

Introduction

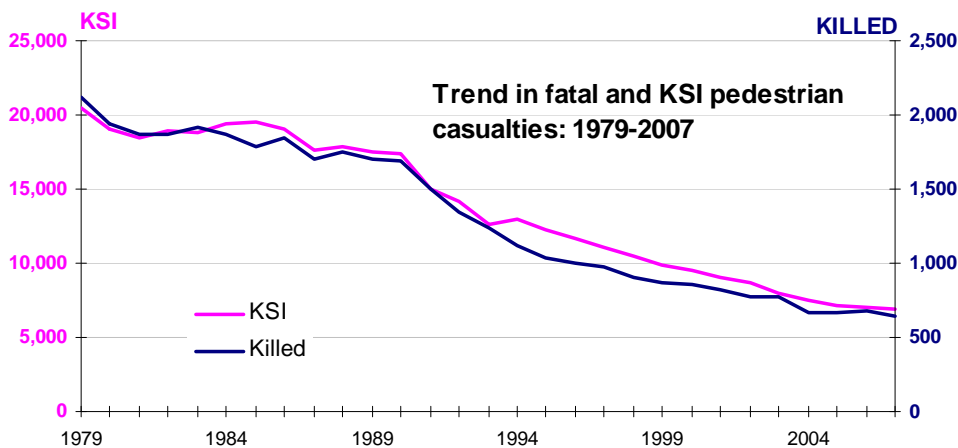
This factsheet presents summary information relating to pedestrian casualties in road accidents; all figures relate to 2007 and to Great Britain unless otherwise stated.

Overview – pedestrian casualties in context

Numbers. In Great Britain there were a total of 182,155 personal injury road accidents. 29,128 of these – around 1 in every 6 – involved a pedestrian, and in total:

- 646 pedestrians were killed (22 per cent of the total road accident fatalities)
- 6,278 were seriously injured (23 per cent of all seriously injured casualties)
- 23,267 were slightly injured (11 per cent of all slightly injured casualties)

Trends. The number of pedestrians killed or seriously injured (KSI) fell by 66 per cent from over 20 thousand in 1979 to 6,924 in 2007, with a 69 per cent drop in deaths from 2,118 to 646 (see chart) – this compares with a 65 per cent fall in KSI and a 53 per cent fall in road deaths for all types of road user.



The Government has set a target to reduce the overall number of KSI casualties in road accidents by 40 per cent from the 1994-98 average by 2010.

Compared with the 1994-98 average, the number of pedestrian KSI casualties in 2007 was 41 per cent lower.

Casualty rates. Estimates of distance walked can be produced using data from the National Travel Survey (NTS). Walking accounts for nearly a quarter of all trips, but only around 3 per cent of all distance travelled. The average distance walked per person has remained relatively unchanged over the past decade (at around 200 miles per year); as a result, the rate of deaths and injuries per billion miles walked has fallen. However, measured per kilometre of exposure, walking remains one of the riskiest forms of travel (see table).

Casualties per billion passenger kilometres (2006 data):

	Killed	KSI	All
Bus or coach	0.3	8	130
Car	2.5	22	260
Pedestrian	36	371	1,631
Pedal cycle	31	527	3,494
Motorcycle	107	1,155	4,156

International comparisons. Britain has one of the best overall road safety records in Europe, with only four EU countries having fewer deaths per 100,000 people in 2005. However, for pedestrians Britain does less well in comparison with the 2005 figure of 1.1 deaths per 100,000, being seventh out of the EU14 (EU15 excluding Germany)¹.

¹ Source: Traffic Safety Basic Facts 2007: Pedestrians, European Road Safety Observatory. Countries included are Belgium, Denmark, Greece, Spain, France, Ireland, Italy, Luxembourg, Netherlands, Austria, Poland, Finland, Sweden and UK

Who are injured as pedestrians in road accidents?

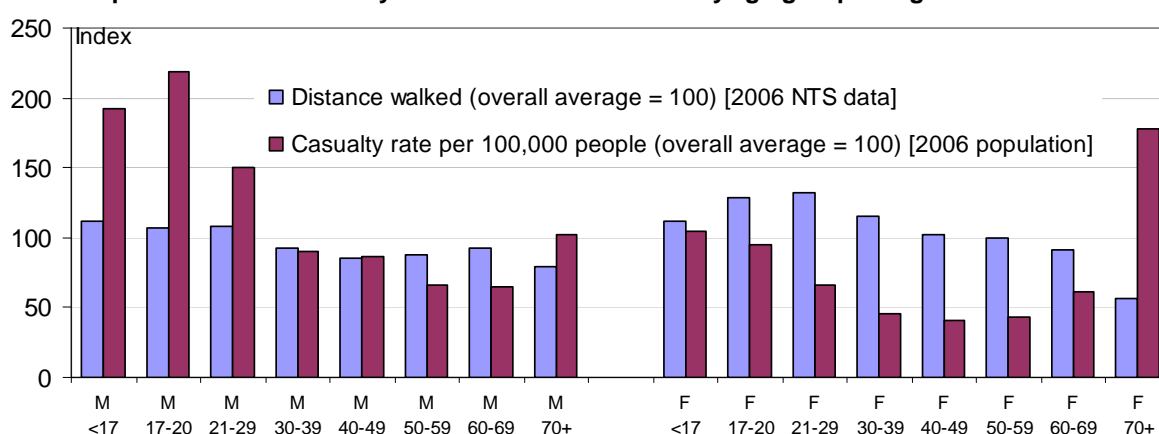
Gender. Although men and women walk similar distances per year², on average, the majority of pedestrian casualties are male – men accounted for 58 per cent of all pedestrian casualties, 62 per cent of KSI casualties and 65 per cent of fatalities in 2007 (for all road users, the equivalent figures are 58, 70 and 75 per cent respectively). Around 2 in every 10 males killed in road accidents are pedestrians; for women, around 3 in 10 fatalities are pedestrians. This reflects the fact that females account for a higher proportion of casualties for pedestrians than for other types of road user (for example motorcyclists, cyclists and car users).

Age. The table shows the breakdown of pedestrian casualties by severity and age group:

- Children (aged 0-15) account for 32 per cent of pedestrian casualties, and 27 per cent of KSI casualties – but only 9 per cent of fatalities. However, of a total of 121 children killed in road accidents in 2007, 57 (47 per cent) were pedestrians.
- Pedestrian casualty and KSI rates per 100,000 people are highest for 12-15 year olds, but fatality rates are highest for those aged over 80. Over a third of pedestrian fatalities are aged 70 and over – 223 in total. For the 80 and over age group, 9 per cent of all casualties are fatal.

	0-4	5-7	8-11	12-15	16-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	All ages
Number													
Killed	14	5	7	31	40	82	62	61	59	58	107	116	646
KSI	253	275	554	817	604	1,000	675	644	474	430	516	557	6,924
All severities	1,122	1,392	2,886	4,127	2,928	4,711	3,130	2,656	1,937	1,519	1,489	1,306	30,191
Rate per 100,000 population													
Killed	0.4	0.3	0.2	1.0	1.3	1.1	0.7	0.7	0.8	1.0	2.5	4.4	1.1
KSI	7.5	13.9	19.7	27.3	19.5	13.1	8.0	7.5	6.4	7.4	12.3	21.1	11.8
All severities	33.2	70.4	102.8	138.0	94.7	61.7	37.3	31.0	26.2	26.3	35.5	49.5	51.3
Proportion of total road casualties for particular age group:													
<i>Killed</i>	54	38	44	47	11	13	14	15	21	28	49	50	22
<i>KSI</i>	68	71	66	55	14	15	14	15	17	25	37	49	23
<i>All severities</i>	36	42	41	40	9	8	7	7	9	12	19	28	12

Indexed pedestrian KSI casualty rate and distance walked by age group and gender



The chart shows that although women aged 21-29 walk the most, pedestrian casualty rates are highest for young males and women aged 70 and over.

Urban/rural. The majority (86 per cent) of pedestrian accidents happened in urban areas. This is accounted for both by the greater population in urban areas and also the fact that those living in urban areas tend to walk further, on average. In comparison, 57 per cent of accidents with no pedestrian casualties occurred in urban areas.

² Males walked on average 192 miles per year and females 201 miles per year (source: NTS, 2005 data).

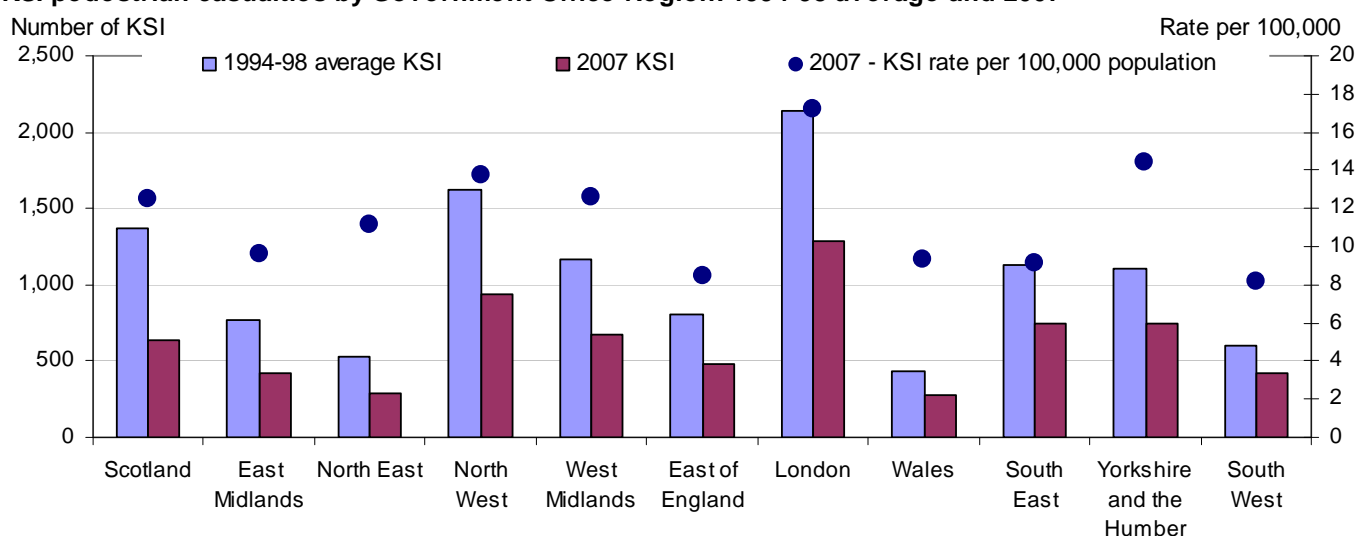
Where do pedestrian accidents happen?

Deprivation. Pedestrian casualty rates are around 70 per 100,000 people in the most deprived 10 per cent of areas in England, compared with just 21 per 100,000 in the least deprived areas. This pattern, which is similar across all age groups, is explained to some extent by the fact that people living in more deprived areas (which are mainly in cities) make more walking trips, but other factors will also have an influence.

Region.

- 19 per cent of KSI casualties and 17 per cent of all pedestrian casualties were in the London region.
- The greatest reduction in pedestrian KSI casualties (in percentage terms) compared with the 1994-98 average occurred in Scotland, followed by the East Midlands and North East (though the latter two regions account for only a small proportion of pedestrian casualties)
- In 2007, London had the highest rate of pedestrian KSI casualties per 100,000 people. This possibly reflects the fact that London has a higher number of commuters and a lower level of car ownership than other areas

KSI pedestrian casualties by Government Office Region: 1994-98 average and 2007



Type of road. Most pedestrians are injured on roads with speed limits of 40mph or below ('built up roads') as these roads tend to be in urban areas where most people live.

- On built up roads, 1 in 5 accidents has a pedestrian casualty, compared with around 1 in 30 on non-built up roads.
- Pedestrians hit on built up roads are less severely injured, on average (22 per cent of pedestrian casualties are killed or seriously injured, compared with 37 per cent on non-built up roads).

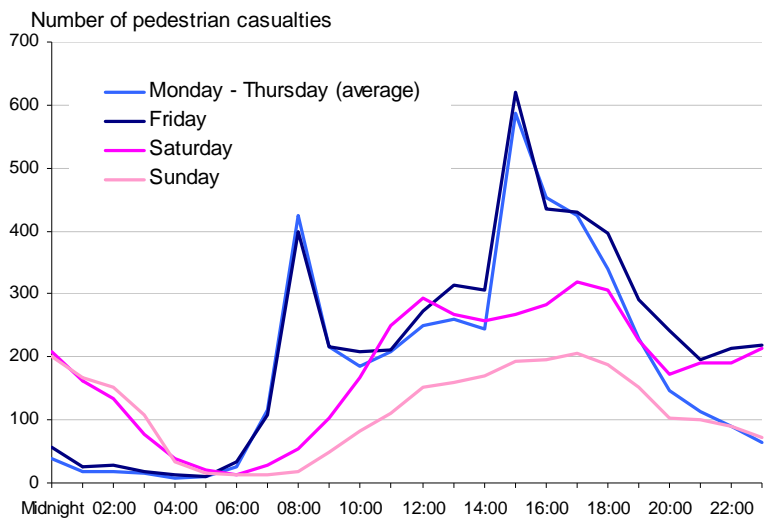
	Number of accidents			Number of ped. casualties			Proportion of ped. casualties		
	With a pedestrian casualty	Total	Per cent with pedestrian casualty	Killed	All KSI severities	All	Killed	KSI	All severities
Built-up roads									
A roads	9,382	54,175	17	239	2,509	9,729	37	36	32
Other roads	18,501	76,213	24	232	3,906	19,148	36	56	63
<i>All built-up roads</i>	<i>27,883</i>	<i>130,388</i>	<i>21</i>	<i>471</i>	<i>6,415</i>	<i>28,877</i>	<i>73</i>	<i>93</i>	<i>96</i>
Non built-up roads									
A roads	585	27,141	2	106	301	614	16	4	2
Other roads	599	16,610	4	39	163	632	6	2	2
<i>All non built-up roads</i>	<i>1,184</i>	<i>43,751</i>	<i>3</i>	<i>145</i>	<i>464</i>	<i>1,246</i>	<i>22</i>	<i>7</i>	<i>4</i>
<i>All roads (including motorways)</i>	<i>29,128</i>	<i>182,115</i>	<i>16</i>	<i>646</i>	<i>6,924</i>	<i>30,191</i>	<i>100</i>	<i>100</i>	<i>100</i>

When do pedestrian accidents happen?

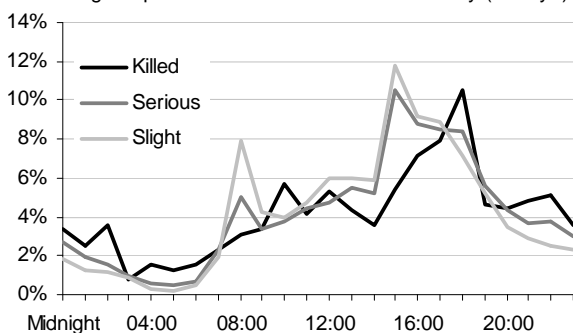
Day of week. In 2007 more pedestrian accidents happened on Friday than any other day of the week, with Sunday having the fewest number of pedestrian accidents, on average. 77 per cent of pedestrian accidents happened on weekdays, compared with 75 per cent of all accidents.

Time of day.

- The patterns shown (in the chart) for pedestrians are very broadly similar to overall patterns for all road casualties.
- On weekdays, most pedestrian casualties occur during the evening peak period. On weekends, most casualties occur during the afternoon.
- A considerable number of casualties (9 per cent) occur between 8pm and 4am on Friday/Saturday and Saturday/Sunday. For other road users, this figure is around 7 per cent. This probably reflects the fact that more pedestrian accidents involve alcohol (see section on why accidents happen)



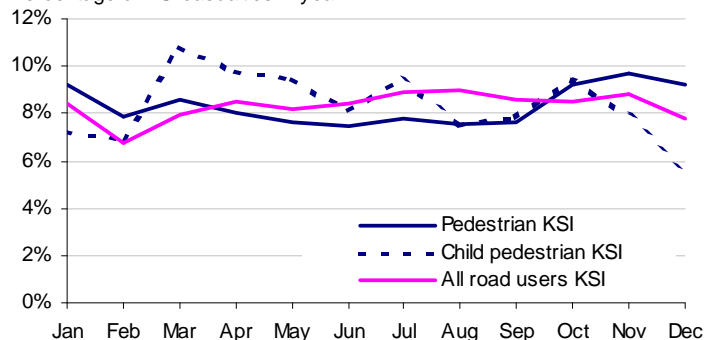
Percentage of pedestrian casualties of each severity (all days)



The above patterns shown for all pedestrian casualties are broadly similar for those seriously injured. However, a slightly greater proportion of pedestrian deaths occur during the evening and night.

Month of year. Compared with all road users, a greater proportion of pedestrian KSI casualties occur during the winter months, with fewer during the summer. For child pedestrians, the pattern is somewhat different with a higher proportion occurring during the spring months (care is needed as numbers each month are small and subject to some fluctuation).

Percentage of KSI casualties in year



Children travelling to school. 442 children were killed or seriously injured as pedestrians out of a total of 541 KSI casualties on journeys to or from school in 2007 – around 80 per cent. This accounts for just under a quarter (23 per cent) of child pedestrian KSI casualties. The National Travel Survey records that around 49 per cent of primary school and 44 per cent of secondary school children walk to school.

9,527 (43 per cent) of all child pedestrian casualties happen between 3pm and 7pm, not on a journey from school - 882 of these are killed or seriously injured. Data from the NTS suggests that around 1 in 6 children aged 5 to 15 spend time playing in the street, with 3pm to 5pm and after 5pm being the most popular play periods.

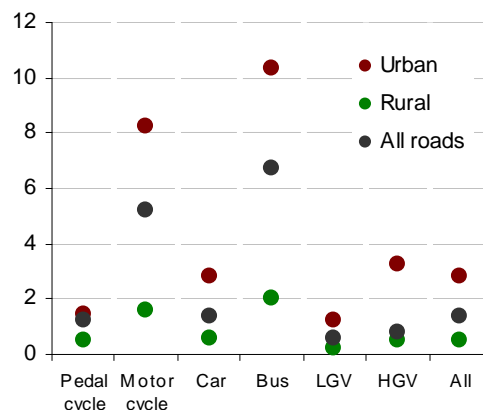
What are the accident circumstances?

Number of vehicles. Most accidents with pedestrian casualties tend to involve only one vehicle – 94 per cent, compared with 18 per cent of accidents with no pedestrian casualty. Pedestrian accidents have an average of 1.1 casualties per accident (compared with 1.4 for other accidents), 95 per cent of whom are pedestrians. In fatal accidents with a pedestrian casualty, 99 per cent of those killed were pedestrians.

Vehicles involved. In *single vehicle* accidents, most pedestrians are hit by cars (see table). This reflects the fact that cars form the majority of traffic. However, when allowing for distance travelled (chart) motorcycles and buses pose greater risk to pedestrians, particularly in urban areas.

Accidents where pedestrians are hit by larger and heavier vehicles tend to result in more serious outcomes, with 12 per cent of accidents between HGVs and pedestrians resulting in a fatality, compared with just 2 per cent of all accidents.

Pedestrian KSI casualties per 100 million vehicle km



Single vehicle accidents with pedestrian casualties

Number of accidents

	Fatal		Serious		Slight		All severities		Proportion of acc. involving vehicle that are fatal
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	
Pedal cycle	3	1	48	1	142	1	193	1	1.6
Motorcycle	28	5	240	4	748	4	1,016	4	2.8
Car	336	63	4,360	76	16,490	78	21,186	77	1.6
Bus or coach	42	8	319	6	1,141	5	1,502	5	2.8
LGV	40	7	296	5	1,056	5	1,392	5	2.9
HGV	66	12	137	2	334	2	537	2	12.3
Any vehicle	537	100	5,731	100	21,134	100	27,402	100	2.0

Vehicle characteristics. 70 per cent of vehicles that hit and injured a pedestrian had a male driver (around two thirds of all drivers involved in accidents are male). In around 1 in 5 cases the driver was aged 25 or under, but only 5 per cent of cases involved a driver aged 70 or over.

Most pedestrian casualties were hit by vehicles recorded as 'going ahead' (63 per cent, rising to 73 per cent for killed or seriously injured pedestrians). Vehicles in accidents with a pedestrian casualty were 4 times more likely to have been recorded as being on the footway than vehicles involved in other accidents - but still only account for 3 per cent of vehicles involved in pedestrian accidents.

Pedestrian location. In total, more than half (57 per cent) of pedestrian casualties were crossing the road (not masked by a stationary vehicle) when injured. *Of these*, 18 per cent were on a pedestrian crossing and a further 12 per cent within 50 metres of one. Of the remaining 43 per cent of casualties:

- 14 per cent were masked by a stationary vehicle
- 10 per cent were in the carriageway but not crossing
- 10 per cent were on the pavement or verge.

Hit and run. Nearly 1 in every 5 pedestrian casualties (18 per cent) occurs in a 'hit and run' accident – a total of 5,516 in 2007 of which 481 were seriously injured and 66 killed. Pedestrians account for nearly a quarter of those injured by drivers who fail to stop.

Why do pedestrian accidents happen?

Contributory factors. Details of factors contributing to injury accidents are recorded by the police. Whilst it is not possible to determine blame from these contributory factors they may offer some insight into common types of accident³:

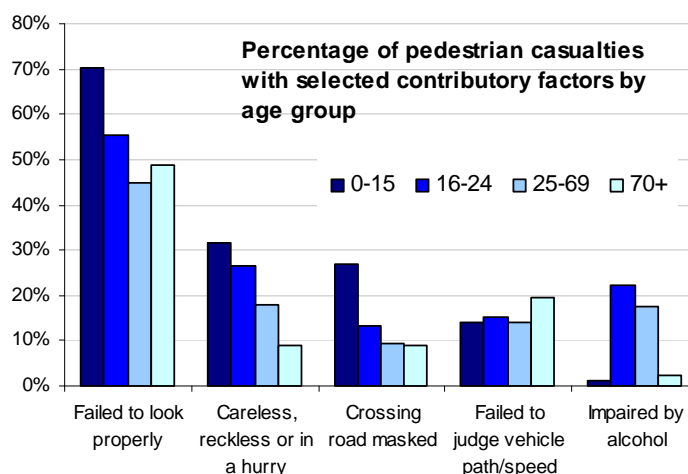
- In 55 per cent of accidents contributory factors were only assigned to pedestrians (with *pedestrian failed to look properly* being the most common individual factor).
- In 21 per cent of accidents factors were only associated with vehicles involved (with *failed to look properly* being the most common vehicle factor, as in all accidents).
- In the remaining 24 per cent of accidents at least one factor was assigned to both a pedestrian casualty and a vehicle (with the most common combination being both participants failing to look properly, recorded in around 7 per cent of all pedestrian accidents)

The most frequently recorded contributory factors in accidents involving a pedestrian are shown (note that more than one factor may be recorded for each accident³):

Contributory factor	Factor assigned to:	Fatal		Fatal and serious		All severities	
		Number	Per cent	Number	Per cent	Number	Per cent
Pedestrian failed to look properly	Pedestrian	272	46	3,385	58	12,632	59
Pedestrian careless, reckless or in a hurry	Pedestrian	92	16	1,364	23	5,297	25
Failed to look properly	Vehicle	140	24	1,032	18	4,051	19
Pedestrian crossing road masked by vehicle	Pedestrian	54	9	975	17	3,637	17
Pedestrian failed to judge vehicle's path or speed	Pedestrian	129	22	1,037	18	3,373	16
Pedestrian impaired by alcohol	Pedestrian	91	15	836	14	2,592	12
Careless, reckless or in a hurry	Vehicle	65	11	467	8	1,708	8
Dangerous action in carriageway (eg. playing)	Pedestrian	55	9	460	8	1,489	7
Vision impaired by stationary or parked vehicle(s)	Vehicle	20	3	258	4	1,140	5
Pedestrian wrong use of pedestrian crossing facility	Pedestrian	26	4	314	5	1,122	5
Number of accidents		593	100	5,842	100	21,436	100

The chart shows the five most common factors attributed to pedestrian casualties, by age group:

- Child pedestrian casualties were more likely to have at least one factor recorded (85 per cent have at least one factor, compared with 76 per cent of all pedestrian casualties)
- Children were more likely to have the factors *failed to look properly, careless, reckless or in a hurry and crossing road masked by vehicle*. In addition 10 per cent of child pedestrian casualties had the factor *dangerous action in carriageway (e.g. playing)*.



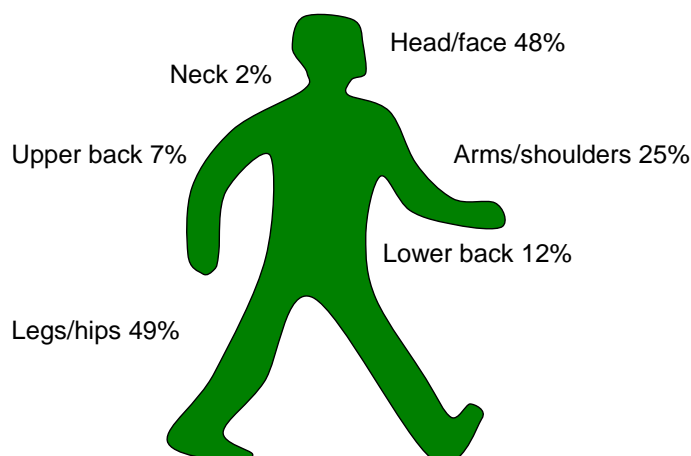
Involvement of alcohol. Around 1 in every 5 pedestrian casualties aged between 16 and 60 had *impaired by alcohol* assigned as a contributory factor. Based on coroners data, 72 per cent of pedestrians killed between the hours of 10pm and 4am were over the legal alcohol limit compared with around half of car drivers – though data is available for less than half of pedestrian fatalities. Conversely, only a small proportion of KSI casualties in accidents involving a drink-driver were pedestrians – 160 out of 2,520 [These figures relate to 2006 data].

³ Figures relate only to those accidents at which a police officer attended the scene and at least one contributory factor was recorded.

What are the medical consequences of accidents for pedestrians?

Information on the medical consequences of pedestrian casualties in road accidents can be obtained from hospital inpatient data (Hospital Episode Statistics, HES).

- Most pedestrian admissions are the result of injuries to the head/face or the legs/hips.
- Compared to other road user types, a higher proportion of pedestrians were admitted with head/face injuries - nearly half of pedestrian admissions, compared with around a third of all road casualty admissions (including pedestrians). There is a similar pattern for injuries to legs/hips.



Note

Coverage. The pedestrian category on the DfT national road accident database includes children riding toy cycles on the footway, persons pushing bicycles, pushing or pulling other vehicles or operating pedestrian controlled vehicles, those leading or herding animals, children in prams or buggies, and people who alight safely from vehicles and are subsequently injured.

Further information

This factsheet presents summary information relating to pedestrian casualties in road accidents in Great Britain. The following are sources of further information:

- **Road Casualties Great Britain: Annual Report 2007.** This contains information on all road accidents in Great Britain, including more detailed figures and tables relating to pedestrian accidents and casualties. In particular, the 2007 volume contains
 - an article containing further details of coverage of pedestrian casualties in hospital data
 - further details of the contributory factors associated with pedestrians by age group and genderThe publication can be accessed online at <http://www.dft.gov.uk/pgr/statistics/datatablespublications/accidents/casualtiesgbar>.
- **National Travel Survey.** The Department's National Travel Survey collects information about walking activities, and provides data on trends that can be used to calculate pedestrian casualty rates. An overview is published in the NTS factsheet on walking: <http://www.dft.gov.uk/pgr/statistics/datatablespublications/personal/factsheets/walkingfactsheet.pdf>
More details can be found in the NTS annual report : <http://www.dft.gov.uk/pgr/statistics/datatablespublications/personal/mainresults/>
- **Research studies.** The Department for Transport has commissioned a number of research studies into different aspects of pedestrian road safety. Details can be found on the Department's road safety webpage at <http://www.dft.gov.uk/pgr/roadsafety/research/rsrr/theme1/>
The Transport Research Laboratory also publishes research on a wide range of road safety topics: <http://www.trl.co.uk/store/reports.asp?pid=108>

Any enquiries relating to the figures in this factsheet or requests for further information on pedestrian accidents and casualties in Great Britain can be addressed to the Road Accident Statistics branch at the Department for Transport:

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