

Fatalities and injuries on the Australian Rail Network 2001-2019

April 2021

Since 2001, there has been on average 109 fatalities on the Australian rail network annually, with 76 of these people taking their own life¹².

As well, there are almost as many attempted suicides as suicides annually, around 30 injuries at a level crossing or because of trespass and around 2,000 level crossing and trespass near hits each year³⁴.

It must be remembered that each of these numbers is a person and each death or injury has impacted the individual, families, and friends.

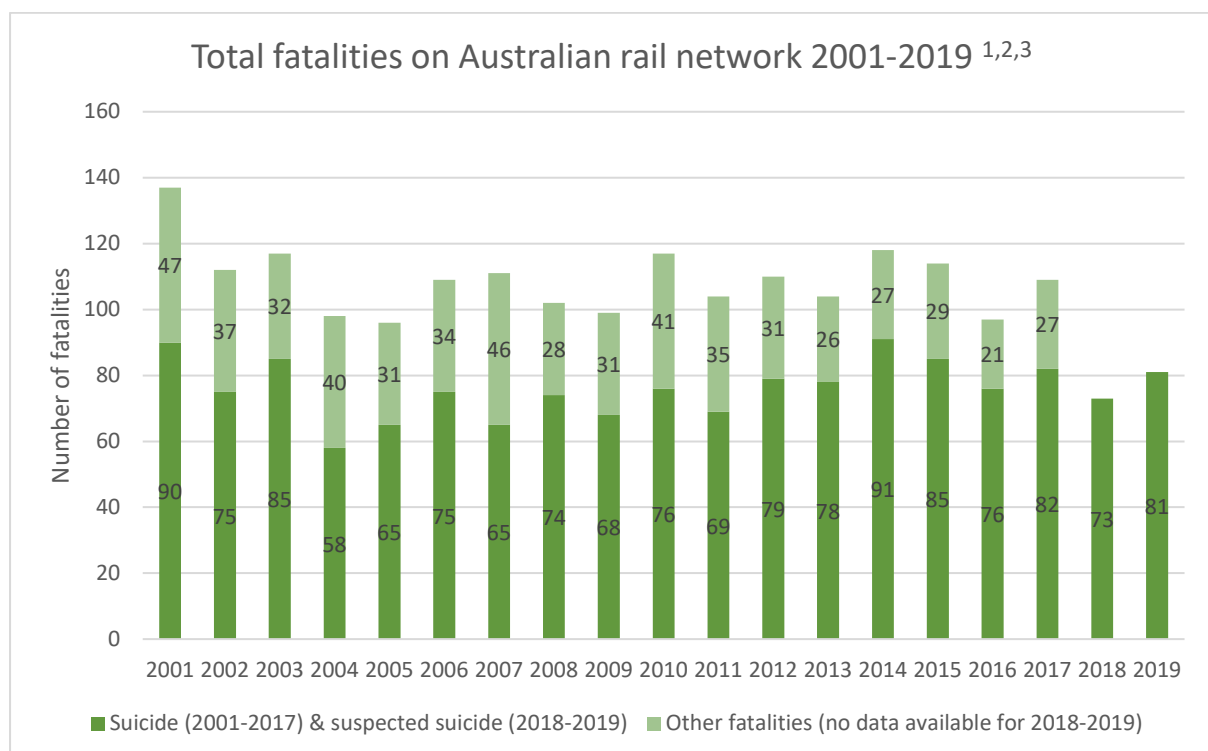
Beyond the human loss, injury and grief, these incidents can cause trauma and work-related stress to the rail and recovery staff involved with incidents. Many of these events cause an absence from work and the risk of acute and chronic health and wellness issues can have ongoing impacts and affect their return to work. Safe Work Australia have grouped train drivers with first responders as one of the most at-risk occupations for work-related mental disorders⁵.

Incidents 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 million⁶.

To address these issues, the TrackSAFE Foundation undertakes activities to prevent suicide, reduce injuries and incidents on the rail network, and improve the wellbeing of the rail workforce.

Fatalities

The number of fatalities vary year to year as shown below.



- There were 563 non-intentional deaths between 2001-2017, an average of 33 per year².
 - 4 in 5 deaths were male (81% ,454)
 - 18% (103) were aged under 21, 20% (114) 21-30 years, 18% (102) 31-40 years, 17% (97) 41-50 years, 26% (144) over 51 years
 - 39% (221) incidents occurred in locations other than a station, 39% (218) incidents occurred at the railway station, 21% (121) incidents occurred at a level crossing and 3 at other areas proximate to the railway lines and station
 - The cause of death was train related in 63% (353) of incidents. Other causes of death include: vehicles (72, 13%), falls (46, 8%), pharmaceutical drug toxicity (70, 12%), electrocution (8, 1%), other (21, 4%)
 - 40% (227) of deaths occurred in Victoria (annual average 13), 35% (194) in New South Wales (annual average 11), 11% (61) in Queensland (annual average 4), 51 in Western Australia, 22 in South Australia, 7 in Northern Territory, 4 in Tasmania and 1 in Australian Capital Territory⁷.
- There were 1,291 suicides between 2001-2017¹, and 154 suspected suicides in 2018-2019³, a total of 1,445 and an average of 76 per year.
 - 45% (651) of these deaths occur in Victoria (annual average 34), 30% (432) in New South Wales (annual average 23), 12% (174) in Queensland (annual average 9), 9% (123) in Western Australia (annual average 6) and 4% (63) in South Australia (annual average 3) and 1 each in Tasmania and Australian Capital Territory (with most incidents occurring in metropolitan and outer metropolitan areas).
 - The proportion of suicides and suspected suicides occurring on the Australian rail network of total intentional self-harm deaths between 2006-2019 has declined from 4.17% to 2.44% and the rail age-specific rate 2010-2019 has declined from 0.34/100,000 to 0.32/100,000 suggesting that suicide prevention actions may be having some effect.
 - 74% (968) of suicide deaths on rail were male (2001-2017)
 - 42% (543) are aged 30 years and under (15% (198) <21 years and 27% (345) aged 21-30 years) (2001-2017)
 - 94% (1,352) of the deaths were train related (2001-2019)
 - More incidents occur on the track (67%, 972) rather than from stations (however in New South Wales more incidents occur from stations) (2001-2019)
 - Of all suicide, suspected suicide and attempted suicide incidents where the individual is struck by a train, in almost one in four occasions the individual will survive. If the individual is not struck by a train, in 95% of incidents the person survives and 70% have no injury (2016-2019).

Injuries

Between 2016-2019, there were 108 serious and minor injuries resulting from trespass and level crossing incidents³.

Total fatalities, injuries and attempted suicides with no injuries on the Australian rail network 2016-2019³

	Fatality	Serious injury	Minor Injury	No injury	Total	
Suicide and suspected suicide	315				315	42%
Attempted suicide		92	45	146	283	38%
Trespasser - struck by train	32	16	16	0	64	8%
Trespasser - other	1	15	23	0	39	5%
Level crossing - collision with road vehicle	10	7	20	0	37	5%
Level crossing - collision with pedestrian	5	7	4	0	16	2%
Total	363	137	108	146	754	

If any of this information raises issues for you, seek support from family, friends, medical professionals or call Lifeline on 13 11 14.

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, 2021, Non-intentional self-harm deaths at Australian railway locations 2000-2017 (DR20-43), February, Melbourne, Australia.

³ Office of the National Rail Safety Regulator, 2020, Occurrence extract-fatalities, serious injuries, minor injuries, attempted suicide with no consequence, near miss July 2015-June 2000, August

⁴ Based on 2016-2019 ONRSR data

⁵ <https://www.safeworkaustralia.gov.au/topic/mental-health#snapshot-of-claims-for-mental-health>

⁶ RISSB 2015 AS 7644:2015, AS 7644 Rail Corridor Access Infrastructure Standard, p4

⁷ Numbers for Western Australia, South Australia, Northern Territory are from 1 July 2000-31 December 2017