

Road Safety Factsheet

November 2017

Cycling Accidents

In 2016, 18,477 cyclists were injured in reported road accidents, including 3,499 who were killed or seriously injured¹.

Cyclist Casualties, 2016²

	Child (0-15)	Adult	All*
Killed	8	94	102
Seriously injured	309	3,088	3,397
Slightly injured	1,664	13,314	14,978
Total	1,981	16,496	18,477

^{*}All includes casualties where age not recorded

These figures only include cyclists killed or injured in road accidents that were reported to the police. Many cyclist casualties are not reported to the police, even when the cyclist is injured badly enough to be taken to hospital. The figures also exclude cycling accidents that occur away from the road. Although the number of deaths is accurate, there could be two or three times as many seriously injured cyclists and double the number of slightly injured.

The majority of cyclist casualties are adults, with approximately 10% being children. Cycling accidents increase as children grow older, with 10 to 15 year old riders being more at risk than other age groups, including adults until about the age of 60 years³. To some extent, this reflects increased cycling as children grow older followed by a switch to motorised transport from the late teens onwards. It also coincides with the age when children attend Secondary school and may start to indicate riskier behaviour.

Males are far more likely to be involved in cycling accidents than females. In 2016, 81% of those injured in a reported road traffic accident were male⁴.

Almost two thirds of cyclists killed or seriously injured were involved in collisions at, or near, a road junction, with T-junctions being the most commonly involved. Roundabouts are particularly dangerous junctions for cyclists. Not surprisingly, the severity of injuries suffered by cyclists increases with the speed limit, meaning that riders are more likely to suffer serious or fatal injuries on higher speed roads. Almost half of cyclist deaths occur on rural roads.

Around 80% of cycling accidents occur in daylight - which is when most cycling takes place. For child cyclists, 90% of their accidents occur during the day. The most dangerous hours for cyclists are 3.00 to 6.00 p.m. and 8.00 to 9.00 a.m. on weekdays⁵. However, cycling accidents in the dark are more likely to be fatal.

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More cycle accidents occur during the spring and summer months (May to September) than the autumn and winter months (October to April). However, the casualty rate in terms of miles travelled is higher over the autumn and winter period.

Per billion vehicle miles, 1,011 pedal cyclists are killed or seriously injured, in comparison to 26 car drivers⁶.

Cycling accidents⁷

- Around 75% of fatal or serious cyclist accidents occur in urban areas
- Around half of cyclist fatalities occur on rural roads
- 75% happen at, or near, a road junction
- 80% occur in daylight
- 80% of cyclist casualties are male
- 10% of cyclists killed or injured are children
- Around three quarters of cyclists killed have major head injuries.

Types of accident

Human error is the main contributory factor involving cyclist collisions. Driver/rider error was the most frequently reported reason for the incident involving 71% of all reported accidents in 2016⁸.

Accidents involving child cyclists are often the result of the child playing, doing tricks, riding too fast or losing control. For teenage and adult cyclists, accidents are more likely to involve collisions with motor vehicles, but about 16% of fatal or serious cyclist accidents reported to the police do not involve a collision with another vehicle, but are caused by the rider losing control of their bicycle.

In collisions involving a bicycle and another vehicle, the most common key contributory factor recorded by the police is 'failed to look properly' by either the driver or rider, especially at junctions. 'Failed to look properly' was attributed to the car driver in 57% of serious collisions and to the cyclist in 43% of serious collisions at junctions⁵.

Other common contributory factors attributed to drivers are 'poor turn/manoeuvre' (in 17% of serious accidents involving a cyclist) and 'careless, reckless, in a hurry (17%). Cyclists are more likely to suffer serious injuries when a driver is judged to be 'impaired by alcohol', exceeding the speed limit' or 'travelling too fast for the conditions'.



The second most common contributory factor attributed to cyclists was 'cyclist entering the road from the pavement' (including when a cyclist crosses the road at a pedestrian crossing), which was recorded in about 20% serious collisions (and over one third of serious collisions involving child cyclists).

The most common vehicle involved in collisions with cyclists is a car or taxi, with the rider usually being hit by the front of the vehicle. In a quarter of fatal cyclist accidents, the front of the vehicle hit the rear of the bicycle.

However, heavy goods vehicles (HGVs) present a particular danger for cyclists, especially in London where around 20% of cyclist fatalities occur involve an HGV. This is despite HGVs accounting for only 4% of vehicle kilometres on London's roads in 2012⁹. These often occur when an HGV is turning left at a junction'. About one quarter of accidents resulting in serious injury to a cyclist involved an HGV, bus or coach 'passing too close' to the rider.

Common cycling accidents

- Motorist emerging into path of cyclist
- Motorist turning across path of cyclist
- Cyclist riding into the path of a motor vehicle, often riding off a pavement
- Cyclist and motorist going straight ahead
- Cyclist turning right from a major road and from a minor road
- Child cyclist playing or riding too fast



Injury Patterns

Limb Injuries

Limb injuries are common in cyclist casualties, with over 40% suffering arm injuries and around 25% suffering leg injuries.

Chest/Abdomen Injuries

Chest and abdomen injuries occur much less frequently (5%), but are often serious. When they do occur they are often accompanied by head injuries.

Head Injuries

Head injuries, ranging from fatal skull fractures and brain damage to minor concussion and cuts, are very common injuries to cyclists. Hospital data shows that over 40% of cyclists, and 45% of child cyclists, suffer head injuries. A study of 116 fatal cyclist accidents in London and rural areas found over 70% of the cyclist fatalities in London had moderate or serious head injuries in London, and over 80% of those killed in collisions on rural roads.



References

¹ DfT (2017) 'Table RAS30001: Reported road casualties by road user type and severity, Great Britain, 2016' URL: https://www.gov.uk/government/statistical-data-sets/ras30-reported-casualties-in-road-accidents Date Accessed: 03/11/2017.

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³ DfT (2017) 'RAS30011: Reported killed or seriously injured casualties by gender, road user type and age, Great Britain, 2016'

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⁵ DfT (2014) 'Focus on Cycling in 'Reported Road Casualties Great Britain 2013"

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⁷ TRL (2009) 'TRL Report PPR 445: Collisions involving cyclists on Britain's roads: establishing the causes' URL: www.trl.co.uk/online store/reports publications/trl reports/cat road user safety/report collisions involving pedal cyclists on britain s roads establishing the causes .htm

⁸ DfT (2017) 'RAS50001: Contributory factors in reported accidents by severity, Great Britain, 2016' URL: https://www.gov.uk/government/statistical-data-sets/ras50-contributory-factors Date Accessed: 03/11/2017.

⁹ Allen et al. (2014) 'London Freight Data Report: 2014 Update' URL: http://content.tfl.gov.uk/london-freight-data-report-2014.pdf Date Accessed: 03/11/2017.