



# Traffic Safety Basic Facts 2018







#### General

In this Basic Fact Sheet, 'children' are defined as those who are aged below 15 years. The age at which people are allowed to drive a motor vehicle varies across the EU, but 14 year olds appear, on the whole, to fit into this group rather than with 'young people'. Children tend to be thought of as innocent victims of road accidents more often than it is the case for adults.

Figure 1 shows the evolution of child fatalities and total road fatalities over the decade 2007-2016. The number of children killed in road accidents fell from 1.188 in 2007 to 615 in 2016, a reduction by 48%, which is higher than the respective reduction of total fatalities (41%).



Figure 1: Number of child fatalities and all road fatalities, EU, 2007-2016

Source: CARE database, data available in May 2018

Table 1 presents the number of children killed in each EU country, as well as in Iceland, Norway and Switzerland for the time period 2007-2016. The annual number of fatalities had a decreasing trend over the decade, with the highest decrease being recorded in 2009, while an increase by about 6% in child fatalities occurred in 2014.

Croatia experienced the highest reduction in child fatalities during this decade (85%), followed by Latvia (82%).

About 620 children died in road accidents in 2016 in the EU countries.



The number of children killed in road accidents fell by 48% between 2007 and 2016 in the EU countries.

ble 1: Number of child fatalities by country, 2007-2016										
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
BE	30	35	16	23	35	16	18	10	19	15
BG	-	40	30	19	9	17	15	16	20	
CZ	25	19	16	17	12	15	11	14	18	14
DK	20	19	10	9	9	7	13	6	6	6
DE	111	102	90	104	86	73	58	71	84	66
EE	6	3	4	1	4	0	3	1	4	
IE	15	18	10	6	7	2	6	12	-	
EL	42	35	43	30	22	21	17	10	6	1
ES	99	83	61	79	43	53	46	37	25	2
FR	150	114	122	130	128	115	97	112	101	10
HR	26	20	24	12	14	8	10	8	14	
IT	95	85	71	70	61	52	55	62	39	4
CY	4	1	4	1	1	0	1	0	1	
LV	11	12	7	9	5	6	7	7	11	
LT	-	-	-	-	-	-	7	15	5	
LU	2	0	6	0	1	1	2	1	0	
HU	37	24	22	20	12	20	7	11	11	1
MT	0	0	1	1	-	-	-	-	1	
NL	36	23	23	16	18	24	8	19	20	1
AT	13	12	15	10	13	8	10	8	11	_
PL	156	146	128	112	102	90	91	80	70	7
PT	27	23	23	18	19	14	11	8	14	_
RO	117	137	125	95	83	90	76	91	76	7
SI	6	4	2	2	6	3	3	2	3	
SK	28	23	9	11	-	-	-	-	-	1
FI	14	8	6	7	8	7	6	10	14	1
SE UK	10	6	9	9	10	7	4	7	7	6
EU	96	110	69	42	52	56 <b>705</b>	41	50	52	6
EU Yearly	1.188	1.079	937	842	760		616	653	639	61
change		-9,2%	-13,1%	-10,2%	-9,7%	-7,3%	-12,6%	6,1%	-2,2%	-3,80
IS	1	0	0	0	2	0	2	0	2	
NO	10	8	8	3	7	4	4	4	2	
СН	14	10	21	8	10	31	12	9	7	1

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Source: CARE database, data available in May 2018

Totals for EU include latest available data (Data for Lithuania and Slovakia not included in totals)

Table 2 shows the percentage of child fatalities of all road fatalities by country in the EU. The highest percentages of child fatalities in 2016 were recorded in Finland and Romania (4%), whilst the EU average percentage was 2,4%.



UIC 2. 1	ercent	age or	cnila ra	talities	s or all	road fa	talities	5, 2007	-2016	
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
BE	3%	4%	2%	3%	4%	2%	2%	1%	3%	2%
BG	-	4%	3%	2%	1%	3%	2%	2%	3%	-
CZ	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
DK	5%	5%	3%	4%	4%	4%	7%	3%	3%	3%
DE	2%	2%	2%	3%	2%	2%	2%	2%	2%	2%
EE	3%	2%	4%	1%	4%	0%	4%	1%	6%	-
IE	4%	6%	4%	3%	4%	1%	3%	6%	-	-
EL	3%	2%	3%	2%	2%	2%	2%	1%	1%	2%
ES	3%	3%	2%	3%	2%	3%	3%	2%	1%	2%
FR	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
HR	4%	3%	4%	3%	3%	2%	3%	3%	4%	1%
IT	2%	2%	2%	2%	2%	1%	2%	2%	1%	1%
CY	4%	1%	6%	2%	1%	0%	2%	0%	2%	2%
LV	3%	4%	3%	4%	3%	3%	4%	3%	6%	1%
LT	-	-	-	-	-	-	3%	6%	2%	-
LU	4%	0%	13%	0%	3%	3%	4%	3%	0%	6%
HU	3%	2%	3%	3%	2%	3%	1%	2%	2%	2%
MT	0%	0%	7%	8%	-	-	-	-	9%	0%
NL	5%	3%	4%	3%	3%	4%	2%	4%	4%	2%
AT	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
PL	3%	3%	3%	3%	2%	3%	3%	2%	2%	2%
PT	3%	3%	3%	2%	2%	2%	2%	1%	2%	1%
RO	4%	4%	4%	4%	4%	4%	4%	5%	4%	4%
SI	2%	2%	1%	1%	4%	2%	2%	2%	3%	2%
SK	4%	4%	2%	3%	-	-	-	-	-	-
FI	4%	2%	2%	3%	3%	3%	2%	4%	5%	4%
SE	2%	2%	3%	3%	3%	2%	2%	3%	3%	2%
UK	3%	4%	3%	2%	3%	3%	2%	3%	3%	3%
EU	3%	3%	3%	3%	3%	3%	2%	3%	2%	2%
IS	7%	0%	0%	0%	17%	0%	13%	0%	13%	6%
NO	4%	3%	4%	1%	4%	3%	2%	3%	2%	1%
СН	4%	3%	6%	2%	3%	9%	4%	4%	3%	6%

The percentage of road fatalities that were children fell steadily from 2007 until 2016, except for 2014.

Source: CARE database, data available in May 2018





Source: CARE database, data available in May 2018



The number of child fatalities has reduced gradually as a proportion of all fatalities during the decade, except 2014 (Figure 2). Map 1 shows the proportion in each country for 2016.

# Map 1: Percentage of child fatalities of all fatalities by country, 2016 or latest available year



The highest percentages of child fatalities in 2016 were recorded in Finland and Romania (4%), whilst the EU average percentage was 2,4%.



Table 3 shows the child fatality rates per million population between 2007 and 2016 by country. The highest number of child fatalities per million population in 2016 was recorded in Romania (37).

	able 3: Child fatality rates per million population by country, 2007-2016									
1	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
BE	25	29	13	19	28	13	14	8	15	12
BG	-	60	46	29	14	26	23	24	31	-
CZ	24	19	16	17	12	14	11	14	18	14
DK	30	28	15	13	13	11	20	9	9	10
DE	15	14	12	14	12	10	8	10	12	9
EE	43	22	29	7	29	0	22	7	30	-
IE	26	30	16	9	11	3	9	18	-	-
EL	39	32	40	27	20	19	16	9	6	19
ES	22	18	13	17	9	11	10	8	5	6
FR	20	15	16	17	17	15	12	14	13	14
HR	58	44	53	26	31	18	23	19	34	10
IT	17	15	13	13	11	9	10	11	7	9
CY	41	10	41	10	10	0	10	0	11	11
LV	50	56	34	44	25	31	37	37	57	10
LT	-	-	-	-	-	-	23	51	17	-
LU	35	0	102	0	17	17	33	16	0	32
HU	35	23	22	20	12	21	7	12	12	11
MT	0	0	23	23	-	-	-	-	24	0
NL	18	12	12	8	9	12	4	10	11	6
AT	15	14	18	12	16	10	12	10	13	8
PL	38	36	32	28	25	23	23	21	19	20
PT	25	21	21	17	18	13	11	8	14	7
RO	48	60	58	44	39	42	37	45	38	37
SI	32	21	10	10	30	15	15	10	15	15
SK	47	39	16	19	-	-	-	-	-	-
FI	23	13	10	12	13	12	10	17	24	17
SE	9	6	9	9	10	7	4	6	6	5
UK	13	15	9	6	7	7	5	7	7	8
EU	23	21	18	16	15	14	12	13	12	12
IS	23	0	0	0	44	0	45	0	45	23
NO	17	13	13	5	11	6	6	6	3	3
СН	18	13	26	10	12	38	15	11	9	15

Source: CARE database (EUROSTAT for population data), data available in May 2018



# Figure 3a: Child fatality rates per million population by country, 2016 or latest available year

Source: CARE database (EUROSTAT for population data), data available in May 2018

In 2016, the highest number of child fatalities per million population was recorded in Romania.



The relative fatality rate allows the comparison of the child fatality rate to the rate of the total population.





Children made up 2,4% of total number of road fatalities in the EU countries in 2016 and about 10% of the population. They are at about a quarter of the risk of dying in a road accident of the average member of the population across the EU as a whole. This varies from about a tenth in Latvia and Portugal to more than two fifths in Ireland, as shown in Figure

In the following tables and figures, the CARE data for 2016 are analysed in greater detail. It should be noted that the latest available data are used, meaning 2010 data for SK, 2014 data for IE and 2015 data for BG, EE and LT.

Children have, on average, at about a quarter of the risk of dying in a road accident compared to the other age groups.

3b.

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#### Age group and Gender

Table 4 presents the distribution of child fatalities by age group and gender in the EU countries, Iceland, Norway and Switzerland in 2016. Also, Figure 4 shows the distribution of child fatalities in each EU country by gender. Whilst girls account for approximately two-fifths of fatalities up to fourteen years old, females make up less than a quarter of adult fatalities. For boys, more children aged 10-14 were killed than in either the 0-4 or the 5-9 age groups.

latest av	atest available year									
		Fem	ale			Ma	le			
	0-4	5-9	10-14	>15	0-4	5-9	10-14	>15		
BE	1	3	2	140	2	5	2	472		
BG	-	-	-	-	-	-	-	-		
CZ	0	0	0	146	0	0	0	451		
DK	1	0	1	56	1	1	2	149		
DE	10	7	8	839	15	14	12	2.301		
EE	1	1	0	21	0	0	2	42		
IE	1	2	2	53	2	3	2	126		
EL	3	2	1	162	5	3	5	643		
ES	9	3	3	395	8	3	2	1.382		
FR	16	10	13	797	19	23	27	2.566		
HR	1	1	0	62	0	0	2	241		
IT	4	9	9	642	5	7	15	2.592		
CY	0	0	0	10	0	0	1	35		
LV	2	0	0	33	0	0	0	123		
LT	1	0	0	73	0	2	2	161		
LU	0	0	0	11	2	0	0	19		
HU	1	2	0	142	3	2	2	454		
MT	0	0	0	6	0	0	0	17		
NL	1	1	4	142	4	0	2	379		
AT	3	0	1	115	2	0	1	310		
PL	4	7	11	735	10	16	24	2.219		
PT	1	0	0	127	1	2	3	429		
RO	9	7	10	482	13	12	23	1.357		
SI	1	0	0	27	1	0	1	100		
SK	1	1	1	89	2	3	3	271		
FI	1	0	3	46	1	3	2	202		
SE	0	2	0	63	1	1	2	201		
UK	11	6	7	460	6	15	19	1.336		
EU	83	64	76	5.874	103	115	156	18.578		
% by gender	45%	36%	33%	24%	55%	64%	67%	76%		
IS	0	1	0	4	0	0	0	13		
NO	0	0	1	23	0	0	1	110		
СН	4	2	2	57	2	1	1	147		

# Table 4: Number of child fatalities by country, gender and age group, 2016 or latest available year

Source: CARE database, data available in May 2018

More boys were killed in the 10-14 age group than in either the 0-4 or the 5-9 age groups.



Boys account for 63% of road accident fatalities amongst children.

Figure 4: Distribution of child fatalities by country and gender, 2016 or latest available year



#### **Road user type and Transport mode**

Table 5: Total number and distribution of child fatalities by country and modeof transport, 2016 or latest available year

	Car/ Taxi	Moped	Motor- cycle	Pedest- rian	Pedal cycle	Bus/ coach	Other/ not known	Total
BE	33%	0%	0%	27%	33%	0%	7%	15
BG	40%	0%	0%	45%	15%	0%	0%	20
CZ	71%	0%	0%	21%	7%	0%	0%	14
DK	33%	0%	0%	50%	17%	0%	0%	6
DE	52%	0%	0%	41%	8%	0%	0%	66
EE	50%	0%	0%	50%	0%	0%	0%	4
IE	42%	0%	0%	50%	0%	0%	8%	12
EL	26%	0%	0%	58%	16%	0%	0%	19
ES	64%	0%	0%	25%	4%	0%	7%	28
FR	56%	4%	1%	26%	9%	2%	3%	108
HR	25%	0%	0%	50%	25%	0%	0%	4
IT	59%	6%	2%	24%	6%	0%	2%	49
CY	0%	0%	0%	0%	0%	0%	100%	1
LV	100%	0%	0%	0%	0%	0%	0%	2
LT	60%	0%	0%	20%	20%	0%	0%	5
LU	50%	0%	0%	50%	0%	0%	0%	2
HU	80%	0%	0%	10%	0%	10%	0%	10
MT	-	-	-	-	-	-	-	0
NL	33%	0%	0%	17%	50%	0%	0%	12
AT	43%	0%	0%	43%	14%	0%	0%	7
PL	47%	7%	0%	22%	18%	0%	6%	72
PT	43%	0%	0%	29%	29%	0%	0%	7
RO	24%	1%	0%	62%	7%	0%	5%	74
SI	0%	0%	0%	0%	33%	0%	67%	3
SK	55%	0%	0%	36%	9%	0%	0%	11
FI	20%	0%	0%	30%	10%	0%	40%	10
SE	17%	0%	0%	67%	17%	0%	0%	6
UK	39%	0%	2%	52%	8%	0%	0%	64
EU	46%	2%	0%	37%	11%	0%	4%	631
IS	100%	0%	0%	0%	0%	0%	0%	1
NO	0%	0%	0%	0%	100%	0%	0%	2
СН	25%	0%	0%	50%	25%	0%	0%	12
Source: (	CARE database	e, data available	e in May 2018					

46% of children who died were travelling by car or taxi, whilst 37% were pedestrians.



Table 5 shows the distribution of child fatalities by mode of transport in 2016. 46% of child fatalities were car or taxi occupants and 37% were pedestrians. Another 11% of child fatalities were cyclists.

Figure 5 examines the distribution of child road fatalities per mode of transport, age and gender. The percentage per mode varies with age and gender, presumably reflecting the changing travel choices of boys and girls as they grow older.



Figure 5: Distribution of child fatalities by age, gender and mode of transport,

Source: CARE database, data available in May 2018

Table 6 and Figure 6 show that about half of child fatalities in the EU were passengers in 2016, whilst 37% were pedestrians and about 14% of child fatalities were 'drivers'.

The percentage of child fatalities per mode varies with age and gender, presumably reflecting the changing travel choices of boys and girls as they grow older.



Table 6: Total number and distribution of child fatalities by country an	d road
user type, 2016 or latest available year	

iser type, 201	6 or latest availa Driver	Passenger	Pedestrian	Total
BE	33%	40%	27%	15
BG	10%	45%	45%	20
CZ	7%	71%	21%	14
DK	17%	33%	50%	6
DE	8%	52%	41%	66
EE	0%	50%	50%	4
IE	0%	50%	50%	12
EL	21%	21%	58%	12
ES	4%	71%	25%	28
FR	14%	60%	25%	108
HR	25%	25%	50%	4
IT	10%	65%	24%	49
CY	10%	0%	0%	1
LV	0%	100%	0%	2
LT	20%	60%	20%	5
LU	0%	50%	50%	2
HU	0%	90%	10%	10
MT	0%	50%	10%	0
NL	75%		25%	12
AT	14%	43%	43%	7
PL	28%	43% 50%	22%	72
PT	28%	43%	22%	72
RO	9%	28%	62%	74
SI	33%	67%	0%	3
SK	9%	55%	36%	11
FI	10%	60%	30%	10
SE	17%	17%	67%	6
UK	9%	39%	52%	64
EU	14%	<b>49%</b>	<b>37%</b>	631
IS	0%	100%	0%	1
NO	100%	0%	0%	2
CH	25%	25%	50%	12
	ase data available in Mi		50%0	12

Source: CARE database, data available in May 2018





Source: CARE database, data available in May 2018

In 2016, 37% of child fatalities in the EU were pedestrians.

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#### Area and Type of Road

The CARE data show whether an accident occurred on a motorway or not, and, if not, whether it occurred in an urban or a rural area. Table 7 shows this distribution of child fatalities in each country. Fewer than one in ten child fatalities occurred on a motorway, whilst 46% of the total child road fatalities were recorded on rural non-motorway roads.

	Motorway	Non-mot	orway	Unknown	Total
		Rural	Urban		
BE	0%	53%	47%	0%	1
BG	5%	40%	55%	0%	-
CZ	14%	57%	29%	0%	:
DK	17%	50%	33%	0%	
DE	18%	39%	42%	0%	(
EE	0%	0%	0%	100%	
IE	0%	58%	42%	0%	
EL	0%	47%	53%	0%	
ES	32%	43%	25%	0%	
FR	6%	57%	37%	0%	1
HR	0%	0%	100%	0%	
IT	16%	49%	35%	0%	
CY	0%	100%	0%	0%	
LV	0%	100%	0%	0%	
LT	0%	0%	0%	100%	
LU	0%	50%	50%	0%	
HU	10%	60%	30%	0%	
МТ	-	-	-	-	
NL	8%	50%	25%	17%	
AT	0%	57%	43%	0%	
PL	0%	57%	43%	0%	
PT	14%	14%	71%	0%	
RO	3%	20%	77%	0%	
SI	67%	33%	0%	0%	
SK	0%	36%	64%	0%	
FI	0%	80%	20%	0%	
SE	0%	33%	67%	0%	
UK	5%	47%	48%	0%	
EU	8%	46%	45%	2%	63
IS	0%	100%	0%	0%	
NO	0%	50%	50%	0%	
СН	17%	25%	58%	0%	

# Table 7: Total number and distribution of child fatalities by country and roadtype, 2016 or latest available year

Source: CARE database, data available in May 2018

Fewer than one in ten child fatalities in the EU in 2016 occurred on motorways. Almost 46% of the total child fatalities occurred in rural areas.







Source: CARE database, data available in May 2018

#### Time of the day and Day of the week

Table 8: Total number and distribution of child fatalities by country and time of the day, 2016 or latest available year

or the t	00.00-	04.00-	08.00-	12.00-	16.00-	20.00-	
	03.59	07.59	11.59	15.59	19.59	23.59	Total
BE	0%	20%	13%	13%	40%	13%	15
BG	10%	5%	15%	30%	20%	20%	20
CZ	0%	0%	29%	36%	29%	7%	14
DK	0%	0%	0%	83%	0%	17%	6
DE	5%	6%	9%	38%	33%	9%	66
EE	0%	0%	25%	25%	25%	25%	4
IE	0%	8%	17%	25%	17%	33%	12
EL	0%	0%	11%	32%	37%	21%	19
ES	7%	4%	21%	18%	32%	18%	28
FR	1%	10%	18%	24%	36%	11%	108
HR	0%	25%	0%	25%	25%	25%	4
IT	4%	0%	10%	31%	33%	22%	49
CY	0%	0%	0%	100%	0%	0%	1
LV	0%	0%	0%	50%	50%	0%	2
LT	0%	0%	0%	20%	80%	0%	5
LU	0%	0%	0%	0%	100%	0%	2
HU	0%	10%	20%	10%	30%	30%	10
MT	-	-	-	-	-	-	0
NL	0%	0%	67%	25%	8%	0%	12
AT	0%	14%	14%	29%	14%	29%	7
PL	1%	6%	14%	33%	36%	10%	72
РТ	14%	0%	14%	14%	29%	29%	7
RO	4%	3%	18%	22%	34%	20%	74
SI	0%	0%	0%	67%	33%	0%	3
SK	0%	0%	18%	27%	55%	0%	11
FI	10%	10%	10%	40%	30%	0%	10
SE	0%	0%	0%	83%	17%	0%	6
UK	0%	0%	8%	33%	47%	13%	64
EU	3%	5%	15%	<b>29%</b>	34%	14%	631
IS	0%	0%	0%	100%	0%	0%	1
NO	0%	0%	50%	0%	0%	50%	2
СН	0%	8%	8%	42%	33%	8%	12
Source: CA	RE database, o	data available	in May 2018				

More than one third of child fatalities in the EU in 2016 occurred between 4pm and 8pm.

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As shown in Table 8, the day has been divided into six four-hour periods beginning at midnight in order to examine the distribution of child fatalities by time of the day. Across the EU, 34% of the fatalities occurred between 4pm and 8pm and 29% occurred between noon and 4pm.

# Table 9: Total number and distribution of child fatalities by country and day of the week, 2016 or latest available year

	Mon	Tue	avallable Wed	Thu	Fri	Sat	Sun	Total
BE	0%	7%	33%	13%	20%	27%	0%	1 <b>0121</b>
BG	15%	10%	5%	15%	20% 5%	27% 30%		20
							20%	
CZ	7%	21%	14%	14%	7%	7%	29%	14
DK	17%	0%	17%	17%	50%	0%	0%	6
DE	11%	20%	8%	12%	24%	9%	17%	66
EE	0%	0%	25%	0%	75%	0%	0%	4
IE	8%	8%	8%	50%	0%	17%	8%	12
EL	16%	11%	5%	21%	16%	16%	16%	19
ES	18%	14%	14%	11%	21%	11%	11%	28
FR	19%	12%	20%	13%	11%	8%	17%	108
HR	0%	25%	25%	25%	25%	0%	0%	4
IT	16%	16%	14%	12%	10%	8%	22%	49
CY	0%	0%	100%	0%	0%	0%	0%	1
LV	0%	0%	0%	50%	0%	0%	50%	2
LT	40%	0%	0%	0%	20%	20%	20%	5
LU	50%	0%	0%	0%	50%	0%	0%	2
HU	0%	0%	20%	30%	10%	40%	0%	10
MT	-	-	-	-	-	-	-	0
NL	17%	8%	25%	17%	25%	8%	0%	12
AT	14%	0%	0%	29%	14%	14%	29%	7
PL	13%	13%	11%	10%	24%	22%	8%	72
PT	14%	14%	0%	14%	0%	29%	29%	7
RO	20%	9%	8%	7%	20%	18%	18%	74
SI	0%	0%	0%	0%	67%	33%	0%	3
SK	27%	27%	0%	27%	9%	0%	9%	11
FI	40%	0%	10%	10%	0%	40%	0%	10
SE	33%	0%	0%	17%	0%	17%	33%	6
UK	19%	8%	17%	17%	19%	16%	5%	64
EU	16%	12%	13%	14%	17%	15%	14%	631
IS	0%	0%	0%	0%	0%	0%	100%	1
NO	0%	0%	0%	50%	50%	0%	0%	2
СН	8%	33%	0% olo in May 20	17%	17%	17%	8%	12

Source: CARE database, data available in May 2018

Table 9 shows the distribution of child fatalities by day of the week. On average in the EU, Friday has the most child fatalities (17%).

Friday is the day of the week with the most child fatalities.



Figure 8: Distribution of child and total fatalities by day of the week and time of the day, EU, 2016 or latest available year



Source: CARE database, data available in May 2018

Also, Figure 8 compares the distributions of child fatalities and all fatalities by day of the week and time of the day. The weekday distributions (Monday-Thursday) are similar, so they have been combined in the figure. There are 168 hours per week, so on average 0,6% of fatalities would occur per hour through the week, if equally distributed. There are clear differences between child and total road fatality distributions. Relatively many children are killed in road accidents between noon and 8pm, especially on Fridays and at weekends and relatively few between midnight and early morning hours.

Relatively many children are killed in road accidents between noon and 8pm, especially on Fridays and at weekends.



#### **Seasonality**

Table 10 shows the distribution of child fatalities through the year, using pairs of months in the EU, Iceland, Norway and Switzerland. The peak period for the EU as a whole is July/August (23%), with fewest fatalities in the period between November/December.

Jan/Feb	Mar/Apr	May/Jun	Jul/Aug	Sep/Oct	Nov/Dec	Total
7%	13%	27%	13%	33%	7%	15
20%	10%	10%	35%	20%	5%	20
0%	7%	7%	43%	29%	14%	14
17%	17%	50%	17%	0%	0%	6
12%	17%	26%	20%	23%	3%	66
25%	0%	50%	0%	0%	25%	4
0%	50%	42%	0%	0%	8%	12
11%	21%	26%	5%	32%	5%	19
18%	11%	11%	32%	7%	21%	28
16%	16%	12%	19%	19%	19%	108
25%	0%	0%	50%	25%	0%	4
16%	8%	22%	29%	12%	12%	49
0%	0%	0%	100%	0%	0%	1
0%	0%	0%	50%	0%	50%	2
20%	20%	20%	20%	20%	0%	5
0%	50%	0%	0%	50%	0%	2
0%	10%	10%	30%	20%	30%	10
-	-	-	-	-	-	0
8%	33%	17%	8%	25%	8%	12
0%	43%	14%	29%	14%	0%	7
8%	8%	17%	22%	29%	15%	72
0%	29%	14%	43%	0%	14%	7
9%	12%	18%	23%	24%	14%	74
0%	33%	0%	67%	0%	0%	3
27%	18%	9%	18%	18%	9%	11
10%	10%	40%	10%	20%	10%	10
17%	17%	0%	17%	33%	17%	6
17%	8%	19%	27%	20%	9%	64
13%	14%	18%	23%	20%	12%	631
0%	0%	0%	0%	100%	0%	1
0%	0%	0%	50%	50%	0%	2
0%	17%	25%	17%	33%	8%	12
	7% 20% 0% 17% 12% 25% 0% 10% 11% 18% 16% 25% 16% 0% 20% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0	7%         13%           20%         10%           0%         7%           17%         17%           12%         17%           25%         0%           0%         50%           11%         21%           16%         16%           25%         0%           16%         25%           0%         0%           25%         0%           16%         8%           0%         0%           0%         0%           0%         0%           0%         33%           0%         29%           0%         33%           0%         29%           10%         10%           10%         10%           10%         10%           10%         10%           10%         10%           10%         10%           10%         10%           10%         0%           10%         0%           10%         0%           0%         0%           0%         0%           10%         10% <th>7%         13%         27%           20%         10%   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      29%           17%         17%         50%         17%         0%           12%         17%         26%         20%         23%           25%         0%         50%         0%         0%           0%         50%         42%         0%         0%           11%         21%         26%         5%         32%           18%         11%         11%         32%         7%           16%         16%         12%         19%         19%           25%         0%         0%         50%         25%           16%         8%         22%         29%         12%           0%         0%         0%         50%         0%           0%         0%         0%         50%         0%           0%         0%         0%         50%         0%           0%         50%         0%         50%         20%           0%         10%         10%         20%<th>7%         13%         27%         13%         33%         7%           20%         10%         10%         35%         20%         5%           0%         7%         7%         43%         29%         14%           17%         17%         50%         17%         0%         0%           12%         17%         26%         20%         23%         3%           25%         0%         50%         0%         0%         8%           0%         50%         42%         0%         0%         8%           11%         21%         26%         5%         32%         5%           18%         11%         11%         32%         7%         21%           16%         16%         12%         19%         19%         19%           25%         0%         0%         50%         0%         0%           16%         8%         22%         29%         12%         12%           0%         0%         0%         50%         0%         0%           0%         0%         0%         0%         50%         0%           0%         0%</th></th>	7%         13%         27%           20%         10%         10%           0%         7%         7%           17%         17%         50%           12%         17%         26%           25%         0%         50%           0%         50%         42%           11%         21%         26%           18%         11%         11%           16%         8%         22%           0%         0%         0%           0%         0%         0%           0%         0%         0%           0%         0%         0%           0%         0%         0%           0%         0%         0%           0%         10%         10%           0%         33%         17%           0%         33%         17%           0%         43%         14%           8%         8%         17%           0%         29%         14%           0%         29%         14%           0%         33%         0%           10%         12%         18%           0%	7%         13%         27%         13%           20%         10%         10%         35%           0%         7%         7%         43%           17%         17%         50%         17%           12%         17%      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        26%         20%         23%           25%         0%         50%         0%         0%           0%         50%         42%         0%         0%           11%         21%         26%         5%         32%           18%         11%         11%         32%         7%           16%         16%         12%         19%         19%           25%         0%         0%         50%         25%           16%         8%         22%         29%         12%           0%         0%         0%         50%         0%           0%         0%         0%         50%         0%           0%         0%         0%         50%         0%           0%         50%         0%         50%         20%           0%         10%         10%         20% <th>7%         13%         27%         13%         33%         7%           20%         10%         10%         35%         20%         5%           0%         7%         7%         43%         29%         14%           17%         17%         50%         17%         0%         0%           12%         17%         26%         20%         23%         3%           25%         0%         50%         0%         0%         8%           0%         50%         42%         0%         0%         8%           11%         21%         26%         5%         32%         5%           18%         11%         11%         32%         7%         21%           16%         16%         12%         19%         19%         19%           25%         0%         0%         50%         0%         0%           16%         8%         22%         29%         12%         12%           0%         0%         0%         50%         0%         0%           0%         0%         0%         0%         50%         0%           0%         0%</th>	7%         13%         27%         13%         33%         7%           20%         10%         10%         35%         20%         5%           0%         7%         7%         43%         29%         14%           17%         17%  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# Table 10: Total number and distribution of child fatalities by country and month, 2016 or latest available year

Source: CARE database, data available in May 2018

The monthly distribution of child fatalities is displayed in Figure 9. By comparison with the overall distribution, there are relatively many child fatalities between April and August, with the highest differences being recorded in July and May.

The number of fatalities amongst children is highest in July and August and is about twice the November-December number.





Source: CARE database, data available in May 2018

#### **Road Accident Health Indicators**

Injury data can be obtained from a wide range of sources, such as police and ambulance reports, national insurance schemes, and hospital records, each of which provides a specific but yet incomplete picture of the injuries suffered in road accidents. In order to obtain a comprehensive view of these injuries, the EU Council issued a recommendation that urges Member States to use synergies between existing data sources and to develop national injury surveillance systems rooted in the health sector. At present, thirteen Member States are routinely collecting injury data in a sample of hospitals and delivering these data to the Commission. This system is called the EU Injury Database (EU IDB).

Within the EU IDB "transport module" injuries suffered in road accidents are recorded by "mode of transport", "role of injured person" and "counterpart". These variables can complement information from police records, in particular for injury patterns and the improved assessment of injury severity. The indicators used include the percentage of casualties attending hospital who are admitted to hospital, the mean length of stay of hospital admissions, the nature and type of body part injured, and potentially also long term consequences of injuries.

By 2012, thirteen Member States routinely collected data in a sample of hospitals and contributed them to the EU Injury Database.





According to estimates based on the EU IDB more than four million people are injured annually in road accidents, one million of whom have to be admitted to a hospital.

20% of the child casualties who attended a hospital were admitted to the hospital; their average stay in hospital was six days. Figure 10: Distribution of non-fatal road accident casualties attending hospital by mode of transport



EU Injury Database (EU IDB AI) - hospital treated patients. IDB AI Transport module and place of occurrence (code 6.n [public road]); n-all = 73.600: n-admitted = 23.568 (DE, DK, LV, MT, AT, NL, SE, SI, CY, years 2005-2008).

Figure 10 is based on IDB data from nine countries for accidents that occurred between 2005 and 2008. Vulnerable road users (pedestrians, cyclists, motorcycles and mopeds) accounted for almost two thirds (63%) of road accident casualties attending hospital, and for over half of casualties admitted to the hospital (56%).

Figure 11 shows that overall 32% of road accident casualties recorded in the IDB were admitted to hospital, compared with 20% for children. Figure 12 shows that the overall average length of stay of eight days, compared with six days for children.





EU Injury Database (EU IDB AI) - hospital treated patients. IDB AI Transport module and place of occurrence (code 6.n [public road]); n-all = 73.600, n-children = 10.123, n-children admitted = 1.984 (DE, DK, LV, MT, AT, NL, SE, SI, CY, years 2005-2008).



Figure 12: Average length of stay (hospital bed days) of non-fatal road accident casualties by age group and mode of transport



EU Injury Database (EU IDB AI) - hospital treated patients. IDB AI Transport module and place of occurrence (code 6.n [public road]); n-all = 73.600, n-children = 10.123, n-children admitted = 1.984 (DE, DK, LV, MT, AT, NL, SE, SI, CY, years 2005-2008).



# Figure 13: Distribution of non-fatal road accident child casualties by mode of transport and body part injured

EU Injury Database (EU IDB AI) - hospital treated patients. IDB AI Transport module and place of occurrence (code 6.n [public road]); n-all = 73.600, n-children = 10.123, n-children admitted = 1.984 (DE, DK, LV, MT, AT, NL, SE, SI, CY, years 2005-2008).

Naturally, hospital data can provide information on the injury patterns sustained by the accident victims. Figure 13 presents the distribution of the body parts of child casualties that were injured by type of road user.

Table 11 shows the types of injuries most frequently recorded in the EU IDB. It compares the distribution of injuries among children and among road users of all ages.

Contusions and bruises account for 35% of all traffic injuries suffered by children who attended a hospital for treatment.



#### Table 11: Ten most frequently recorded types of injury by age group

	Children (0-14 years)	All age groups
Contusion, bruise	35%	38%
Fracture	28%	20%
Open wound	12%	10%
Distortion, sprain	7%	9%
Concussion	6%	8%
Other specified brain injury	2%	2%
Luxation, dislocation	1%	1%
Injury to muscle and tendon	0%	2%
Abrasion	2%	2%
Injury to internal organs	1%	1%
Other specified types of injury	4%	4%
Total	100%	100%

Source: SafetyNet Accident Causation Database 2005 to 2008



#### Notes

1. Country abbreviations

	Belgium	BE		Italy	IT		Romania	RO
	Bulgaria	BG	<b>*</b> **	Cyprus	CY	0	Slovenia	SI
	Czech Republic	CZ		Latvia	LV	(ŧ)	Slovakia	SK
	Denmark	DK		Lithuania	LT		Finland	FI
	Germany	DE		Luxembourg	LU	_	Sweden	SE
	Estonia	EE		Hungary	HU		United Kingdom	UK
	Ireland	IE	*	Malta	MT			
ŧ	Greece	EL		Netherlands	NL		Iceland	IS
<u>.</u>	Spain	ES		Austria	AT	巍	Liechtenstein	LI
	France	FR		Poland	PL	╪╞═	Norway	NO
	Croatia	HR	١	Portugal	PT	+	Switzerland	СН

2. Sources: CARE (Community database on road accidents). The full glossary of definitions of variables used in this Report is available at: <u>http://ec.europa.eu/transport/road\_safety/pdf/statistics/cadas\_glossary.pdf</u>

3. Data available in May 2018.

4. Data refer to 2016 and when not available the latest available data are used (2010 data for SK, 2014 data for IE and 2015 data for BG, EE and LT). Totals and related average percentages for EU also include latest available data.

5. Data for Lithuania and Slovakia are not included in the totals of data comparing the years 2007-2016.

6. At the commenting of the tables and figures, countries with small figures are omitted.

7. This 2018 edition of Traffic Safety Basic Facts updates the previous versions produced within the EU co-funded research projects SafetyNet and DaCoTA.

#### 8. Disclaimer

This report has been produced by the National Technical University of Athens (NTUA), the Austrian Road Safety Board (KEV) and the European Union Road Federation (ERF) under a contract with the European Commission. Whilst every effort has been made to ensure that the matter presented in this report is relevant, accurate and up-to-date, the Partners cannot accept any liability for any error or omission, or reliance on part or all of the content in another context.

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#### 9. Please refer to this Report as follows:

European Commission, Traffic Safety Basic Facts on Children, European Commission, Directorate General for Transport, June 2018.

