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ROAD DEATHS AND AGE GROUPS OF ROAD DEATHS IN COUNTRIES WORLDWIDE

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This paper gives statistics on the number of road deaths by age groups in the UK, Republic of Ireland and other countries worldwide, for international comparison. The second section of the paper focuses on the differences in enforcement and attitude between some of the countries displayed in section one.

SUMMARY OF KEY POINTS

Road Deaths

- In 2008 Northern Ireland and the Republic of Ireland have the largest rate of road deaths per 100,000 compared to other parts of the United Kingdom. All parts of the UK and ROI have shown a decrease in the number of deaths from 2004 to 2008 (Table 1).

- For each year from 2004 to 2008, 16-24 year olds have the highest number of road deaths in NI (Table 2) and GB as a whole (Table 3).

- The highest number of deaths in the ROI has been in the 15-24 age category each year from 2005 to 2007 (Table 4).

- At international level, Poland has the highest number of road deaths per 100,000 in 2008, and the Netherlands has the lowest number (Figure 1).

- Table 5 shows that for the worldwide countries displayed, the age group with the highest level of road deaths is 25-64 years. (this table uses wider age brackets that the tables for NI, GB and ROI.

Enforcement

- Using the data from Figure 1 it is evident that the Netherlands have the lowest number of deaths per 100,000 of the population compared to the rest of the countries displayed

- The Netherlands have tightened their enforcement measures by clamping down on speed limits, introducing the concept 'the more dangerous the concept, the higher the sanction', increased enforcement pressure with more inspections etc.

Attitude and learning

- The level and efficiency of enforcement in a country may have affect on the attitudes of road users. Increased enforcement could result in increased subjective risk of being caught

- Looking at Figure 1, GB has the second lowest level of road deaths after the Netherlands. Paul Smith, the founder of the Safe Speed Road Safety Campaign[1]relates to the 'sound principles of the UK driving culture, which involve individual responsibility, attitude etc.

- Smith highlights the importance of individual responsibility in producing safe driving, and suggests that over regulation and enforcement erodes driver's individual responsibility, and can encourage drivers to act out against regulations. For example in Belgium where enforcement is high but speed violations are also high.

[1] Safe Speed Road Safety Campaign

- Attitudes to speed can include: doing it for the thrill and copying media adverts etc, having a false perception of their ability.

Seat belt wearing

- Looking at Figure 1 a number of the Central European (CE) countries (Poland, Slovenia, Czech Republic and Hungary) have some of the highest values for road deaths per 100,000.

- They also have high levels of cars without seat belts, crashes involving passengers without seat belts and a general belief that seat belts are not needed when driving carefully.

Young and inexperienced drivers

- Reasons for high death rates among young drivers is due to a mixture of attitude towards speed, carrying passengers, wearing seat belts, and inexperience. All this mixed with being over confident, feeling invincible, taking risks and poor assessment of them, leaves them vulnerable to the perils of the road.

- Possible introduction of a Graduated Driving Licence (GDL) as applied in New Zealand, California and Australia, might help to combat such high percentages of young road deaths in the UK and NI.

CONTENTS

ROAD DEATHS

The number of road deaths and the number of road deaths per 100,000 in the regions of the United Kingdom as well as the Republic of Ireland from 2004 to 2008 are detailed below.

TABLE 1: THE NUMBER AND RATE OF ROAD DEATHS (PER 100,000) IN THE UNITED KINGDOM AND REPUBLIC OF IRELAND 2004-2008 (2008 FIGURES ARE PROVISIONAL).

	2004		2005		2006		2007		2008	
	No.	No./100,000	No.	No./100,000	No.	No./100,000	No.	No./100,000	No.	No./100,000
Northern Ireland	147	8.6	135	7.8	126	7.2	113	6.4	107	6.0
England	2714	5.4	2735	5.4	2695	5.3	2502	4.9	2123	4.1
Wales	201	6.8	180	6.1	163	5.5	162	5.4	143	4.8
Scotland	306	6.0	286	5.6	314	6.1	282	5.5	272	5.3
Great Britain	3221	5.5	3201	5.5	3172	5.4	2946	5.0	2538	4.3
United Kingdom	3368	5.6	3336	5.5	3298	5.4	3059	5.0	2645	4.3
Republic of Ireland	337[2]	8.4	399[3]	9.7	365	8.7	338	7.8	279	6.3

Sourced from the Department of Transport, Road Casualties in Britain: Annual Reports 2005-2008
See http://www.dft.gov.uk/pgr/statistics/datatablespublications/accidents/casualtiesgbar/

Road Traffic Fatalities in Northern Ireland: The PSNI produces statistics on the number of deaths on the road, broken down by age and road user. These figures are updated daily and historic data is also available. In 2009 there were 115 road traffic related deaths in Northern Ireland.[4] A more in-depth breakdown of the age groups of those killed in road traffic collisions is also available, with the most recent year being 2008. A table summarising this is detailed overleaf:

[2] 2003 Data
[3] Note: This figure is different to that of the figure available from the Road Safety Authority detailed below.
[4] See PSNI, Road Traffic Statistics, 2009 Injury Road Traffic Collision Statistics Monthly Update, **http://www.psni.police.uk/index/updates/updates_statistics/updates_road_traffic_statistics.htm**

TABLE 2: NUMBER OF ROAD TRAFFIC FATALITIES IN NORTHERN IRELAND BY AGE GROUP, 2004-2008.

Age Group	2004		2005		2006		2007		2008	
	No.	% of Total	No.	% of Total	No.	% of Total	No.	% of Total	No.	% of Total
0-15	11	7.5	15	11.1	9	7.1	5	4.4	7	6.5
16-24	52	35.4	34	25.2	45	35.7	31	27.4	41	38.3
25-34	24	16.3	29	21.5	17	13.5	21	18.6	7	6.5
35-44	16	10.9	18	13.3	22	17.5	12	10.6	19	17.8
45-54	11	7.5	7	5.2	11	8.7	16	14.2	7	6.5
55-64	11	7.5	11	8.1	12	9.5	10	8.8	9	8.4
65+	22	15.0	21	15.6	10	7.9	18	15.9	17	15.9
Total	**147**	**100**	**135**	**100**	**126**	**100**	**113**	**100**	**107**	**100**

All information sourced from the PSNI website: Injury Road Traffic Statistics for the 2008 Calendar Year (http://www.psni.police.uk/index/updates/updates_statistics/updates_road_traffic_statistics.htm) and Road Traffic Collision Statistics Annual Report 2004, 2005, 2006 & 2007 (http://www.psni.police.uk/index/updates/updates_statistics/updates_road_traffic_statistics/updates_road_traffic_statisyics_archive.htm)

Road Traffic Fatalities by Age-Group in Great Britain: The Department of Transport produces detailed annual statistics regarding the number of casualties in Great Britain (England, Wales and Scotland). These statistics, broken down by age group, are displayed below for the years 2004 to 2008.

TABLE 3: NUMBER OF ROAD TRAFFIC FATALITIES IN GREAT BRITAIN BY AGE GROUP, 2004-2008.

Age Group	2004		2005		2006		2007		2008	
	No.	% of Total	No.	% of Total	No.	% of Total	No.	% of Total	No.	% of Total
0-15	166	5.2	141	4.4	169	5.3	121	4.1	124	4.9
16-24	845	26.2	857	26.8	837	26.4	770	26.1	640	25.2
25-34	574	17.8	541	16.9	531	16.7	477	16.2	419	16.5
35-44	529	16.4	472	14.7	483	15.2	440	14.9	380	15.0
45-54	274	8.5	345	10.8	318	10.0	335	11.4	298	11.7
55-64	248	7.7	241	7.5	263	8.3	238	8.1	194	7.6
65+	567	17.6	595	18.6	562	17.7	557	18.9	482	19.0
Age not specified	18	0.6	9	0.3	9	0.3	8	0.3	1	0.0
Total	**3221**	**100**	**3201**	**100**	**3172**	**100**	**2946**	**100**	**2538**	**100**

All information sourced from the Department of Transport, Road Casualties in Britain: Annual Reports 2004-2008.
See http://www.dft.gov.uk/pgr/statistics/datatablespublications/accidents/casualtiesgbar/

Road Traffic Fatalities by Age-Group in the Republic of Ireland: The Road Safety Authority (RSA) was established in September 2006. Its functions, transferred from the Department of Transport (DoT), the National Roads Authority (NRA) and the National Safety Council, include driver testing and training, enforcement and road safety promotion and research.[5] The following table provides the number of road fatalities in the Republic of Ireland from 2005 to 2007, broken down by age group.

TABLE 4: NUMBER OF ROAD TRAFFIC FATALITIES IN THE REPUBLIC OF IRELAND BY AGE GROUP 2005-2007.

Age Group	2005		2006		2007	
	No.	% of Total	No.	% of Total	No.	% of Total
0-14	9	2.3	16	4.4	16	4.7
15-24	136	34.3	113	31.0	90	26.6
25-34	77	19.4	79	21.6	60	17.8
35-44	45	11.4	38	10.4	45	13.3
45-54	31	7.8	23	6.3	29	8.6
55-64	33	8.3	29	7.9	34	10.1
65+	56	14.1	66	18.1	58	17.2
Unknown	9	2.3	1	0.3	6	1.8
Total	**396**[6]	**100**	**365**	**100**	**338**	**100**

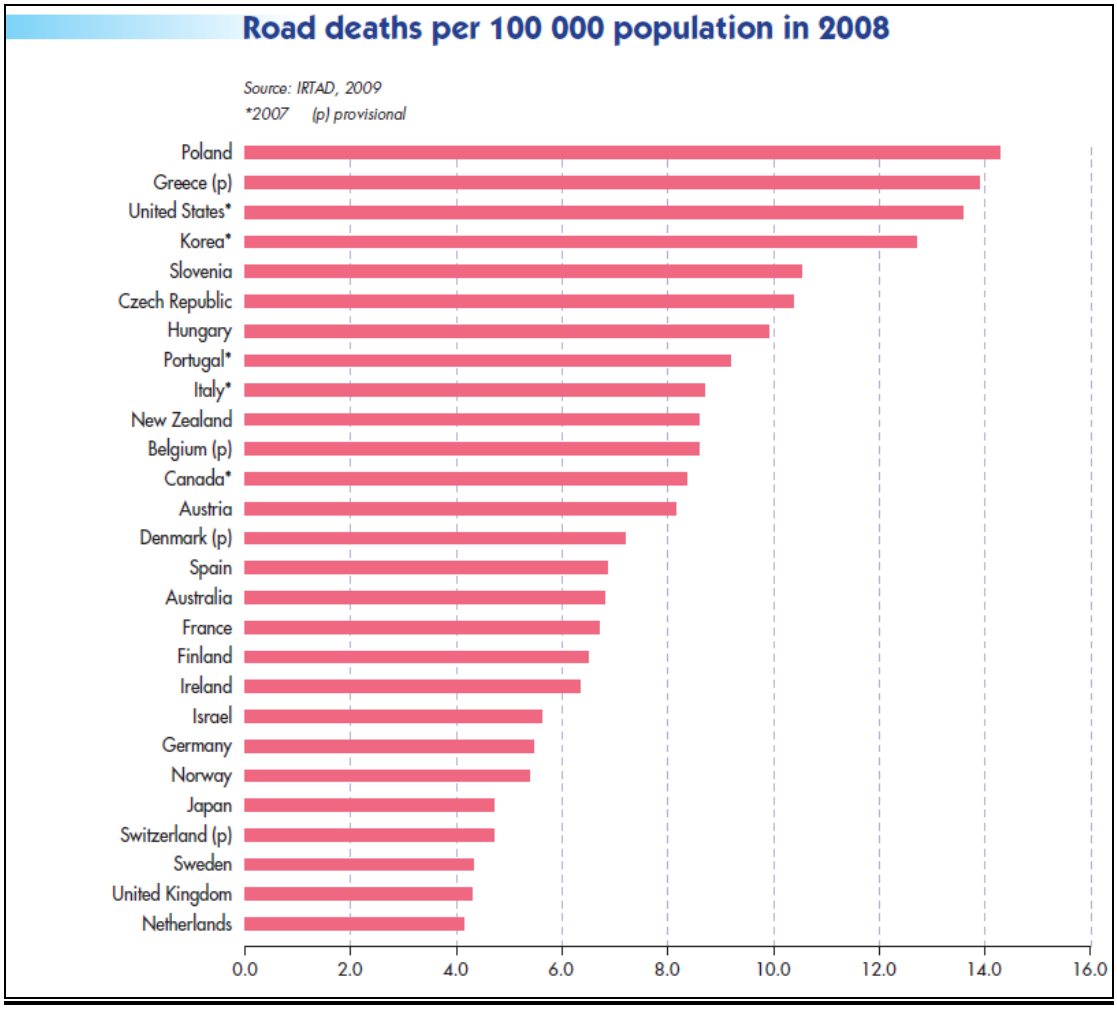
All information sourced from the Road Safety Authority Publication Database, Road Collision Factbook 2007 and Road Collision Facts 2005 &2006. See http://www.rsa.ie/publication/publication/index.php

International Comparisons: International comparisons are available thorough a variety of sources. The World Health Organisation, for example, has produced a detailed, country-by-country report detailing the number of road traffic fatalities up to 2007. It also provides information on the institutional framework, national legislation, registered vehicles, post-crash care and other factors relating to road safety for each country. The report, Global status report on road safety, can be accessed via the following link:
http://www.who.int/violence_injury_prevention/road_safety_status/2009/en/index.html

The International Road Traffic and Accident Database (IRTAD) also provide detailed information on road traffic fatalities. IRTAD is a working group of the Joint Transport Research of the Organisation for Economic Co-operation and Development (OECD) and the International Transport Forum.[7] Among the data available from this database is the number of road deaths per 100,000 of population in 2008 for the OECD countries, and a graph displaying this information is displayed below.

[5] Road Safety Authority, Annual Report 2007, http://www.rsa.ie/publication/publication/index.php
[6] Note: This figure differs from the figure available in the Department of Transport report.
[7] International Road Traffic and Accident Database (IRTAD), About IRTAD, http://internationaltransportforum.org/irtad/about.html

FIGURE 1: THE NUMBER OF ROAD DEATHS PER 100,000 IN 2008, INTERNATIONAL COMPARISONS.



See IRTAD, Road Deaths per 100,000 population by age in 2008 – selected countries. http://internationaltransportforum.org/irtad/graphs.html

Further to this comparisons across age-groups are available and the data from the OECD countries are available and displayed overleaf:

TABLE 5: ROAD USER FATALITIES BY AGE, INTERNATIONAL COMPARISON.

	Year	Total Number of Road User Fatalities	0-14 years	% of all road user fatalities	15-24 years	% of all road user fatalities	25-64 years	% of all road user fatalities	65 years and more	% of all road user fatalities
Australia	2008	1454	56	3.9	364	25.0	794	54.6	239	16.4
Austria	2008	679	12	1.8	160	23.6	335	49.3	172	25.3
Belgium	2007	1067	30	2.8	242	22.7	622	58.3	167	15.7
Canada	2006	2892	96	3.3	713	24.7	1574	54.4	466	16.1
Czech Republic	2008	1076	19	1.8	207	19.2	646	60.0	186	17.3
Denmark	2008	406	19	4.7	83	20.4	207	51.0	97	23.9
Finland	2008	344	8	2.3	76	22.1	167	48.5	93	27.0
France	2008	4275	125	2.9	1130	26.4	2209	51.7	811	19.0
Germany	2008	4477	102	2.3	1061	23.7	2242	50.1	1066	23.8
Great Britain	2008	2538	105	4.1	659	26.0	1290[8]	50.8	482	19.0
Greece	2007	1612	42	2.6	323	20.0	892	55.3	330	20.5
Hungary	2008	996	36	3.6	135	13.6	644	64.7	179	18.0
Iceland	2008	12	0	0.0	3	25.0	5	41.7	4	33.3
Ireland	2007	338	16	4.7	90	26.6	168	49.7	58	17.2
Israel	2008	412	34	8.3	82	19.9	193	46.8	76	18.4
Italy	2007	5131	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Japan	2008	6023	145	2.4	655	10.9	2273	37.7	2950	49.0
Korea	2007	6166	202	3.3	604	9.8	3573	57.9	1786	29.0
Luxembourg	2008	35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Netherlands	2008	677	23	3.4	139	20.5	341	50.4	174	25.7
New Zealand	2008	366	23	6.3	117	32.0	171	46.7	50	13.7
Norway	2008	255	9	3.5	72	28.2	126	49.4	48	18.8

[8] Note: This figure is one less than the corresponding total given in the previous section which used data from the Department of Transport Annual Report.

	Year	Total Number of Road User Fatalities	0-14 years	% of all road user fatalities	15-24 years	% of all road user fatalities	25-64 years	% of all road user fatalities	65 years and more	% of all road user fatalities
Poland	2007	5583	156	2.8	1134	20.3	3251	58.2	946	16.9
Portugal	2006	969	21	2.2	136	14.0	581	60.0	215	22.2
Slovenia	2008	214	4	1.9	48	22.4	128	59.8	34	15.9
Spain	2008	3100	84	2.7	561	18.1	1851	59.7	551	17.8
Sweden	2008	397	6	1.5	77	19.4	212	53.4	102	25.7
Switzerland	2008	357	10	2.8	58	16.2	189	52.9	100	28.0
USA	2008	37261	1347	3.6	8723	23.4	21579	57.9	5533	14.8

SOURCED FROM IRTAD, ROAD USER FATALITIES BY AGE, HTTP://INTERNATIONALTRANSPORTFORUM.ORG/IRTAD/DATASETS.HTML. PLEASE NOTE: THE SUM OF THE TOTALS IN THE AGE CATEGORIES FOR EACH COUNTRY DOES NOT ALWAYS EQUAL THE TOTAL NUMBER OF ROAD DEATHS FOR THAT COUNTRY

ROAD DEATHS AND AGE GROUPS OF DEATHS, ENFORCEMENT AND ATTITUDE

INTRODUCTION

The tables provided give a detailed breakdown of the figures of road fatalities throughout Great Britain and a selection of other countries world wide. To simply look at the total of deaths for each of the countries would give a false indication as to which has the highest level. Obviously countries with smaller populations will have fewer fatality levels, due to fewer road users than countries with larger populations.

For this reason, I am going to refer to Figure 1 which gives a breakdown of the deaths per 100,000 of the population, thus giving a clearer picture, allowing a fair comparison of the number of road fatalities between the countries displayed.

ENFORCEMENT

Using the data from Figure 1 it is evident that the Netherlands have the lowest number of deaths per 100,000 of the population compared to the rest of the countries displayed.

As already discussed in Section 2 (Enforcement of speeding on rural roads in the UK and Europe), enforcement measures have a large influence on the number of deaths on the road. Section 2 has described the Netherlands as an example of best practice in Europe for the enforcement of speeding under its **Start up Programme Sustainable Safety** (please refer back to the table: Examples of Best Practice, for more detail). The Netherlands have tightened their enforcement measures by:

- clamping down on speed limits
- introducing the concept 'the more dangerous the concept, the higher the sanction'
- increased enforcement pressure with more inspections etc.

Subjective Risk

By tightening enforcement, they are increasing the awareness among road users that not only are they more likely to be caught speeding under the introduction of increased number and efficiency of enforcement mechanisms, but once caught, could face steeper consequences. As discussed in section 2, this increases the level of drivers' subjective risk of being caught.

Therefore, the level and efficiency of enforcement in a country may have an affect on the attitudes of road users.

Section 2 uses Belgium as one of the best examples in Europe for speed enforcement (see point 5.Examples of best practice). At the same time Table 1 in Section 2 displays Belgium as having the highest percentage of speeding violations on rural roads. One would expect a country with strong enforcement to have low numbers of violations, this emphasises the point that other factors as well as enforcement effect safe driving on roads, and these may include the attitude and learning of the road users.

ATTITUDE AND LEARNING: POSITIVE EFFECTS ON NUMBERS OF ROAD DEATHS

Looking at the bar graph in Figure 1, GB has the second lowest level of road deaths after the Netherlands. There are many contributing factors to this, of which driver attitudes appear to be the most important.

The Safe Speed Road Safety Campaign (Paul Smith)[9] argues that differences between countries in relation to road safety and deaths is due to its culture; roads culture; driving culture and safety culture.

[9] Safe Speed Road Safety Campaign

According to the Campaign the UK driving culture was influenced by Sir Mark Everard Pepys, who in the 1920s as a racing driver and motoring enthusiast had his own radio programme dedicated to the promotion of safer driving. Due to his efforts, he was recruited by the Police Driving School at Hendon during its infancy. Most of the UK driving culture can be attributed to Hendon, with its focus on decreasing police accidents. Hendon soon became the only centre of driving excellence in the world. It's ideas soon infiltrated the general driving culture of the UK population with principles being applied to the driving test, legislation, road design and advice for drivers.[10]

The sound principles of the UK driving culture:

Individual responsibility
One of the main principles taught to police drivers is **"You will never have an accident for which you are not to blame."** Individual drivers are expected to take full responsibility for leaving room for error and time to react.

Attitude
At Hendon, police drivers are encouraged to:

- be calm
- take driving seriously
- learn from mistakes
- not get annoyed with other road users
- make rational decisions
- leave a margin for error
- be courteous and considerate to others
- have discipline and take pride in their skills

Methods
Many of the Hendon techniques require a great deal of forward thinking, methods may seem cumbersome, but once learned it's the forward planning that provides the benefit rather than the methods themselves.

Concentration
According to Smith, concentration is both an attitude and a skill. High degrees of concentration call for a certain discipline or mental attitude.

Smith continues to state that it is the leakage of these Hendon ideas into UK driving culture that helps to keep road deaths and fatalities at one of the lowest levels in the world.

ATTITUDE AND LEARNING: NEGATIVE EFFECTS ON THE NUMBER OF ROAD DEATHS

Individual responsibility

According to the Safer Roads Campaign, Smith states that "*Whenever restrictions are placed on drivers, individual responsibility is eroded.*" The problem being that people associate accidents with speed, for instance "it wasn't his fault, he wasn't exceeding the speed limit". Smith believes that accidents are to do with far more sophisticated judgements and actions than just keeping within the speed limits. Blame tends to be focused on those who set the speed limits.

This creates a population of drivers who believe sticking to the speed limit is their main responsibility, and according to Smith, this is not satisfactory as responsibilities are more complex than this.

[10] http://www.safespeed.org.uk/roadsafety.html

Smith makes reference to a famous Dutch experiment called “Shared Space”, where road signs and markings were removed, forcing drivers to think about how to deal with junctions and other road users. Increasing individual responsibility this way resulted in more cautious driving which in turn reduced accident rates[11]. The experiment was adopted in a town called Drachten in 2007, and found that casualties at one junction dropped from 36 over the previous four years to just 2 in the two years following the experiment.[12]

Modern road safety policy is underpinned by the notion that the ideal is traffic at zero mph, with no accidents and more regulation, and it is clear that Smith does not agree, in fact he states that “more regulation will erode responsibility and attitudes, making us more like the Belgians.”

Belgium

Taking note of Smith’s statement with regards to Belgium, looking at Figure 1, it appears that Belgium has twice the number of road deaths per 100,000 than the GB. In Section 2, Belgium was used as one of the best examples of speeding enforcement in the EU due to its increase in the number of speed cameras. With good enforcement it would make sense for road deaths to be low, which for Belgium is not the case. According to Smith, if people feel over regulated, they react out against it. For instance, with increased automated control and fewer police patrols, drivers may be more likely to think that the chance of being caught is greatly reduced. This may be because people believe that for one to get caught on camera, the car must be traceable, therefore by not registering the car you can evade any form of speeding prosecution, which in turn encourages illegal behaviour.

For example, in Section 2 Table 1 (Mean speeds and speed limit violations on rural roads), Belgium has the highest percentages of speed violations on rural roads at 58%. In fact the mean speed travelled on rural roads (74.6 km/h) exceeds the speed limit set (70 km/h).

Speed

According to research by Corbett and Simon, Stradling, the AA,
RAC and the Midlands Road Safety Partnership study of driver attitudes to speed[13]:

- Many drivers considering themselves as law-abiding often choose a speed well over the limit. This can be supported by official enforcement thresholds, for example, 68mph would be ACPO's recommended enforcement threshold for the 60mph limit. Drivers can remain well within this threshold and still bring great risk to themselves and others.
- Drivers speed for the thrill and as a form of 'self-expression'. Speeders tend to be high mileage drivers with powerful cars and are mainly men, especially young men. Many of these use driving to test and challenge themselves (encouraged by car advertising, the motoring media and vehicle design).
- Drivers tend to have a false perception of their ability. They are unlikely to think road safety campaigns are targeted at them. They think drink and drug driving is a much greater road safety problem than speed.

[11] http://www.safespeed.org.uk/roadsafety.html

[12] http://onthecommons.org/content.php?id=1998
[13] http://www.slower-speeds.org.uk/files/slowerspeeds/killer%20roads%20or%20killer%20speed%20limits.pdf

ENFORCEMENT AND ATTITUDES TO SEAT BELT WEARING

How people perceive the importance of wearing seat belts would have a huge impact on road fatalities. If they are not considered fundamental to saving lives in an accident, then they are less likely to be worn.

Looking at Figure 1 a number of the Central European (CE) countries (Poland, Slovenia, Czech Republic and Hungary) have some of the highest values for road deaths per 100,000. One of the reasons for this could be due to their attitude to wearing seatbelts.

According to the project Social Attitudes to Road Traffic Risk in Europe (SARTRE) investigating the Attitudes and behaviour of European car drivers to road safety[14]:

In Poland:

- only 37% of cars have fitted belts on both seats,
- present legislation states: obligation to wear belts for both seats, if belts fitted
- 6% of drivers have been fined for not wearing belts in the last three years,
- results showed that wearing rates for Polish drivers were the highest of all CE countries but,
- most Polish drivers (90%) believed that belts reduce serious injury, but 36% of them agreed that seat belts are not necessary when driving carefully.

In Slovenia:

- more than half of the vehicles have seat belts fitted in all seats,
- present legislation state: obligation to wear belts in all seats if fitted,
- almost one driver out of five (18%) has been fined or punished for not wearing seat belts,
- Slovenian drivers wear safety belts more often than the average wearing rates of all CE countries
- more than a half of drivers (64%) feel less comfortable when not wearing belts but also more than half (66%) think there is a risk of being trapped by belts.

In the Czech Republic:

- almost half of the vehicles (46%) have seat belts fitted in all seats,
- present legislation system: obligation to wear belts for both seats
- 8% of drivers have been fined for not wearing belts in the last three years,
- most of Czech drivers do not always wear their seat belts (percentage of drivers wearing belts is lower than the average percentage of drivers in CE countries
- the percentage of people considering seat belts of no use is the highest (35%),
- 35% of drivers think that seat belts are not, or at least less, necessary when driving carefully, but 86% of respondents believe that seat belts reduce risk of injury.

In Hungary:

- only half of the vehicles (48%) are equipped with front and rear belts,
- present legislation system: mandatory wearing for both seats except rear seats
- 7% of drivers have been fined for not wearing belts in the last three years,
- results showed that wearing rates for Hungarian drivers were higher than average rates
- many drivers (82%) believe that seat belts reduce the risk of serious injury,
- half of the Hungarian drivers (51%) think there is a risk of being trapped by seat belts.

YOUNG AND INEXPERIENCED DRIVERS

[14] SARFRE, Attitudes and behaviour to Road Traffic Risk in Europe

Looking at the data in terms of the age groups of fatalities, Northern Ireland, Great Britain and the Republic of Ireland have the highest number of deaths in the 16- 24 year old age group. This is different to the rest of the countries shown in Table 5 where the highest numbers of deaths occur in the 25 to 64 year old age bracket.

Many reasons can be attributed to the large number of fatalities among young drivers in NI, GB and ROI, according to the road safety charity Brake[15], some of the main factors are:

Speed - Young drivers are more likely to seek thrill from driving fast and cornering at high speed than older drivers[16]. Sticking to the speed limit can be too fast in the wrong conditions - such as in ice or snow, or on bendy country roads - but young drivers, particularly male drivers, may be reluctant to drive under the speed limit for fear of 'losing face' in front of friends.

Alcohol - Government statistics show that male drivers under 25 have the highest incidence of failing a breath test after being involved in a road crash. In 2004, 5.7% of male 20-24 year-old drivers and 4.2% of male 17-19 year-old drivers involved in injury crashes failed breath-tests.[17]

Carrying passengers - Research shows that peer pressure can encourage bad driving and result in drivers 'showing off' to their passengers. However this can result in the death or injury of the driver, passengers or other road users.

The presence of young passengers, together with the distraction of conversation can be distracting to inexperienced drivers.

US research has shown that the already high crash rate for 16-19-year-olds driving alone is greatly increased when passengers are present. The more passengers, the more risk. With two or more passengers, the fatal crash risk for 16-19 year-old drivers is more than five times what it is when driving alone[18].

Driving at night- Young drivers may be under the impression that because roads are quieter at night it is safer for them to speed or pay less attention to the road. At night they are more likely to be under the influence of drugs and alcohol. Driver tiredness is also most common at night.

Seat belts - Young drivers and passengers are more influenced by the idea that it is 'not cool' to wear a seatbelt, especially if other people in the car are not wearing theirs. Research in the United Sates has showed seatbelt use decreases among young drivers when increasing numbers of passengers are present and is lowest with passengers aged 20-29 years old. Of fatalities, only one-third of young drivers and one-fifth of young passengers were restrained.[19]

According to Brake, research shows that younger drivers also take more risks due to a lack of experience and poor attitudes. It is these combined risks that make younger drivers much more of a danger on roads. Young driver are likely to:[20]

Be over-confident
Young people may quickly pick up the physical skills of driving and, as a result, feel they have mastered it and quickly gain confidence about their driving ability. This means young drivers may drive unsafely, but think that they are actually in control.

[15] http://www.brake.org.uk/
[16] Young Driver Attitudes, S. Stradling, M. Meadows (DfT, 2001)
[17] Table 2f, Road Casualties Great Britain 2004 (DfT, 2005)
[18] Doherty, S.T.; Andrey, J.C.; and MacGregor, C. 1998. The situational risks of young drivers: the influence of passengers, time of day, and day of week on accident rates.
[19] MCCarrt AT & Northrup VS (2004) Factors relating to seat belt use among fatally injured teenage drivers.
[20] Brake, *Young drivers: the hard facts* http://www.brake.org.uk/facts/young-drivers-the-hard-facts

Feel they are invincible
Many young people admit they often feel they are immortal and that they think crashes only happen to other people.

Assess risks poorly
There are some situations where the risks are not immediately obvious. It often takes experience to notice these hidden risks and due to inexperience, young people may be poor at assessing these risks. US research has shown inexperience to be a significant contributing factor to crash risk, particularly in relation to errors in attention, visual awareness, speed relative to conditions, hazard recognition and emergency manoeuvres.[21]

Take risks
Young people tend to take more risks than older people. Younger drivers are sometimes unaware of how devastating the consequences of taking risks can be. For example, research has shown that young drivers are less likely than older drivers to cite speeding as a major cause of crashes, and when asked to rank a number of driving situations in order of risk, young drivers ranked speeding significantly lower in risk than older drivers did.[22] It has also been suggested that one of the reasons young drivers attach less importance to the risk of speeding is they are overconfident in their control and recovery skills.[23]

Be overloaded mentally
Any new task takes a great deal of concentration and driving in particular takes continuous concentration. Driving is a new experience for young people and they tend to use most of their mental energy on the immediate tasks such as gear changing, rather than general observation of the potential hazards. If there is a sudden need to avoid a situation, young people may be less able to deal with it due to their mental energy being focused on other tasks.

WHAT CAN BE DONE?

Recognising the importance of addressing the issues surrounding young and inexperienced drivers, Belgium has tightened their laws for novice drivers[24], which in turn may have helped in keeping the number of young fatalities between the age of 16 – 24 considerably lower compared to GB and NI (see Table 5).

In NI, proposals have been outlined by the Environment Minister which will begin consultation later this year[25]. The proposals are as follows:

- Minimum mandatory learning periods
- Limiting the number of passengers novices can carry
- Changing the speed limit for new drivers – drivers are restricted to 45mph for their first 12 months driving. Concerns are that this limit prevents them being trained or getting experience of driving at higher speeds
- Introduce a **Graduated Driver Licensing** (GDL) to replace the current 'R' scheme. Graduated Driver Licensing (GDL) allows new drivers to build up their driving skills and experience gradually. The basic principles according to Brake are[26]:

[21] McKnight AJ & McKnight AS (2003) Young novice drivers: careless or clueless?
[22] Jonah, B. A. (1986). Accident risk and risk taking behaviour among younger drivers
[23] Brown, I. D. (1982). Exposure and experience are a confounded nuisance in research on driver behaviour
[24] ETSC, Managing Speed: Towards Safe and Sustainable Road Transport
[25] Belfast Telegraph, New drivers may face curfew in bid to cut deaths (05/01/10)
[26] http://www.brake.org.uk/facts/graduated-licensing

Stage 1-learner (displaying red 'L' plates)	Drivers hold a learner's licence for at least 12 months before taking the practical, theory and hazard awareness test. The license is not valid until the learner has > 10 hours professional tuition with dual controls. Minimum age for accompanying drivers to be raised to 25 yrs. Accompanying drivers must be approved by completing a questionnaire to assess their suitability (checked by their insurer)
Stage 2-novice/provisional (displaying green 'N' or 'P' plates)	Drivers hold this license for at least 2 years after passing the practical test. Allowed to drive unsupervised, but restrictions include: - 40mph and not allowed on motorways - Restricted to a certain engine size - Carrying of passengers under 21 must be supervised. Novice parent drivers carrying their children should be exempt. - Not to drive between 11pm and 6am, unless supervised. - Low drink drive limit of BAC 0.01 Any failure to comply results in automatic disqualification rather than points on the license. **After 1 year, novice drivers are required to take a further 10 hours professional tuition for driving on motorways and at night.**
Stage 3-full licence	Can apply for this after holding a novice licence for 2 years Required to pass a second test to ensure their level of safe driving is consistent on all roads.

Although the exact requirements can vary slightly, GDL already exists in many countries such as: New Zealand, California and New South Wales in Australia (for more information see Graduated Driver Licensing - A Review of Some of the Current Systems, (TRL Report 529, 2001))