



# 2018

Preliminary summary  
of fatalities on  
Western Australian roads



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If you would like this document in  
another format please contact us.

Office address:

Level 1, 151 Royal Street  
EAST PERTH WA 6004

Postal address:

Road Safety Commission  
PO Box 6348  
EAST PERTH WA 6892

Telephone: (08)1300 999 772  
Fax: (08) 6552 0802  
Email: [info@rsc.wa.gov.au](mailto:info@rsc.wa.gov.au)  
Website: [www.rsc.wa.gov.au](http://www.rsc.wa.gov.au)

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## Foreword



**Michelle Roberts MLA**  
**Minister for Police and Road Safety**

These preliminary crash statistics provide an important summary of the trends in fatal road crashes in Western Australia.

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It is clear that there is no single story behind these statistics.

There have been improvements in some figures, such as the reduction in metropolitan deaths and in crashes involving drink driving and fatigue. However, the number of fatalities in our regions remains far too high and too many crashes involve driver inattention.

While the statistics are part of an important evidence base, we need to remember that each one represents a tragedy.

In 2018, 161 people lost their lives resulting in life changing impacts on families, friends and communities.

Soon I will be inviting members of the community to provide feedback to the Road Safety Council to inform the development of Western Australia's new road safety strategy. The data provides useful information as that consultation gets underway.

I thank the Road Safety Council for their advice and commitment to road safety and the Road Safety Commission for producing this report.

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## Introduction



**Iain Cameron**  
**Chairman, Road Safety Council**

In 2018, 161 lives were lost on Western Australian (WA) roads. The families of these people will continue to be affected by road trauma for a long time, along with the families of those who have died in previous years and decades.

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The 2018 Preliminary Summary of Fatalities on Western Australian roads shows that there was an improvement in metropolitan Perth in 2018, with eight fewer lives lost than in the previous 12 months. We are making progress in the city, with safer vehicles, better road infrastructure and lower urban speed limits all contributing to saving lives on our roads.

The most common crash type for fatalities in metropolitan Perth was collisions with objects. Metropolitan fatalities in right-angled crashes decreased in 2018 when compared with the preceding five-year average. Sadly this report shows that of the 161 people who died on WA roads in 2018, 100 of them died on our regional roads, in many cases on roads they knew well.

The number of regional road deaths increased by nine in 2018. That can be due to someone just making a mistake, not paying attention or falling asleep while travelling on a road where the consequences of a crash are much more severe than the lower speeds we travel in built-up areas.

Collisions with objects such as walls and trees (48%, 48) was also the most common crash type for fatalities in regional WA.

In 2019, the Road Safety Council (Council) will consult with Western Australians about what more we are prepared to do to end road trauma in WA. That invaluable feedback will inform the development of the State's new road safety strategy from 2020.

I look forward to working with all Western Australians as we continue our journey towards zero deaths and serious injuries on our roads.











# Preliminary summary of fatalities 2018

**This publication presents statistics on fatalities as a result of crashes that occurred from 1 January up to and including 31 December 2018.**

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Unless otherwise identified, the Road Safety Commission (Commission) prepared the numbers reported in this publication based on preliminary fatality data provided by the Western Australia (WA) Police Force. This data is accurate as at 25 January 2019. Numbers may change in the future due to police investigation, coronial inquiry or upgrade of injuries. For this reason, comparisons between this publication and others may result in discrepancies.

A fatality is defined as a person killed immediately or within 30 days of a crash, as a result of the crash. This publication reports on fatalities as a result of reportable road crashes that occurred on roads open to the public for normal road use in metropolitan, regional and remote WA. This definition excludes fatalities from crashes where the cause of the crash was a medical condition or premeditated intent to cause harm.

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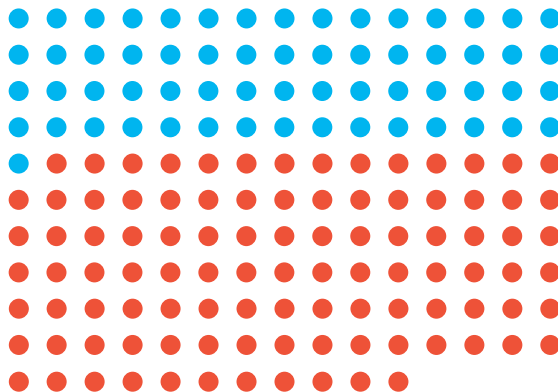
This publication adopts WA Police Force definitions. Please note that these may differ from those regularly reported by the Commission (or by the former Office of Road Safety). This information should also be considered with the following caveats:

- (1) These statistics have been derived from WA Police Force data, but the calculations have not been endorsed by WA Police Force.
- (2) The information was sourced from the WA Police Force via the WA Police Force Traffic Enforcement and Crash Executive Information System.
- (3) The information is provisional and may be subject to revision.



## Key information at a glance

**161** people died on WA roads in 2018 with **100** in regional areas area and **61** in metropolitan Perth.



2018 had one of the lowest number of fatalities (161) and fatality rate per 100,000 persons (6.2) for a calendar year since 1961



32% fatalities were in speed-related crashes (52).



19% fatalities were in alcohol-related crashes (30)



18% fatalities were in inattention-related crashes (29)



75% of fatalities were male (121)



9% fatalities were in fatigue-related crashes (15)



Most motorcycle fatalities were in metropolitan Perth (55%, 16)



25 motor vehicle occupant fatalities (including passengers) were not wearing seatbelts at the time of the crash



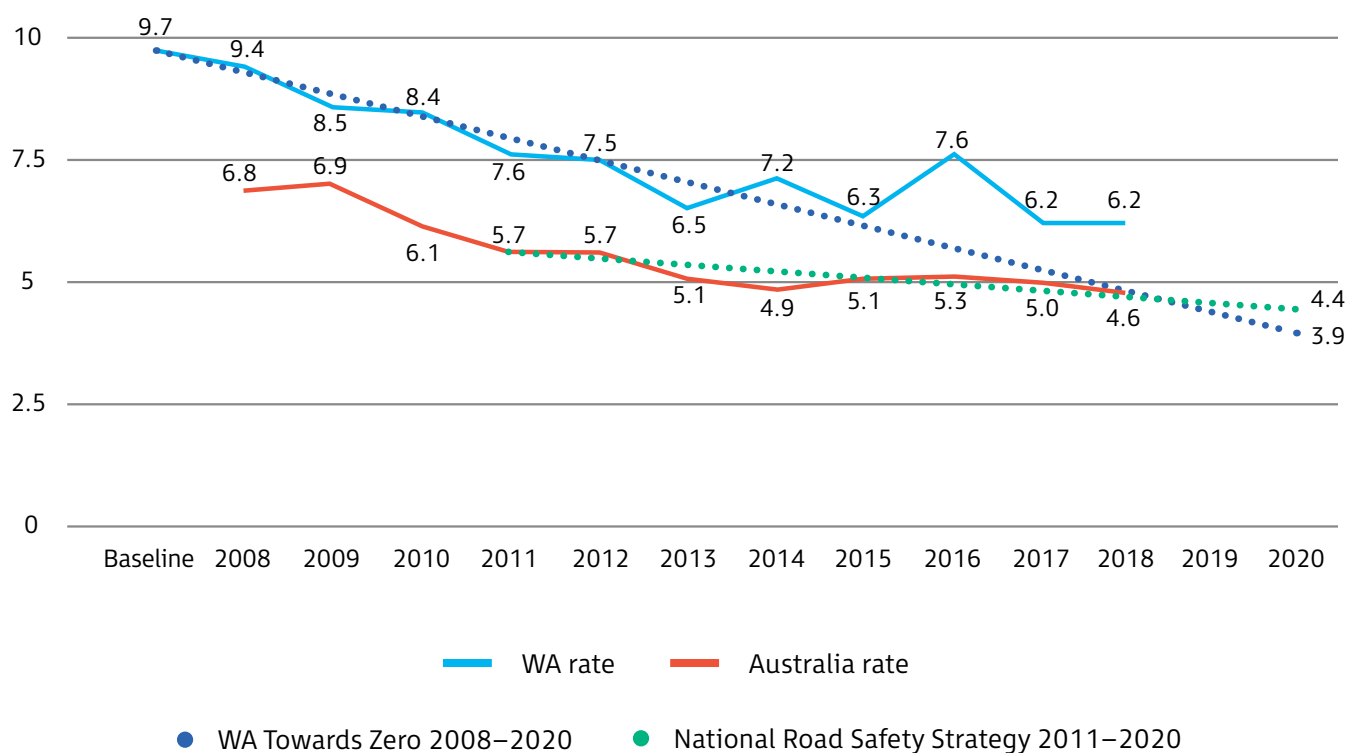
Two of the five cyclists killed were not wearing a helmet at the time of crash.

# Overview

In 2018, the WA fatality rate per 100,000 persons was 6.2. This was lower than the baseline rate (2005–2007 average: 9.7) before implementation of the State Government’s road safety strategy *Towards Zero 2008–2020*.

Despite this reduction, WA’s fatality rate is higher than expected if WA is to meet the ambitions of the *Towards Zero* Road Safety Strategy (estimated to be 3.9 fatalities per 100,000 persons) and also higher than the national average (4.6).<sup>2</sup>

Figure 1. Fatality rates per 100,000 population<sup>1,2</sup>



<sup>1</sup>Denominators from Australian Bureau of Statistics. (2018). Australian demographic statistics, Australia, September 2018, (Catalogue No. 3101.0). Retrieved from <http://www.abs.gov.au/ausstats/abs@.nsf/mf/3101.0>

<sup>2</sup>Department of Infrastructure, Regional Development and Cities (BITRE). Australian Road Deaths Database, December 2017. Retrieved from [https://bitre.gov.au/statistics/safety/files/BITRE\\_ARDD\\_Fatalities\\_December\\_2017.xlsx](https://bitre.gov.au/statistics/safety/files/BITRE_ARDD_Fatalities_December_2017.xlsx)

In 2018, there were 161 fatalities in reported road crashes in Western Australia. This represented a 6.4% reduction compared with the preceding five-year average of 172.

These reductions occurred at a time when the population and the numbers of registered motor vehicles and licensed drivers and riders were all increasing.<sup>1,3,4</sup>

Figure 2. Fatality rates per 100,000 persons by jurisdiction, 2018<sup>1,2</sup>



<sup>3</sup>Australian Bureau of Statistics. (2018).  
Motor Vehicle Census, 31 January 2018, (Catalogue No. 9309.0).  
Retrieved from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/9309.0>

<sup>4</sup>Motor vehicle drivers licence counts provided by Department of Transport, Western Australia.



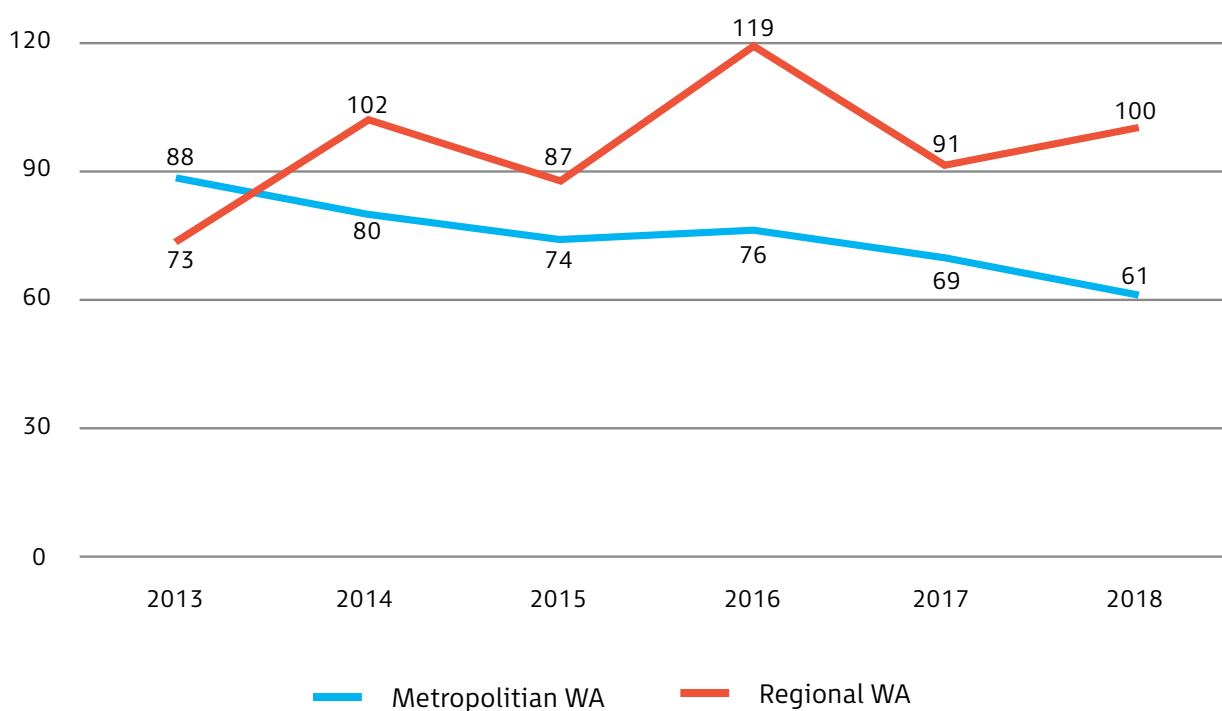
Table 1. Fatality counts and rates

	Fatality count	Rate per 100,000 persons
<b>2013</b>	161	6.5
<b>2014</b>	182	7.2
<b>2015</b>	161	6.3
<b>2016</b>	195	7.6
<b>2017</b>	160	6.2
<b>2018</b>	161	6.2

Consistent with historical trends, most (62%, 100) 2018 road fatalities were a result of crashes in regional WA. This was fewer than the preceding five-year average (94).

Metropolitan Perth had 61 fatalities and also showed a reduction in fatalities compared with the preceding five-year average (77).

Figure 3. Fatality counts by region







## WA Police Force Districts

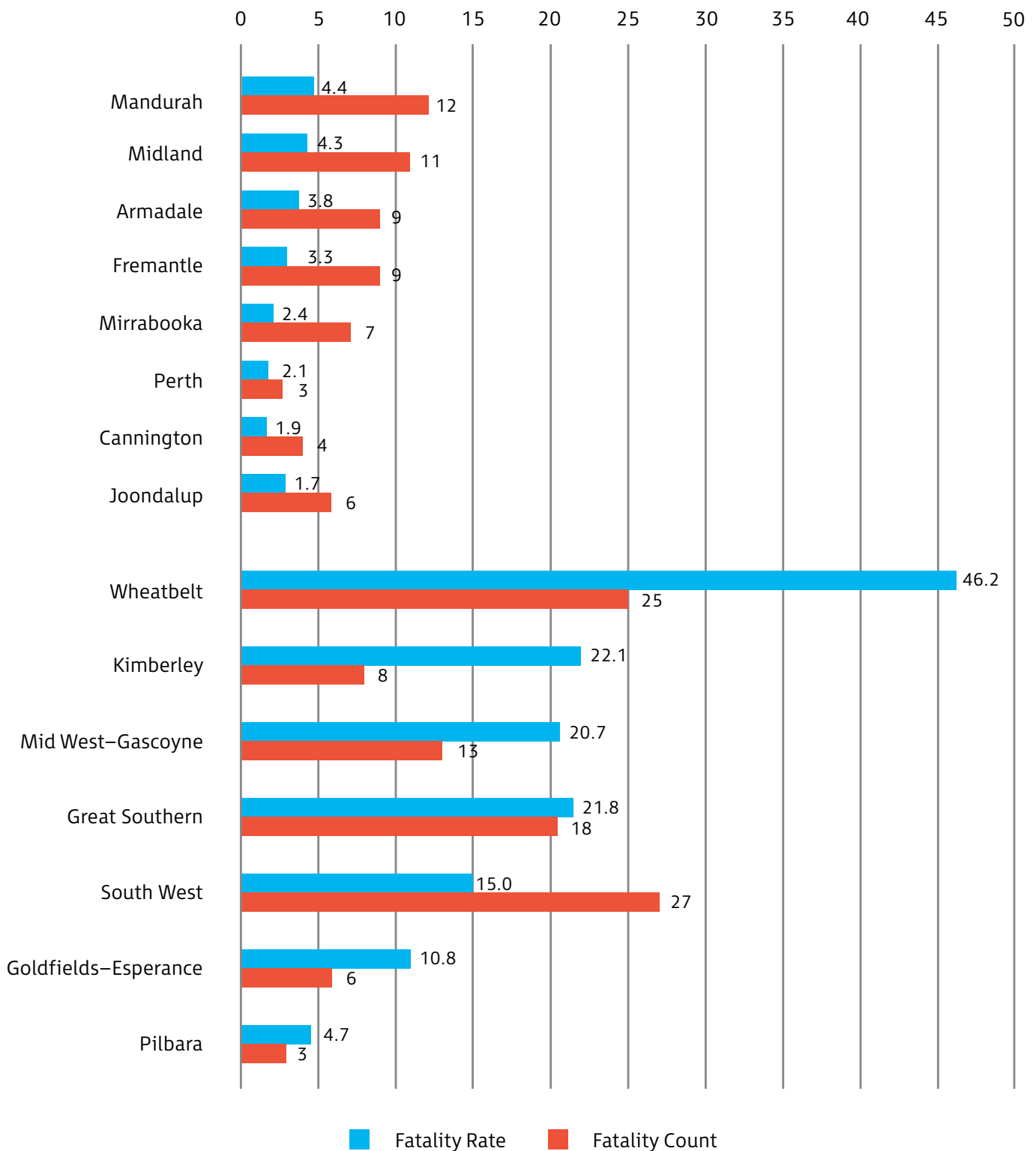
These districts are based on WA Police Force operational boundaries and are different from regions usually reported by the Road Safety Commission.

Consistent with previous years, the regional districts had consistently higher fatality rates

than districts in metropolitan Perth. In 2018, the Wheatbelt police district continued to have the highest fatality rate per 100,000 persons (46.2). In contrast, the Joondalup Metropolitan police district had the lowest fatality rate (1.7).<sup>5</sup>





Figure 4. Indicative fatality rates per 100,000 persons and fatality counts by WA Police Force district, 2018<sup>5</sup>

<sup>5</sup>The rate denominators are estimated population counts for WA Police Force districts which were prepared for the WA Police Force by the Australian Bureau of Statistics in 2018. District boundaries changed in July 2018 and this may affect reliability of the calculated rates.

## Local Government areas (LGAs)

The 13 LGAs with the highest fatality count are shown in Table 2. These 13 LGAs accounted for 42%, (68) of all fatalities in 2018. The fatalities

in these LGAs were distributed evenly across local government roads (46%, 31) and State-controlled roads (54%, 37).

Table 2. Fatalities by LGA of crash – Top 13

Local Government areas	Fatality count
Harvey	11
Stirling	7
Cockburn	6
Irwin	5
Kalamunda	5
Northam	5
Rockingham	5
Armadale	4
Canning	4
Dandaragan	4
Gingin	4
Mundaring	4
Wyndham	4
Total	68

## Temporal characteristics

In 2018, there was an average of 13 fatalities a month. The number of fatalities were highest in April (12%, 20). Saturday and Sunday had the equal highest number of fatalities (20%, 32) when compared with other days of the week.

Fatalities in metropolitan Perth were most common between the hours of 3:00pm and 5:59pm (23%, 14) while regional areas were most common between the hours of 12:00pm and 2:59pm (20%, 20).

## Roads and speed zones

Of the 161 fatalities in 2018, 86 were the result of crashes on State roads and 75 were on local government roads.

Most fatalities occurred in 110km/h zones (47%, 75), followed by 70km/h zones and 60km/h zones (both 12%, 19).

The 110km/h and 70km/h speed zones were the only zones to see an increase in fatalities in 2018 compared with the preceding five-year average.

Most regional fatalities happened in 110km/h speed zones (70%, 70), while most metropolitan Perth fatalities occurred in 70km/h speed zones (25%, 15).

**WA's road network comprises 5,115km of National Land Transport Routes (maintained by the State), 13,399km of State roads and 129,159km of local roads.<sup>6</sup>**

Table 3. Fatalities by speed zone

	2013	2014	2015	2016	2017	Five-year average	2018
<=40km/h	2	5	1	0	5	2.6	0
50km/h	20	17	11	19	25	18.4	18
60km/h	29	30	21	24	23	25.4	19
70km/h	20	21	16	16	15	17.6	19
80km/h	18	14	19	16	15	16.4	9
90km/h	6	11	17	13	7	10.8	10
100km/h	12	14	11	10	10	11.4	9
110km/h	52	65	65	94	58	66.8	75
Not recorded	2	5	0	3	2	2.2	2
<b>Total</b>	161	182	161	195	160	171.8	161

<sup>6</sup>Main Roads WA. (2018). Road Facts Summary Sheet.

Retrieved from <https://annualreports.mainroads.wa.gov.au/AR-2018/appendices-and-downloads/road-facts-summary-sheet.html>



## Crash nature

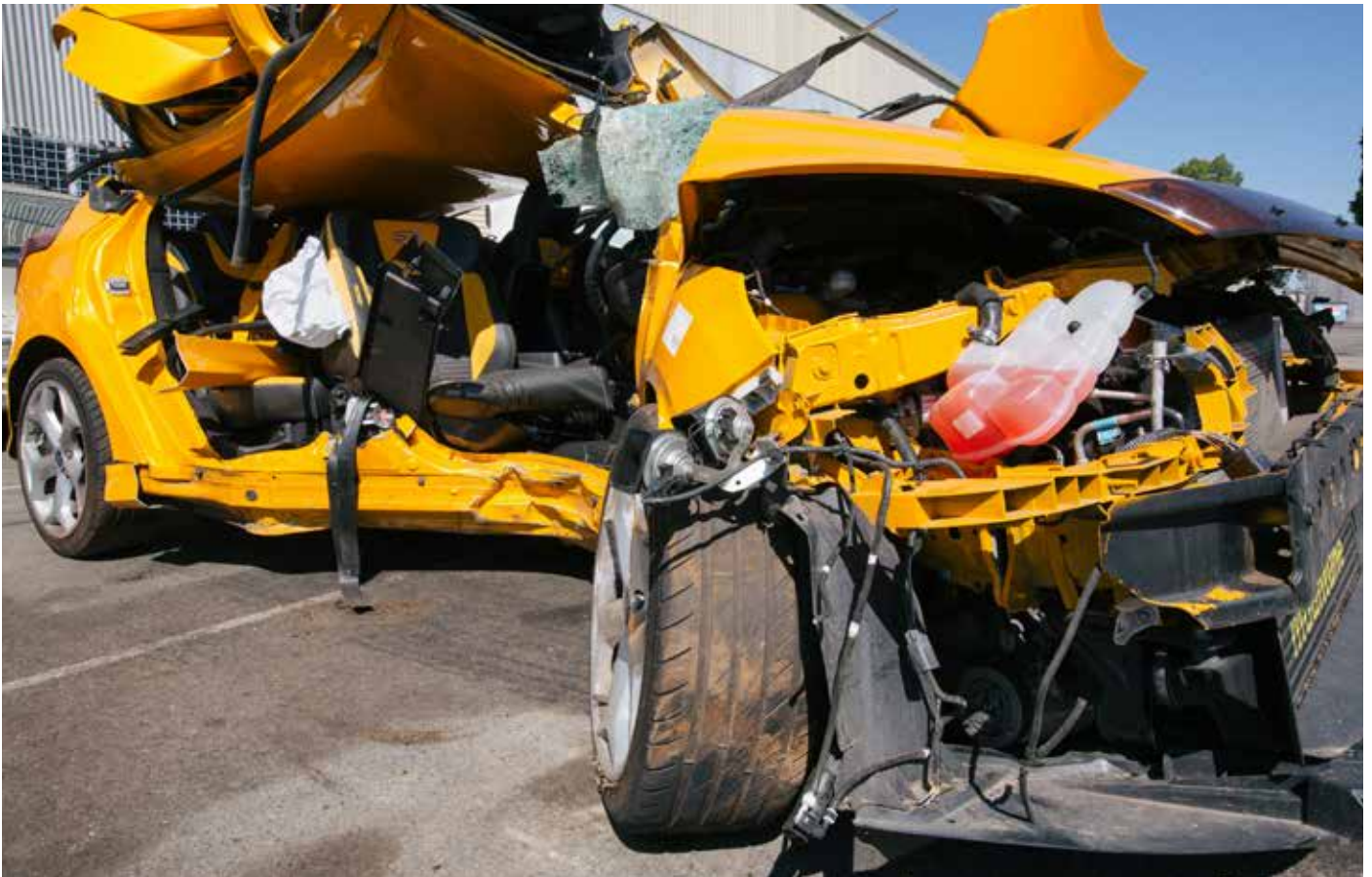
Nearly half (43%, 70) of the 2018 fatalities resulted from vehicles crashing into objects such as walls and trees. This is higher than the preceding five-year average (31%, 53).

The most common crash type for fatalities in metropolitan Perth was crashes with objects such as walls and trees (36%, 22). This was about the same as the preceding five-year average in number but not in percentage (27%, 21). While the distribution across crash natures remained

reasonably constant, metropolitan Perth fatalities in right-angled crashes decreased in 2018 (13%, 8) when compared with the preceding five-year average (18%, 14).

Hitting objects such as walls and trees (48%, 48) was also the most common crash type for fatalities in regional WA. The distribution of fatalities by crash nature remained relatively stable when compared with the preceding five-year averages.

## **43% of fatalities in WA were from crashes involving objects such as walls and trees**



## Definitions

*Common behavioural factors* include alcohol use, speed, fatigue and inattention. These categories should not be summed, as they are not mutually exclusive.

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**Speed-related crashes** include those crashes where police recorded speed as a primary crash factor, either alone or in combination with other factors, and/or where police recorded speed as a contributing factor. Police may record speed as a contributing factor where at least one vehicle is travelling above the speed limit or at an inappropriate speed for the prevailing conditions.



**Inattention-related crashes** include those crashes where police suspected inattention as the primary crash factor. Inattention includes distractions, eating, using in-vehicle devices, using mobile phones, etc.



**Fatigue-related crashes** include those crashes where police suspected fatigue as a contributing factor and/or the primary crash factor.



**Alcohol-related crashes** include those crashes where the attending police officer suspected alcohol as a primary crash factor, either alone or in combination with other factors, and/or where police suspected that at least one driver or rider in control of a motor vehicle had consumed alcohol.

## Common behavioural factors

In 2018, 100 (62%) fatalities were a result of crashes that police suspected involved at least one driver/rider behavioural factor.

Of the four behavioural factors, speed was the most frequently recorded category. About one third (32%, 52) of fatalities were in speed-related crashes. This was about the same as the preceding five-year average (31%, 54) and that of 2017 (31%, 50).

About one fifth (19%, 30) of those killed were in alcohol-related crashes – a decrease of 28% on the preceding five-year average (46). It was also a 52% decrease on the peak in 2016 of 62 fatalities.

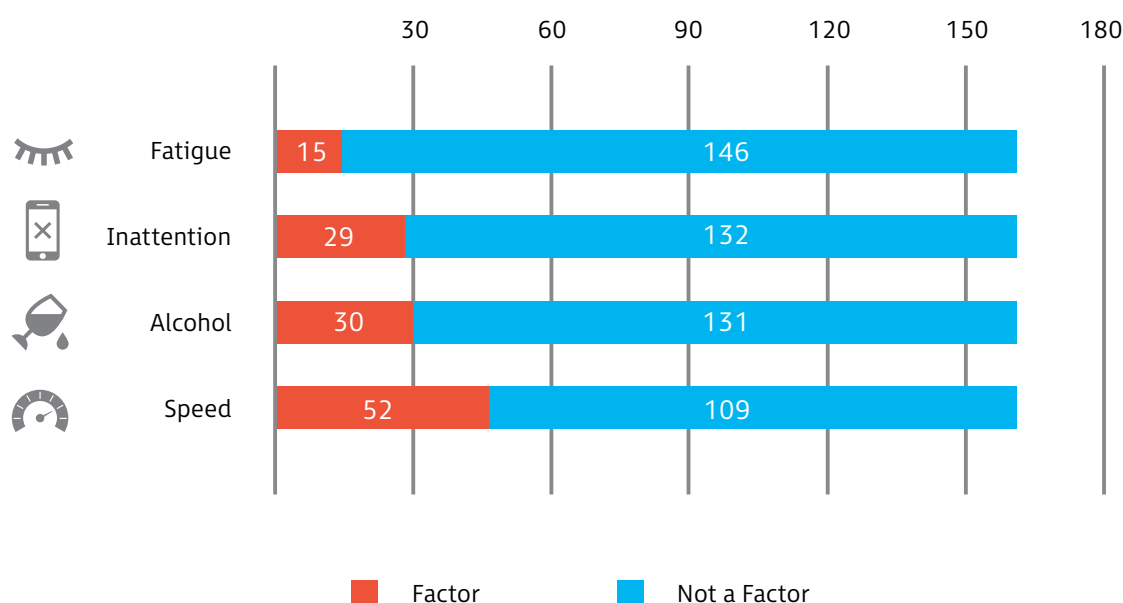
Most (63%, 19) of the fatalities in alcohol-related crashes occurred in regional WA.

Twenty-nine (18%) fatalities were in inattention-related crashes. This was a 70% increase compared to the preceding five-year average of 17. This increase continued to be driven largely by fatalities in metropolitan Perth, which were 50% higher in 2018 (20%, 12) when compared with the preceding five-year average (8).

Just under one in 10 (9%, 15) of those killed in 2018 were in fatigue-related crashes. This was a 12% reduction compared to the preceding five-year average of 17. Most (87%, 13) occurred in regional WA.

**Fact: In 2018, 62% of fatalities were a result of crashes with recorded driver behavioural factors.**

Figure 5. Number of fatalities by behavioural factor, 2018







## Road user type

One third (31%, 50) of fatalities in 2018 were people walking or riding.

In 2018, motorcyclist fatalities (18%, 29) decreased compared to the preceding five-year average (31). However, motorcyclists were still over-represented in fatalities. Despite representing only 5.6% of the registered vehicles in WA, 18% of fatalities were motorcyclists (29).<sup>3</sup>

Most (55%, 16) motorcyclist fatalities in 2018 were in metropolitan Perth. The vast majority were males (97%, 28) and 28% (8) were aged 30–39 years of age.

The number of pedestrian fatalities in 2018 (9%, 15) decreased 16% compared to the preceding five-year average (18). The majority (73%, 11) were in metropolitan Perth. The most common age group for pedestrian fatalities was 20–29 (33%, 5) years.

Cyclist fatalities in 2018 (3%, 5) were about the same as the preceding five-year average (3%, 6). Of the five cyclists killed, two were aged 60–69 years old and three were in a regional area.



111 motor vehicle occupants



29 motorcyclists



15 pedestrians



5 cyclists



1 others

Table 4. Fatalities by road user and year

Road user type	2013	2014	2015	2016	2017	Five-year average	2018
Motor vehicle occupant	96	113	120	137	108	115	111
Vulnerable road user	65	69	41	58	52	57	50
Motorcyclist	25	44	23	39	26	31.4	29
Pedestrian	31	16	13	14	15	17.8	15
Cyclist	6	8	4	3	7	5.6	5
Other*	3	1	1	2	4	2.2	1
<b>Total</b>	161	182	161	195	160	176.4	183

\*Other includes gophers, horse and skateboard riders

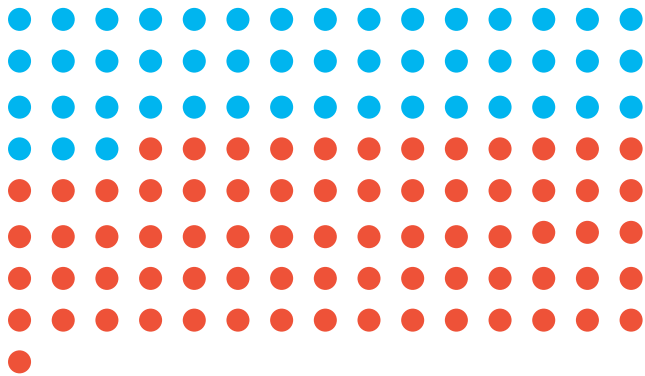
## Gender

Males were over-represented in fatalities, comprising 75% (121) of lives lost in 2018, but only made up 50% of the WA population.<sup>1</sup> Sixty per cent of all male fatalities were in regional WA (73). Of the 161 fatalities, 40 (25%) were female. Sixty-eight per cent of all female fatalities were in a

regional area (27). While the number of male (131) and female (41) fatalities decreased compared with the preceding five-year average, the proportions matched the preceding five-year average (males 76%, females 24%).

### Males

48 metropolitan, 73 regional



### Females

13 metropolitan, 27 regional



<sup>1</sup>Denominators from Australian Bureau of Statistics. (2018). Australian demographic statistics, Australia, September 2018, (Catalogue No. 3101.0). Retrieved from <http://www.abs.gov.au/ausstats/abs@.nsf/mf/3101.0>

<sup>3</sup>Australian Bureau of Statistics. (2018). Motor Vehicle Census, 31 January 2018, (Catalogue No. 9309.0). Retrieved from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/9309.0>

## Age

The highest number of fatalities in 2018 was in the 20–29 year age group (25%, 40). Figure 6 shows that fatalities in this age group decreased slightly compared with the preceding five-year average.

The age group with the lowest fatality rate was for the 0–16 age group (1.9 per 100,000 population).

When compared with the preceding five-year average, most age groups remained relatively stable.

The biggest changes were seen in a decrease in the 17–19, 60–69 and 70–79 year age groups.

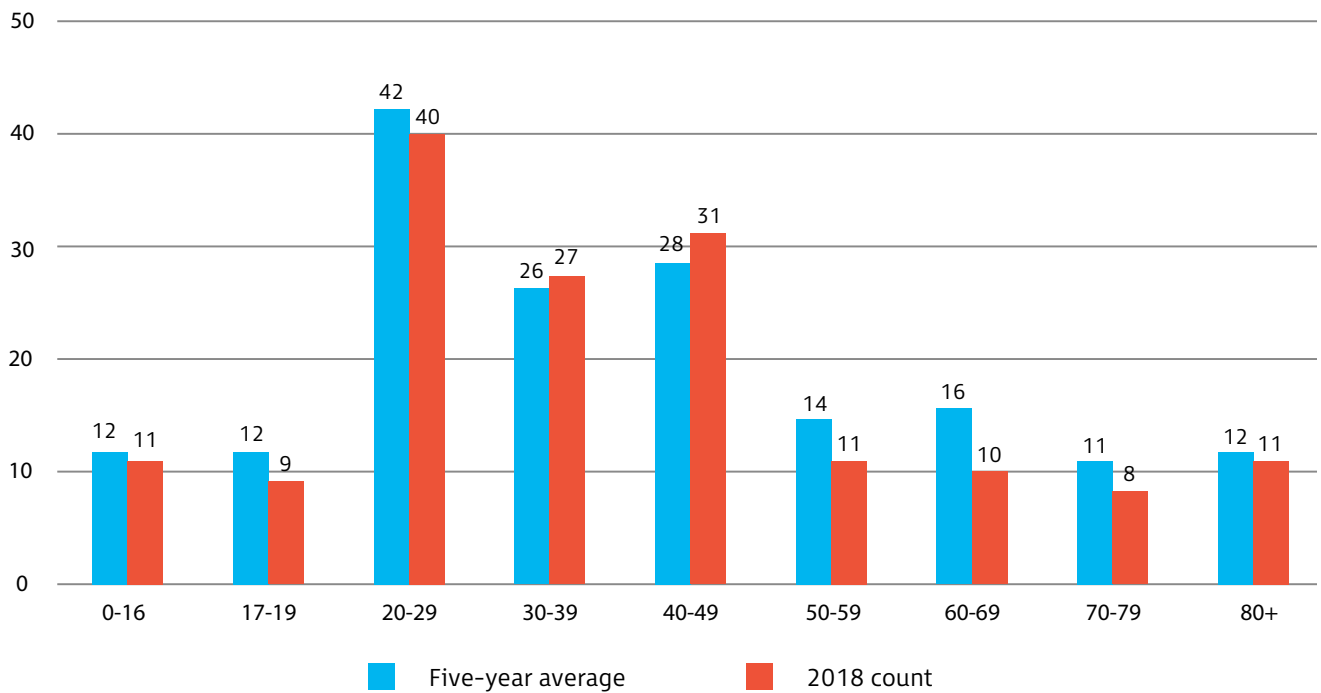
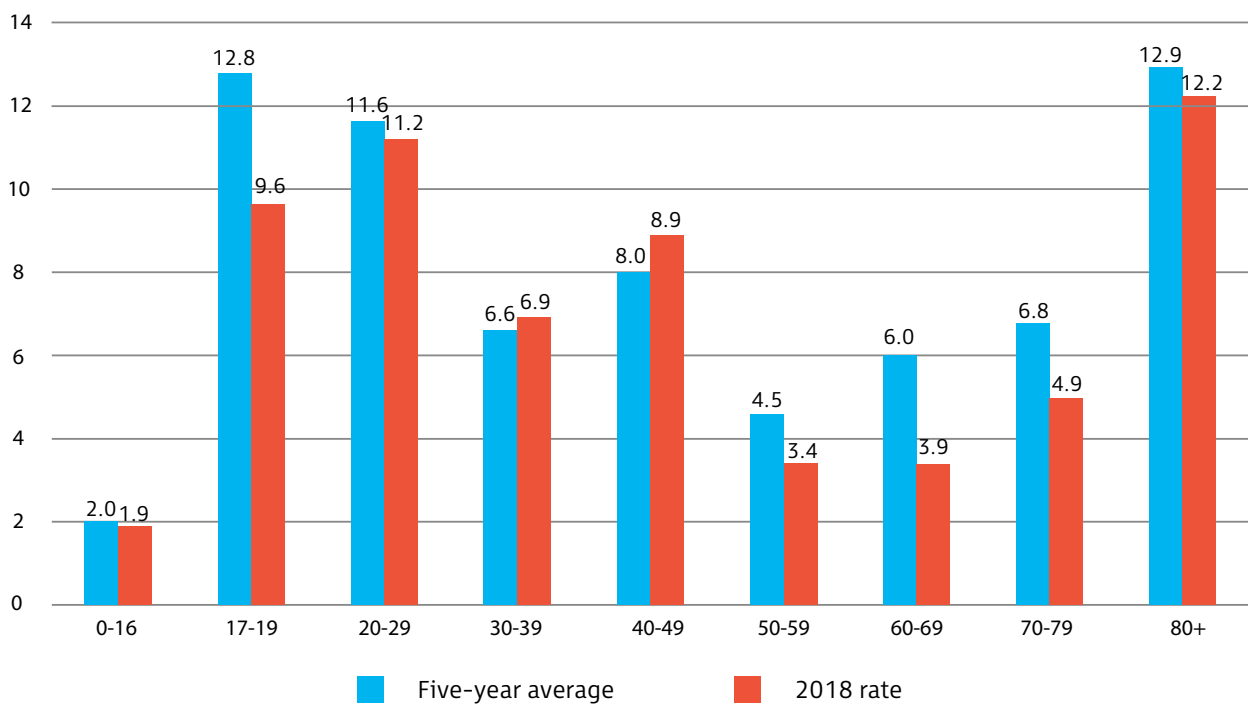
**The 40 people aged 20–29 years old who lost their lives represent 2,347 potentially healthy life years lost.<sup>7</sup>**



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<sup>7</sup>Potential life years lost were estimated by multiplying fatality counts by age and gender-specific life expectancies from: Australian Bureau of Statistics. (2018). Life Tables, States, Territories and Australia, 2015–2017 (Table 1.5), (Catalogue No. 3302.0.55.001). Retrieved from <http://abs.gov.au/ausstats/abs@.nsf/latestProducts/3302.0.55.001Media%20Release12014–2016>

Figure 6. Fatalities by age, five-year average and 2018

Figure 7. Age-specific fatality rates, five-year average and 2018<sup>2</sup><sup>2</sup>Department of Infrastructure, Regional Development and Cities (BITRE).

Australian Road Deaths Database, December 2017.

Retrieved from [https://bitre.gov.au/statistics/safety/files/BITRE\\_ARDD\\_Fatalities\\_December\\_2017.xlsx](https://bitre.gov.au/statistics/safety/files/BITRE_ARDD_Fatalities_December_2017.xlsx)



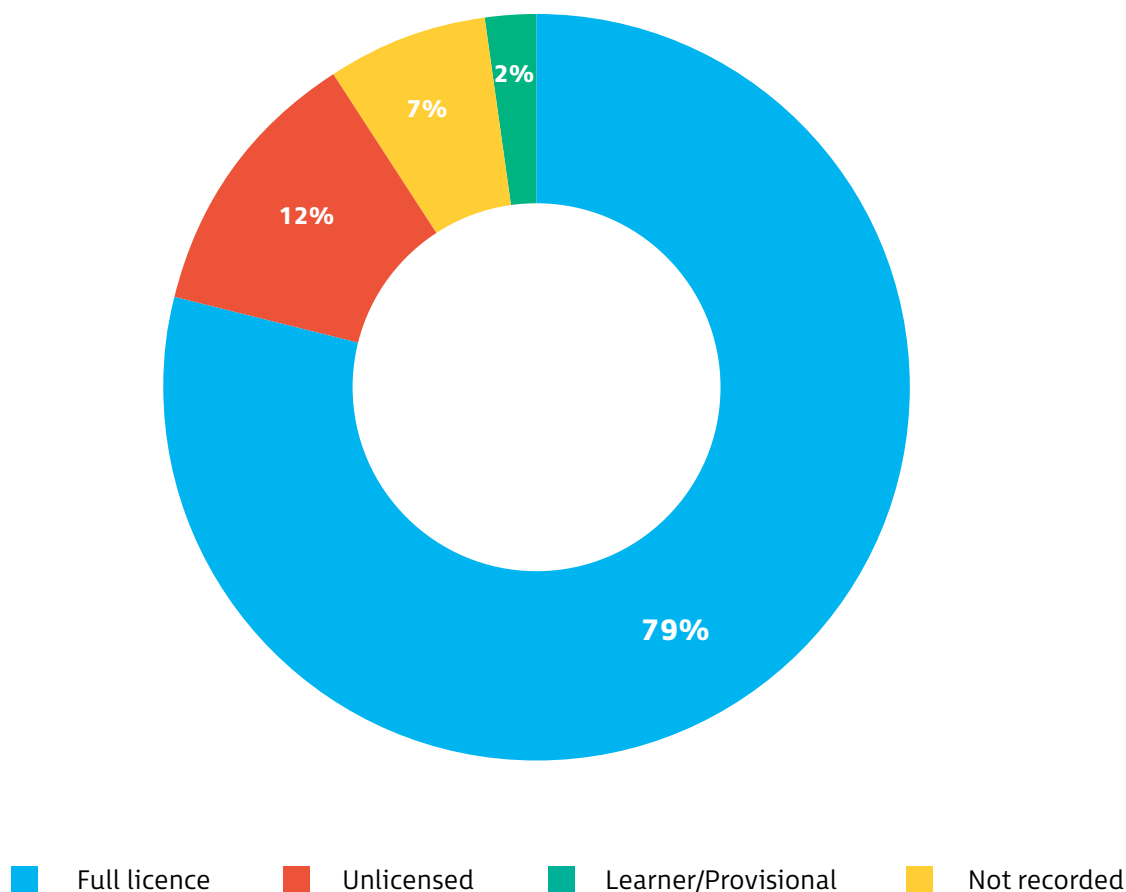
## Licence type

While 161 people were killed in fatal crashes in 2018, 212 people were involved as drivers or riders. Most (79%, 167) of recorded motor vehicle drivers and riders involved in fatal crashes were appropriately licensed. However, one in eight (12%, 26) had no licence or an expired,

inappropriate, suspended or cancelled licence. This number is fewer than the preceding five-year average of 32. It should be noted, however, that involvement does not infer liability.

### 12% of recorded drivers/riders involved in fatal crashes were unlicensed.

Figure 8. Motor vehicle driver/riders involved in fatal crashes by licence type, 2018



## Seatbelts and helmets

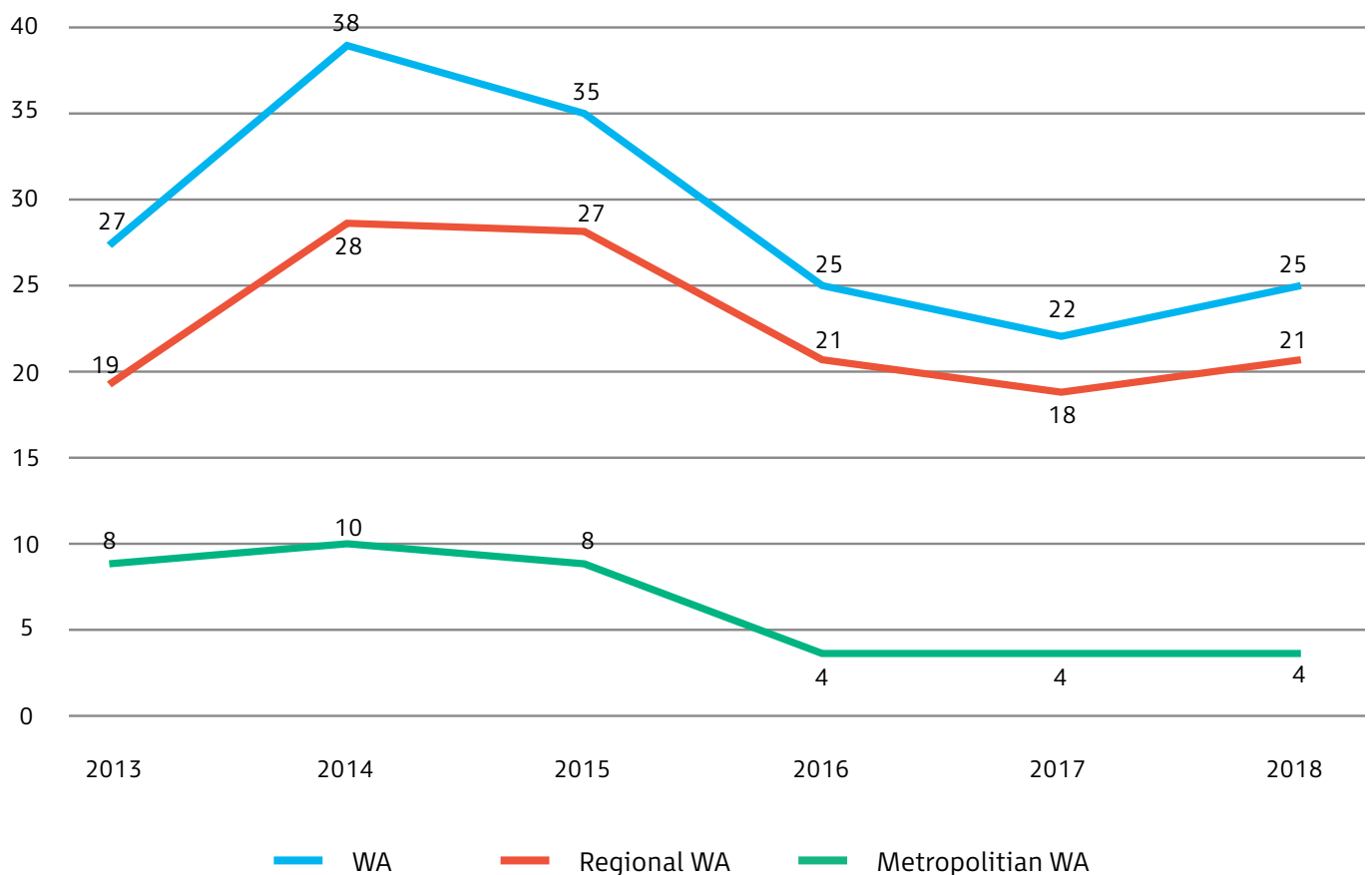
Of the 111 motor vehicle occupant (MVO) fatalities in 2018, 25 (23%) were not wearing a seatbelt or child restraint at the time of the crash.

Most of these fatalities (21) were in regional WA. This number is about the same as the preceding five-year average (23).

Two of the 29 motorcyclists and two of the five cyclist fatalities were not wearing a helmet at the time. Both cyclist fatalities not wearing helmets were in metropolitan Perth.

## Three of the seven cyclist fatalities were not wearing a helmet at the time.

Figure 9. Motor vehicle occupant fatalities recorded as not wearing an appropriate restraint by region and year



**Saving Lives Together**