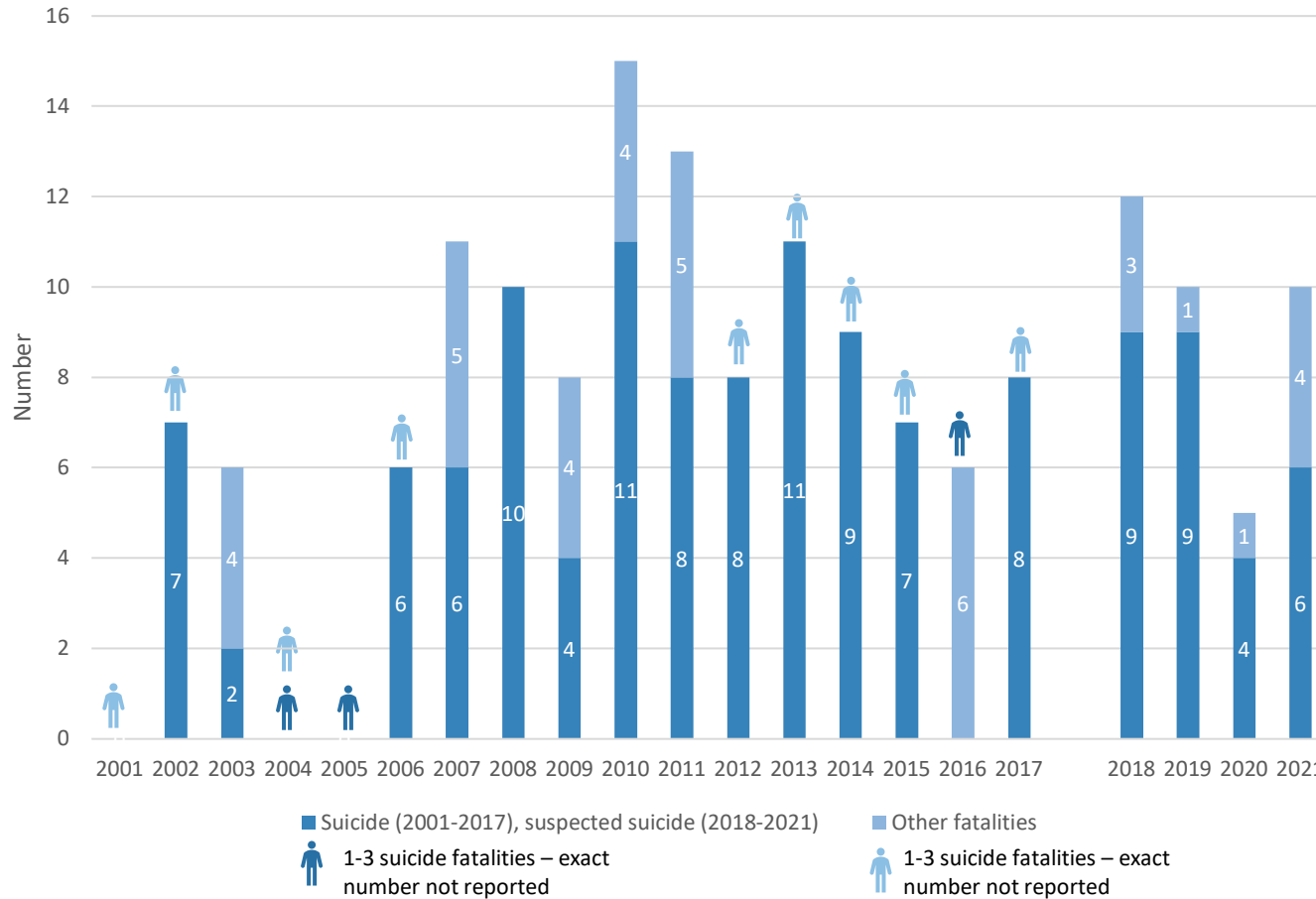
3. Suicide Prevention Australia, University of New England, 2016, The ripple effect: understanding the exposure and impact of suicide in Australia

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 WESTERN AUSTRALIAN HEAVY RAIL NETWORK 2001-2021<sup>1,2,3</sup>



Between July 2000 – December 2021 there were 193 fatalities – 133 (69%) suicides or suspected suicides and 60<sup>4</sup> (31%) other fatalities. This is a total annual average of 9 fatalities per year.

## STATE DISTRIBUTION OF FATALITIES



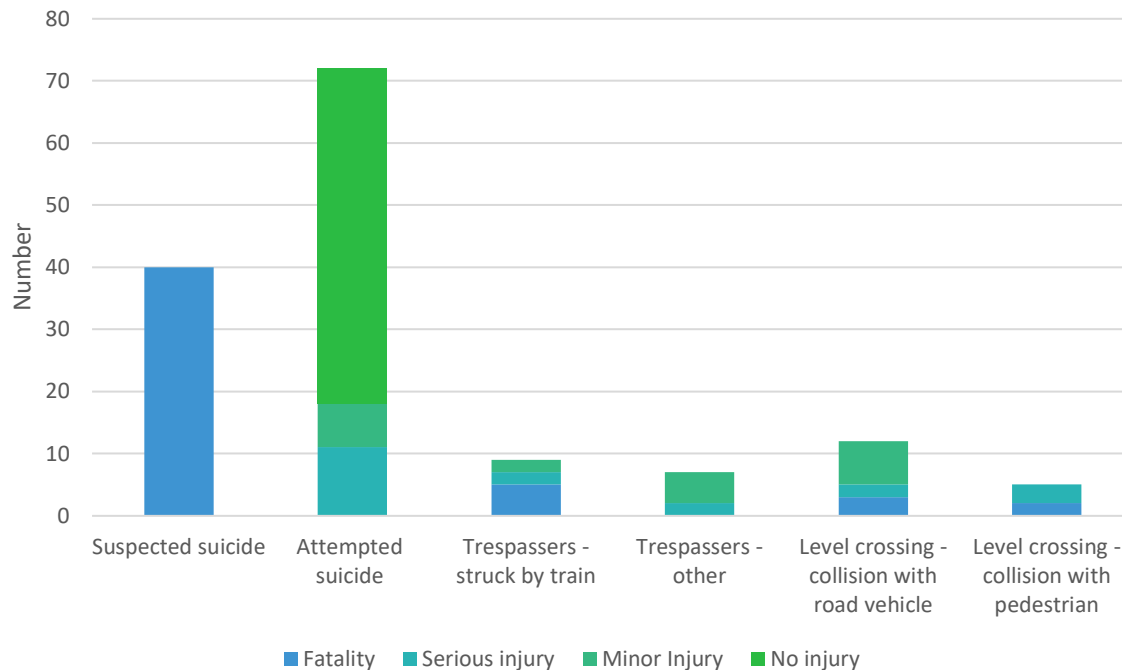
In addition, there were 5 fatalities in TAS, 7 in the NT and 2 in the ACT.

- 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). The exact number per year is not reported if it is less than 4.
- 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.
- NCIS report for Australia less 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).
- This includes between 1-3 fatalities that occurred in various years between July 2000 – December 2021, the exact annual number is not reported.

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

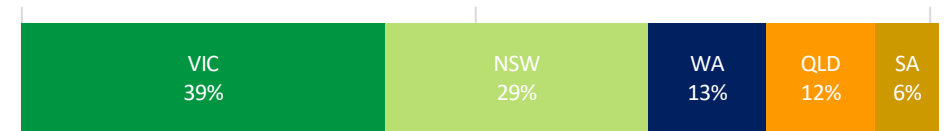
In this period there were:

- 145 fatalities, injuries and attempted suicides with no injury reported to the Office of the National Rail Safety Regulator, an average of 24 per year.
- 80% of fatalities were suspected suicides.



	Fatality	Serious injury	Minor Injury	No injury	Total
Suspected suicide	40				40
Attempted suicide		11	7	54	72
Trespassers - struck by train	5	2	2		9
Trespassers - other	0	2	5		7
Level Xing - collision with road vehicle	3	2	7		12
Level Xing - collision with pedestrian	2	3	0		5
<b>Total</b>	<b>50</b>	<b>20</b>	<b>21</b>	<b>54</b>	<b>145</b>

## STATE DISTRIBUTION OF OCCURENCES



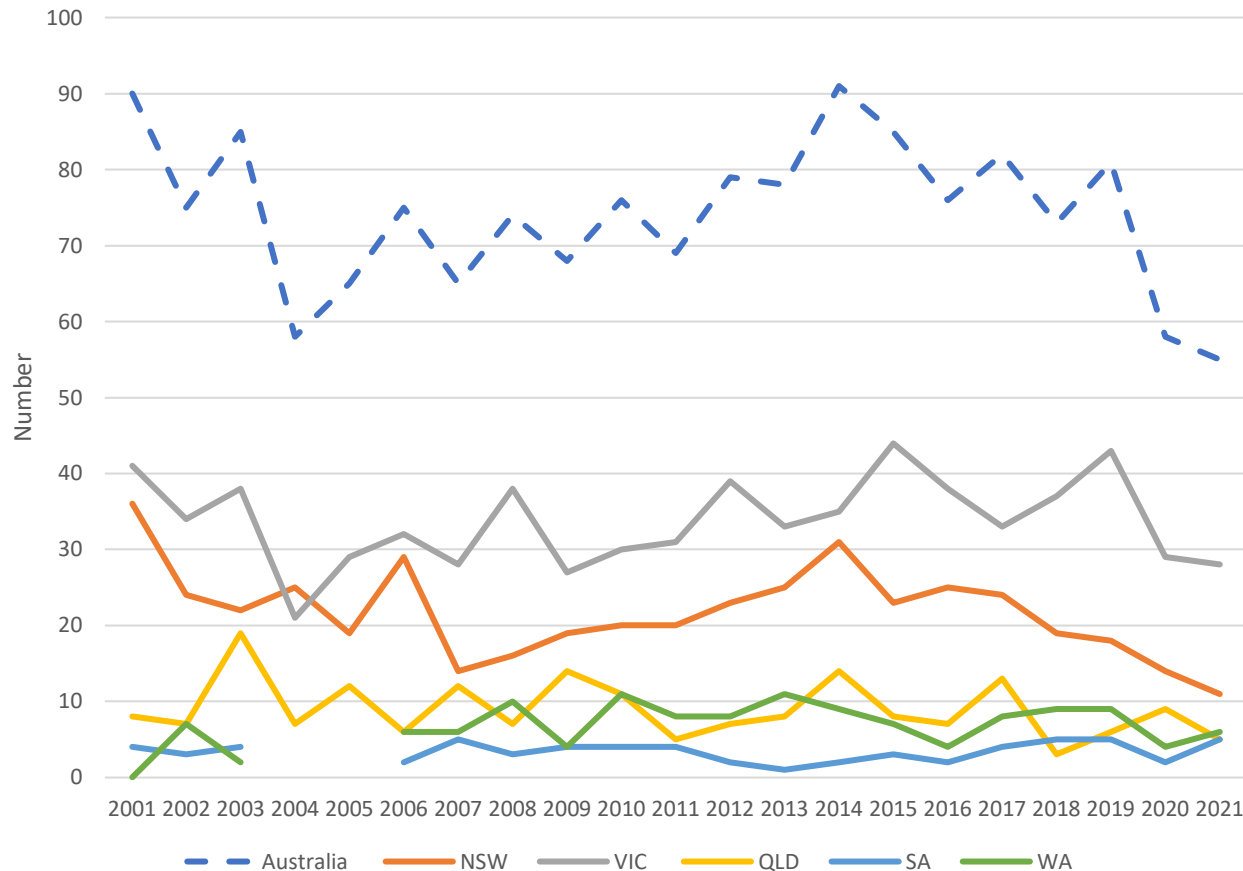
There were 2 injury incidents in NT, 1 in TAS and 0 in ACT

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>



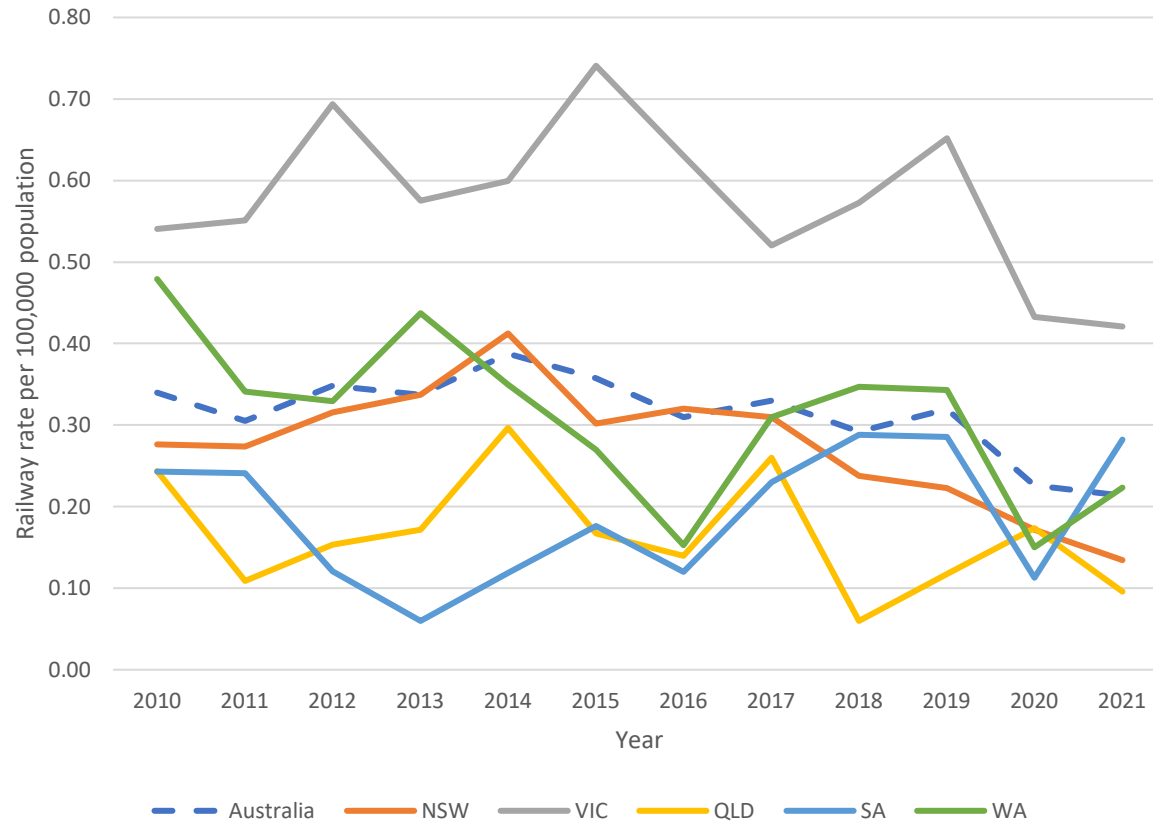
In this period there were 1,558 suicides & suspected suicides, an average of 74 per year and equivalent to 71% of all fatalities.

## 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 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



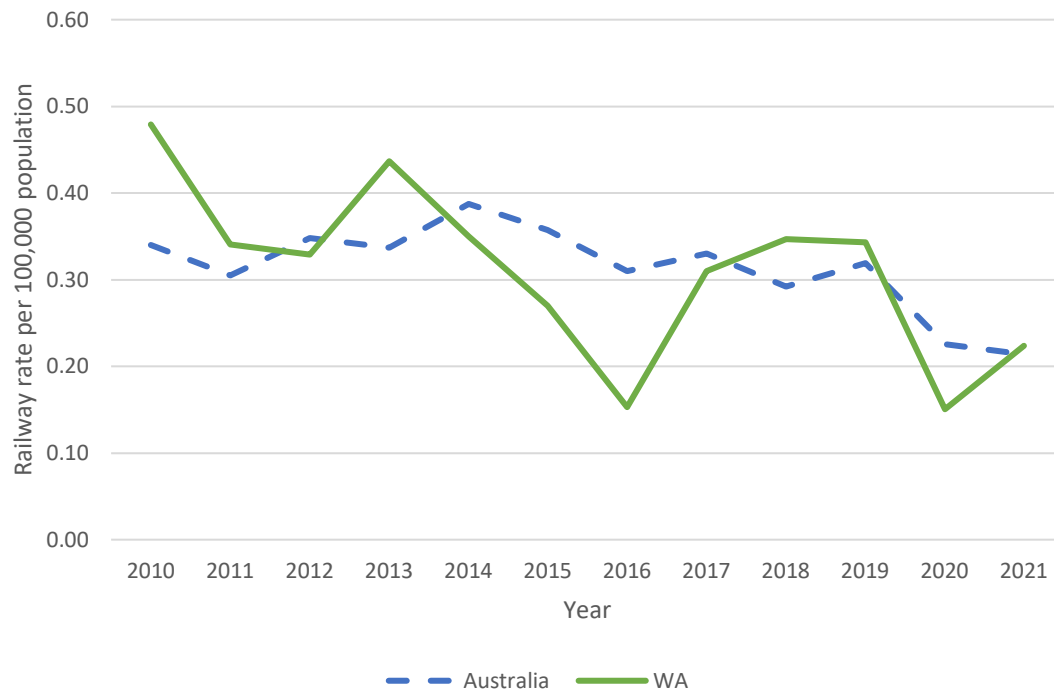
Nationally, and in each state except SA, the rate of suicide/suspected suicide is less in 2021 than it was in 2010.

	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

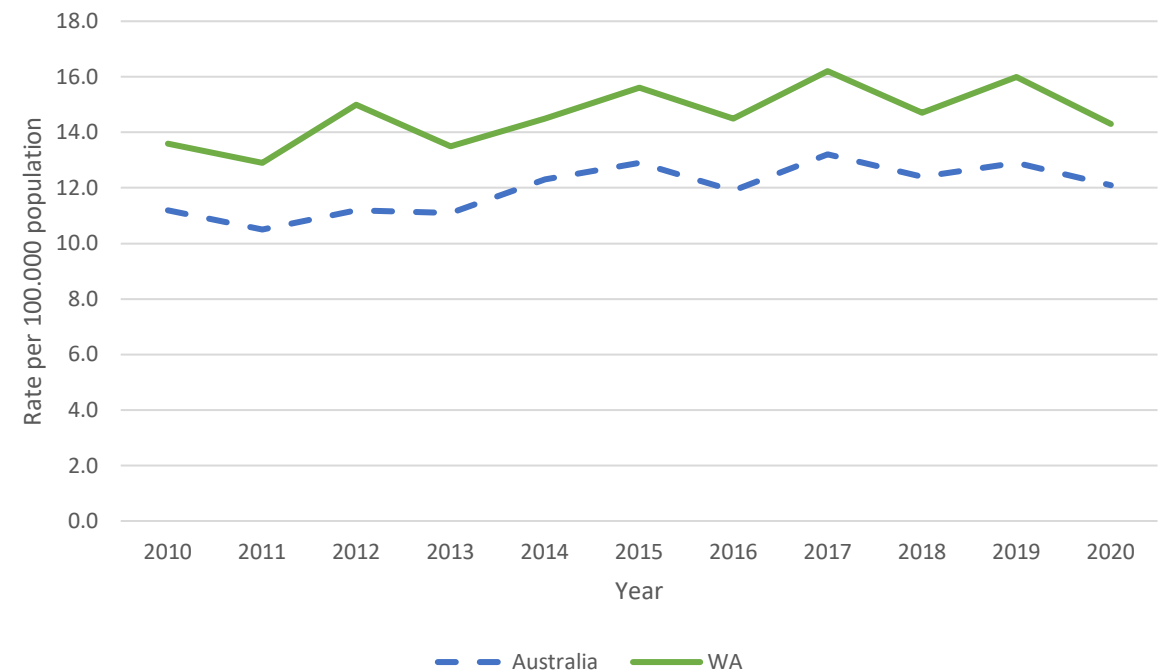
1. National Coronial Information System, 2020 Intentional Self-harm deaths at Australian railway locations 2000–2017, (DR20-31 and DR20-31A), November, Melbourne Australia.
2. ONRSR data used for SA & WA in 2016 as NCIS report <4
3. Office of the National Rail Safety Regulator, Occurrence extract-fatalities, 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](#)

# 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> – WESTERN AUSTRALIA

## SUICIDE & SUSPECTED SUICIDE RATE ON RAIL

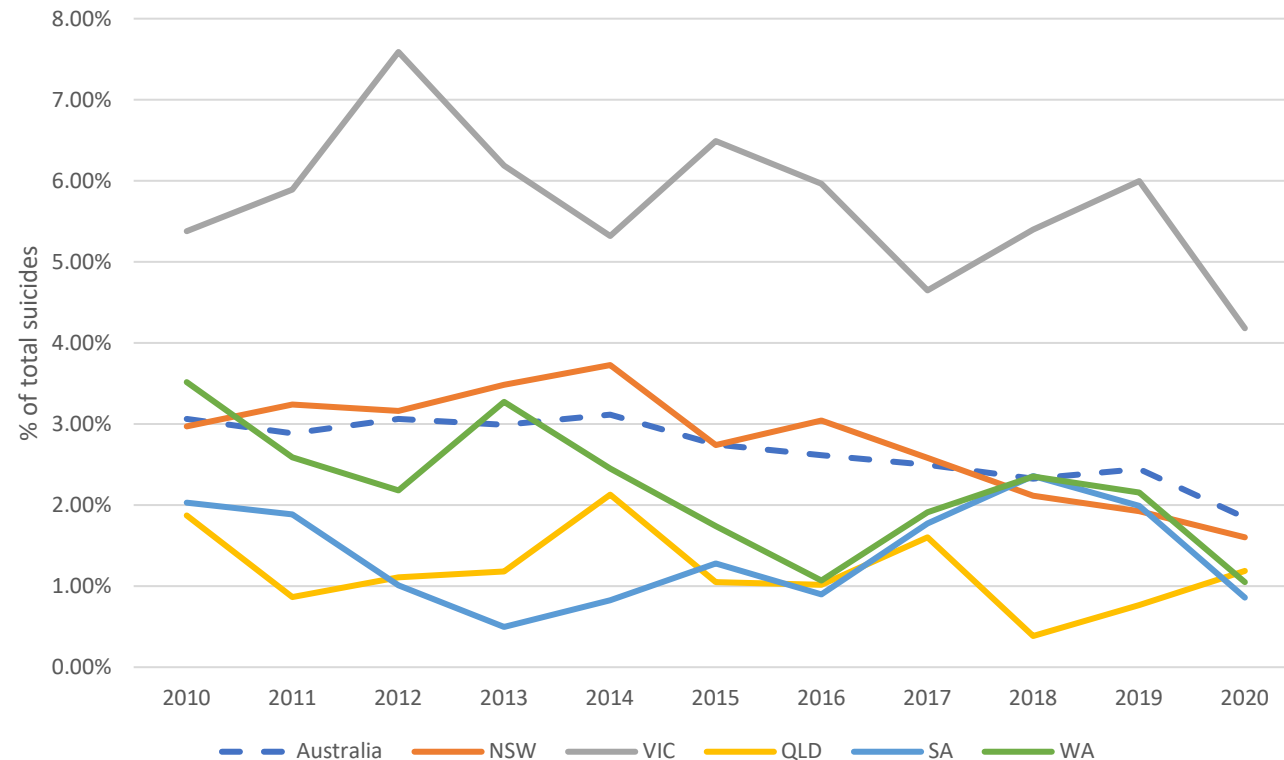


## AGE STANDARDISED DEATH RATES FOR SUICIDE<sup>5,6</sup>



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 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

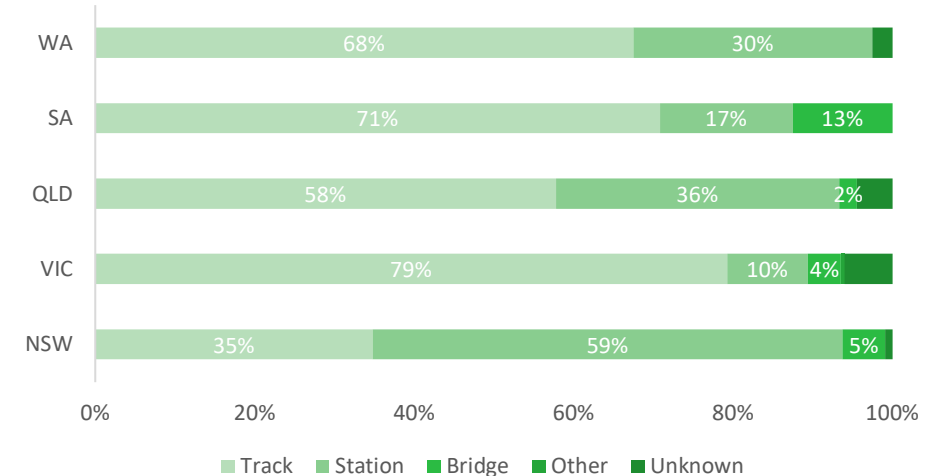
# SUICIDE (2014-2017)<sup>1</sup> & SUSPECTED SUICIDE (2016-2021)<sup>2</sup> ON THE AUSTRALIAN HEAVY RAIL NETWORK BY LOCATION BY STATE

More suicides and suspected suicides occur on the track (between stations) than from a station. Between 2016-2021, across Australia 64% of suspected suicides occurred on the track and 27% from the station. In Western Australia, 68% (27) of incidents occurred on the track, 30% (12) and 2% (1) from another or unknown location.

## 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

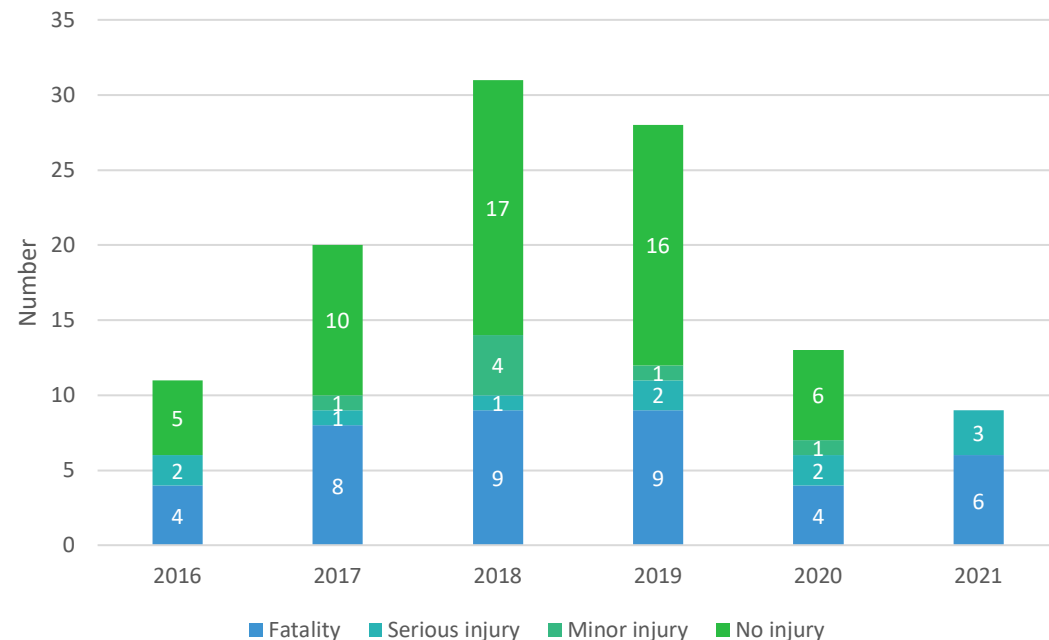


1. National Coronial Information System, Pirkis, J & Clapperton, A, 2020, Suicide in public places project
2. Office of the National Rail Safety Regulator, Occurrence extract-fatalities, serious injuries, minor injuries, attempted suicide no consequence July 2015–December 2021 (for 2016-2021 data). Incidents 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.

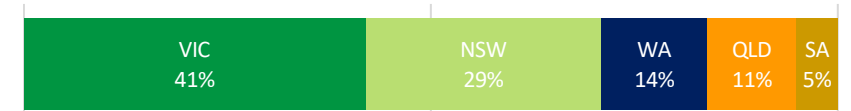
# SUSPECTED AND ATTEMPTED SUICIDE ON THE WESTERN AUSTRALIAN HEAVY RAIL NETWORK 2016-2021<sup>1</sup>

In this period:

- there were 112 suspected and attempted suicides resulting in 40 fatalities, 11 serious injury, 7 minor injuries and 54 incidents with no injury
- there was an average of almost 7 suspected suicides and 12 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.



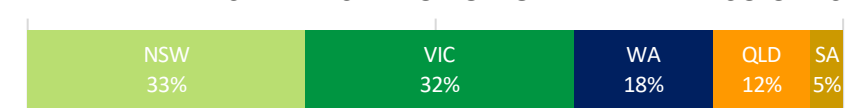
## STATE DISTRIBUTION OF SUSPECTED & ATTEMPTED SUICIDES



## 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

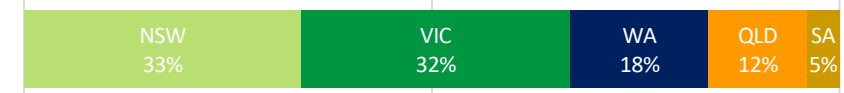
## STATE DISTRIBUTION OF SUSPECTED SUICIDES



## STATE DISTRIBUTION OF SUSPECTED & ATTEMPTED SUICIDES



## STATE DISTRIBUTION OF ATTEMPTED SUICIDES



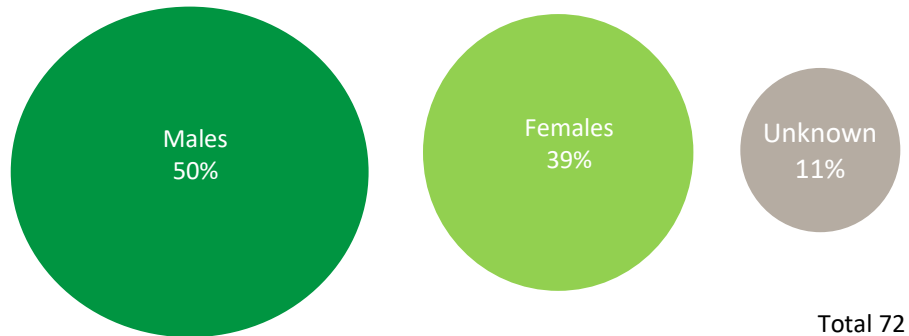
1. Office of the National Rail Safety Regulator, Occurrence extract-fatalities, serious injuries, minor injuries, attempted suicide no consequence July 2015–December 2021. The requirements for operator reporting of notifiable occurrences are set out in the Reporting Requirements for Notifiable Occurrences.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

Note: NCIS report less 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)

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

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 Western Australian data for suspected suicides 2016-2021 includes too many unknowns to allow a comparison with the national trend (88%). Of the attempted suicides nationally, 44% were male, 42% were female and 14% unknown and in Western Australia, 50% were male (36), 39% were female (28) and 11% were unknown (8).

## ATTEMPTED SUICIDE

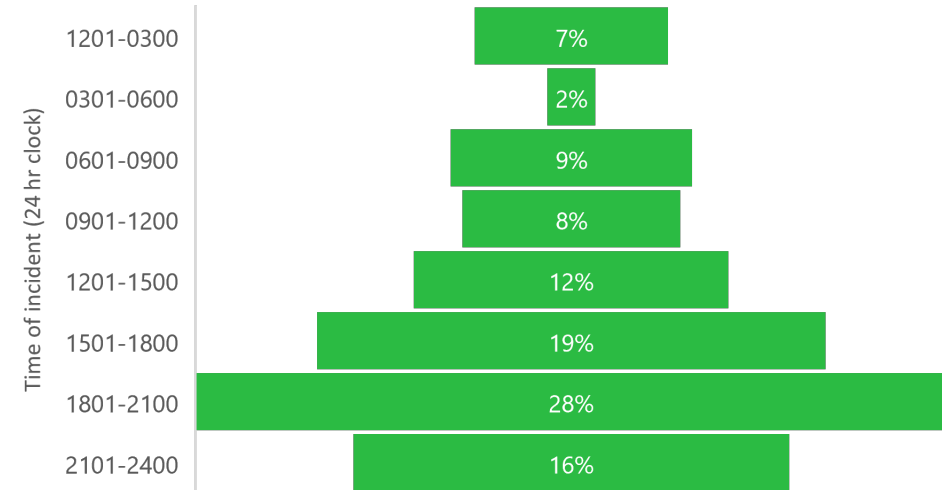
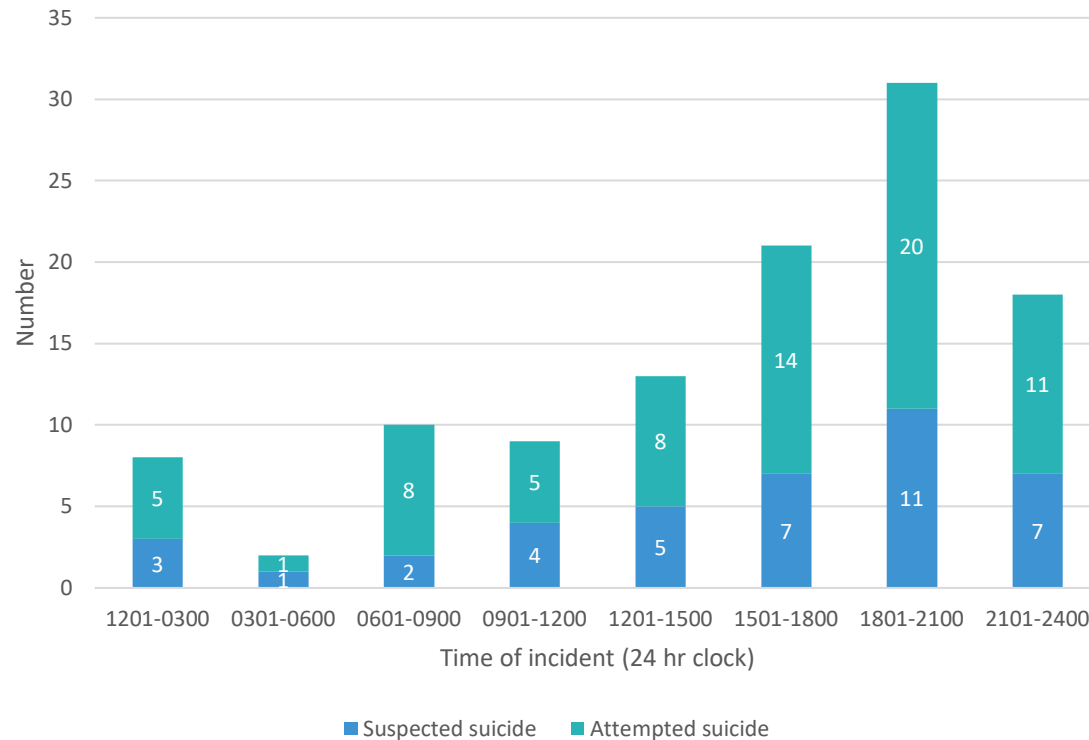


1. Office of the National Rail Safety Regulator, Occurrence extract-fatalities, serious injuries, minor injuries, attempted suicide no consequence July 2015–December 2021. The requirements for operator reporting of notifiable occurrences are set out in the Reporting Requirements for Notifiable Occurrences.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



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

75% of incidents occurred from midday onwards with more occurring between 6 – 9pm (28%) than any other period. Australia wide, 69% of incidents occurred from midday onwards with more incidents occur between 3 – 6pm ( 20% ) than any other period.



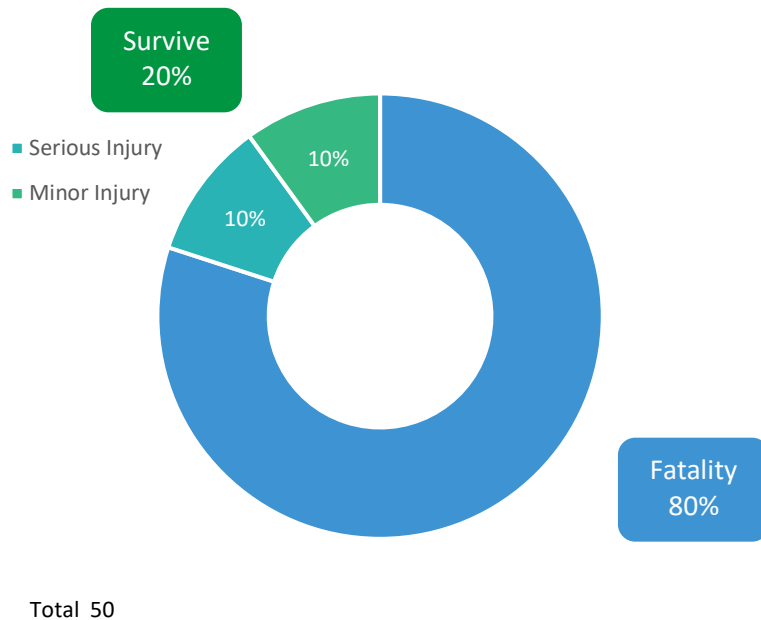
Total 112

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.

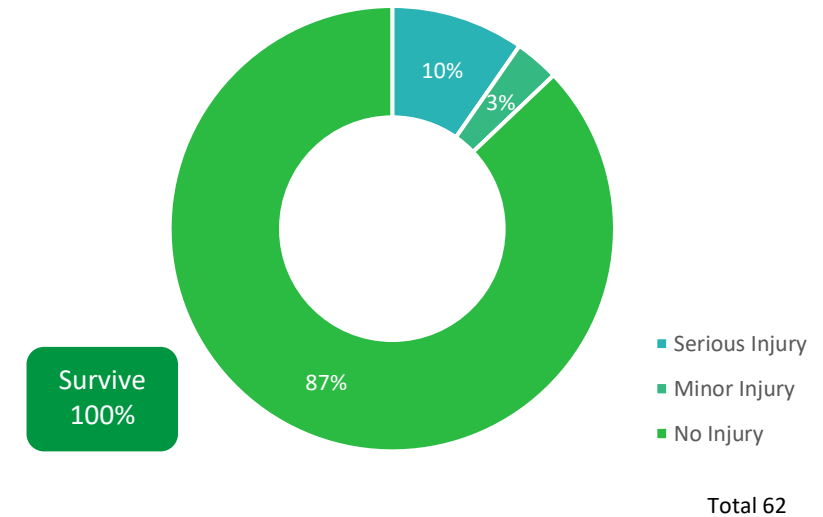
# SUSPECTED & ATTEMPTED SUICIDE ON THE WESTERN AUSTRALIAN HEAVY RAIL NETWORK – OUTCOME INDIVIDUAL STRUCK BY TRAIN 2016-2021<sup>1</sup>

In 45% of the attempted suicides, the individual was struck by a train, with 80% resulting in a fatality. Of those that were not struck by a train, all survived

## INDIVIDUAL STRUCK BY TRAIN



## INDIVIDUAL NOT STRUCK BY TRAIN

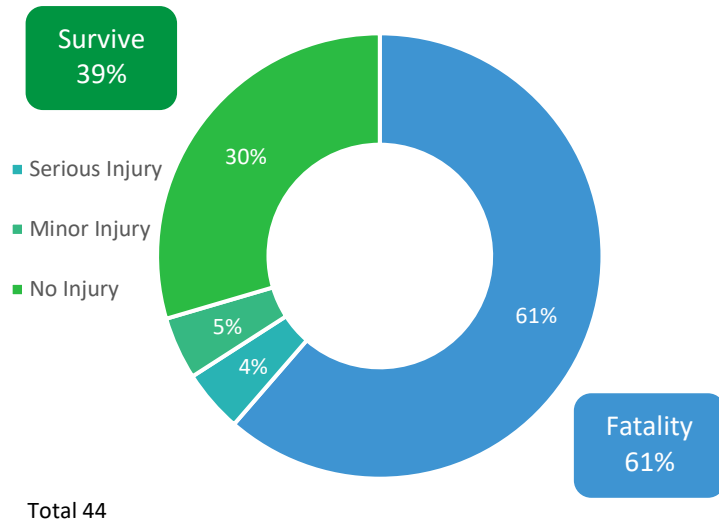


1. Office of the National Rail Safety Regulator, Occurrence extract-fatalities, serious injuries, minor injuries, attempted suicide no consequence July 2015–December 2021. The requirements for operator reporting of notifiable occurrences are set out in the Reporting Requirements for Notifiable Occurrences.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

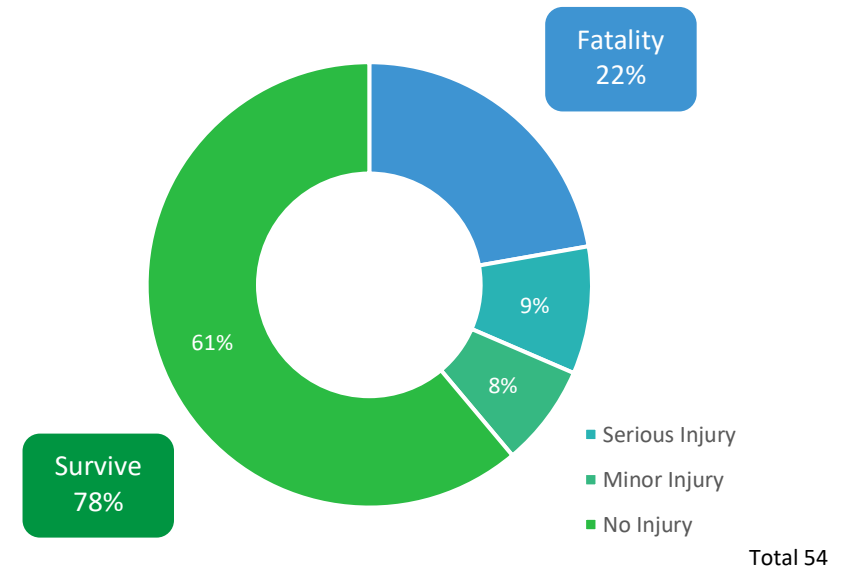
# SUSPECTED & ATTEMPTED SUICIDE ON THE WESTERN AUSTRALIAN HEAVY RAIL NETWORK – OUTCOME BY LOCATION 2016-2021<sup>1</sup>

40% of all incidents occurred on the track and of these, 61% resulted in a fatality. 48% of all incidents occur from a station and of these, the individual survives 78% of the time.

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



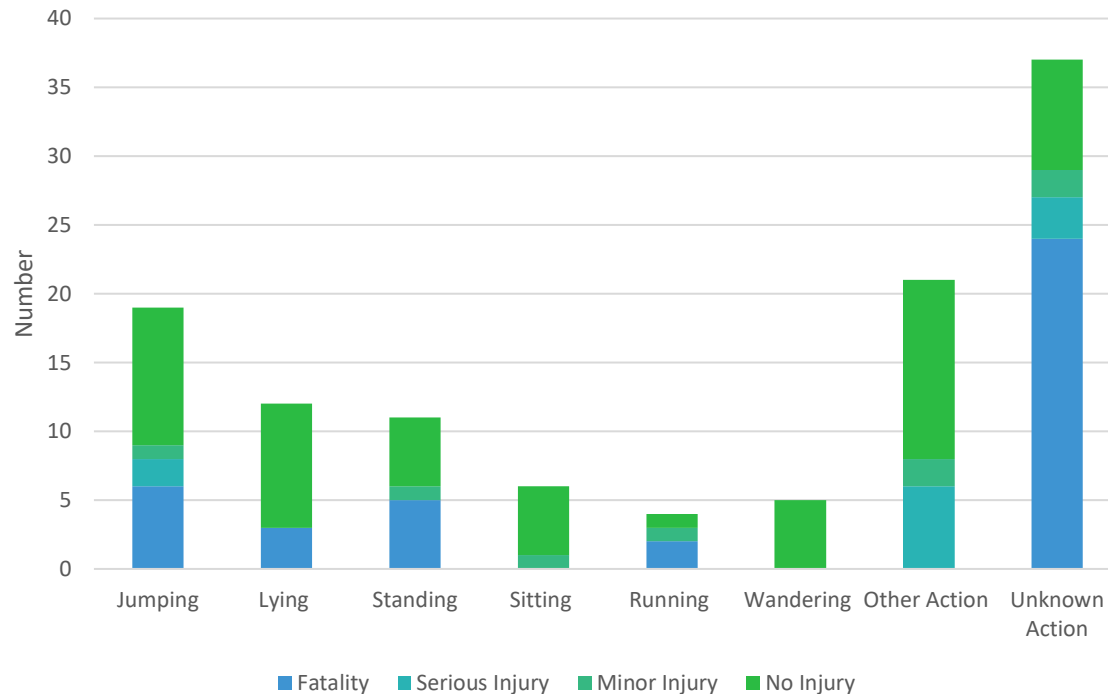
## OUTCOME OF INCIDENTS THAT OCCUR FROM A STATION<sup>2</sup>



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 14 occurrences that occur at a bridge, other or unknown location resulting in 1 fatality, 4 serious injuries, 1 minor injuries and 8 no injuries.

# SUSPECTED & ATTEMPTED SUICIDE ON THE WESTERN AUSTRALIAN 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 WESTERN AUSTRALIAN LOCAL GOVERNMENT AREAS – 2000-2017<sup>1</sup>

LGA of incident	2013–2017	Total 2000–2017
Armadale ( C )	4	11
Victoria Park ( T )	<4	11
Gosnells( C )	<4	8
Stirling ( C )	<4	8
Bayswater ( C )	<4	7
Joondalup ( C )	4	7
Canning ( C )	<4	6
Subiaco ( C )	<4	6
Swan ( C )	<4	6
Cockburn ( C )	<4	5
Bassendean ( T )	<4	<4
Cambridge ( T )	<4	<4
Chittering ( S )	0	<4
Claremont ( T )	0	<4
Cottesloe ( T )	<4	<4
Fremantle ( C )	<4	<4

LGA of incident	2013–2017	Total 2000–2017
Kalgoorlie/Boulder ( C )	0	<4
Kwinana ( C )	<4	<4
Mandurah ( C )	<4	<4
Melville ( C )	<4	<4
Merredin ( S )	0	<4
Mosman Park ( T )	0	<4
Murray ( S )	<4	<4
Nedlands ( C )	0	<4
Perth ( C )	0	<4
Port Hedland ( T )	0	<4
Rockingham( C )	<4	<4
Serpentine-Jarrahdale ( S )	<4	<4
South Perth ( C )	0	<4
Vincent ( C )	0	<4
Not available	0	<4
<b>Total</b>	<b>38</b>	<b>106</b>

**Note:** 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, 'T' Town Council, 'RC' Regional Council, 'DC' District 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 WESTERN AUSTRALIAN RESIDENT BY WESTERN AUSTRALIAN LOCAL GOVERNMENT AREA – 2000-2017<sup>1</sup>

LGA of residence	2013–2017	Total 2000–2017
Stirling ( C )	5	14
Armadale ( C )	<4	9
Gosnells ( C )	<4	9
Victoria Park ( T )	<4	7
Cockburn ( C )	<4	5
Joondalup ( C )	<4	5
Perth ( C )	<4	4
Bassendean ( T )	<4	<4
Bayswater ( C )	0	<4
Belmont ( C )	<4	<4
Cambridge ( T )	<4	<4
Canning ( C )	<4	<4
Claremont ( T )	<4	<4
Cottesloe ( T )	0	<4
East Fremantle(T)	0	<4
Harvey ( S )	<4	<4

LGA of residence	2013–2017	Total 2000–2017
Kwinana ( C )	<4	<4
Mandurah ( C )	<4	<4
Melville ( C )	0	<4
Merredin ( S )	0	<4
Mosman Park ( T )	0	<4
Murray ( S )	<4	<4
Nedlands ( C )	0	<4
Rockingham ( C )	<4	<4
Serpentine_Jarrahdale ( S )	<4	<4
Subiaco ( C )	0	<4
Swan ( C )	<4	<4
Vincent ( C )	<4	<4
Wanneroo ( C )	<4	<4
Not available	<4	8
<b>Total</b>	<b>35</b>	<b>104</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, 'T' Town Council, 'RC' Regional Council, 'DC' District 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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