



Department of the
Environment
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Northern Ireland Seat Belt Survey April 2008: Wearing Rates in Cars

July 2008



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Technical Notes

1. Any statements in this report regarding differences between groups, such as males and females are statistically significant at the 5% significance level. This significance level is the criteria for judging whether differences between groups might have arisen by chance. The most common criteria is the 5% level, i.e. the probability being one in twenty that a difference might have arisen by chance.
2. The percentages quoted in this report are quoted to the nearest whole number. As a result, not all percentages may add to 100 due to this rounding.
3. The wearing rates quoted include seatbelt and child restraint where applicable.

Notation

4. The following symbols are used:-

No responses in category	- cell is empty
Value of category is less than 0.5%	- cell is 0%

Note: a) For categories with a cell total less than 100, counts are shown instead of percentages. All counts are shown in square brackets.

Background to the Survey

This is the nineteenth in a series of Seatbelt Surveys. The series, which began in 1994, had been conducted biannually, in April and October. However, since April 1997 the survey has been conducted on an annual basis in April of each year, with the exception of 2001 when a survey was carried out in both April and October.

Data for this report were collected from 15 sites throughout Northern Ireland, consisting of 6 rural, 3 motorway and 6 urban locations.

Fieldwork involved observing stationary traffic and recording details such as gender, estimated age and whether a restraint was being used for any car occupants. Recording took place in eight half hour sessions between 08:30 and 17:00 on Tuesday 22nd and Saturday 26th April 2008. In total 16,487 cars were observed and details of 25,240 occupants recorded, of which 16,487 were drivers, 5,900 were front seat passengers and 2,853 were back seat passengers. A more detailed breakdown of base numbers can be found in Appendix 1. Please note that in some tables there are small numbers of car occupants and caution should therefore be used when looking at the results.

Summary

Overall restraint wearing rates in 2008

Ninety-five percent of car occupants observed used a restraint. Ninety-six percent of drivers and ninety-five percent of front seat passengers wore a restraint, so too did ninety-one percent of back seat passengers (see tables 3-6).

Restraint wearing rates by type of site in 2008

Ninety-six percent of drivers on urban and rural roads were restrained. Ninety-seven percent of drivers at motorway sites were restrained. Front seat passengers observed wearing rate was 95% on urban roads and motorway sites, and 96% on rural roads. Back seat passengers observed wearing rates varied from 95% on rural roads to 92% on urban roads and 82% on motorways (see tables 7-9).

Restraint wearing rates by gender in 2008

Ninety-eight percent of female and 95% of male drivers were restrained. With regard to front seat passengers, 97% of females and 92% of males were restrained (see tables 10-11).

Adult restraint wearing rates in 2008

Ninety-seven percent of drivers aged 60+, and 96% of drivers aged 17 – 29 and 30 - 59 were restrained (see table 13).

Child restraint wearing rates in 2008

Seven percent of children aged 10-13, and 6% of those aged 5-9 were unrestrained when travelling in the back of a car (see table 15).

Wearing rates by whether driver is restrained 2008

When the driver wore a seatbelt, the wearing rate of front seat passengers was 96%. When the driver was not wearing a seatbelt, three fifths (60%) of front seat passengers were restrained (See table 19).

Mobile phone usage in 2008

This is the sixth Northern Ireland Seatbelt Survey that has observed the use of mobile phones by drivers. One percent of drivers were using a mobile phone (0.7% were using a hand-held phone and 0.3% were using a hands-free phone) (see tables 24-28).

Survey trends

Wearing rates overall have improved since 1994. Driver wearing rates have increased from 88% to 96%, while front seat wearing rates have increased from 88% to 95%. Back seat wearing rates have increased fairly consistently from 52% in 1994 to a high of 91% in 2008 (See table 1 and figures 6-7).

Comparison with Great Britain

According to the latest GB figures available (2007) the wearing rates were 94% for drivers, 94% for front seat passengers and 85% for back seat passengers. This last figure has risen considerably from 63% in April 1997. The 2008 Great Britain Seatbelt Survey will be carried out in Autumn 2008 (See figures 6-9).

**Table 1: Summary of Key Results from NI Seatbelt Surveys
1994 – 2008**

	1994	1995	1996	1997	1998	1999	2000	Apr-01	Oct-01	Apr-02	Apr-03	Apr-04	Apr-05	Apr-06	Apr-07	Apr-08
% of car occupants wearing seatbelts																
Driver	88	85	85	85	87	86	87	86	88	90	90	91	93	93	95	96
Front Seat	88	86	85	86	88	86	87	86	89	89	89	90	92	93	95	95
Back Seat	52	50	51	56	61	62	65	67	71	72	75	77	81	85	90	91
Of which:																
Under 1 year	96	96	97	95	96	93	97	98	97	95	97	98	98	96	98	99
1-4 years	70	65	72	78	78	78	82	86	86	85	87	88	92	96	96	96
5-9 years	50	49	50	54	61	62	68	65	73	71	75	77	82	84	90	94
10-13 years	47	47	47	51	58	65	65	68	70	72	75	78	82	86	92	93
Overall																
Wearing Rate %	82	80	80	81	84	83	84	84	87	88	88	89	91	93	95	95
Occupancy Rate																
Front Seat Passengers	0.41	0.39	0.4	0.4	0.38	0.38	0.38	0.37	0.38	0.36	0.37	0.37	0.36	0.35	0.37	0.36
Back Seat Passengers	0.27	0.24	0.24	0.23	0.21	0.2	0.21	0.2	0.18	0.17	0.17	0.16	0.15	0.15	0.17	0.17

Main Findings

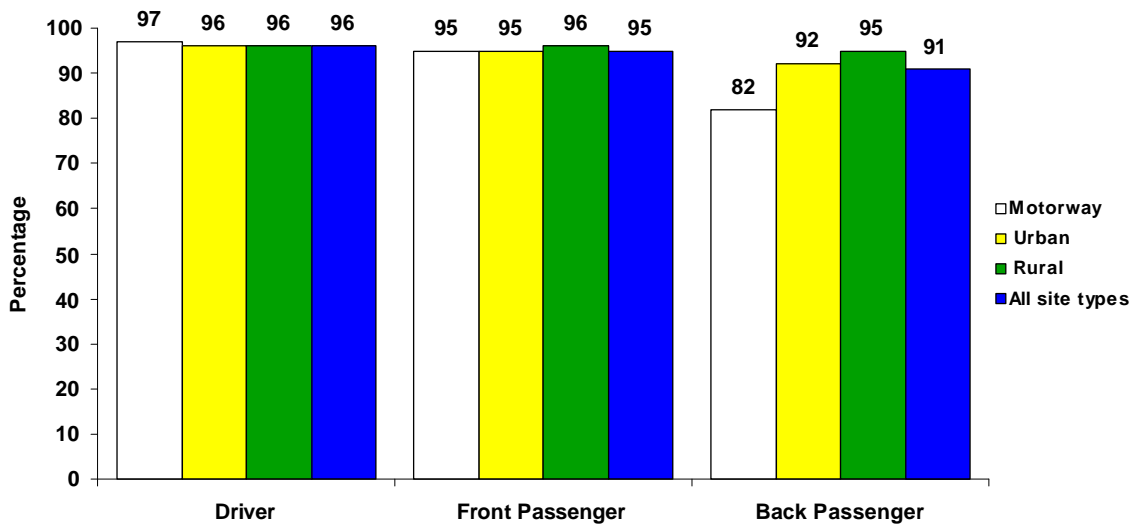
Occupancy rates 2008

Thirty-six percent of all vehicles contained front seat passengers. In addition there was an average of 17 back seat passengers per 100 cars (see table 2).

Wearing rate by type of site 2008

A similar proportion of drivers and front seat passengers are likely to wear a restraint, irrespective of the type of road they were travelling on. Back seat passengers were least likely to be restrained when travelling on motorways (see figure 1).

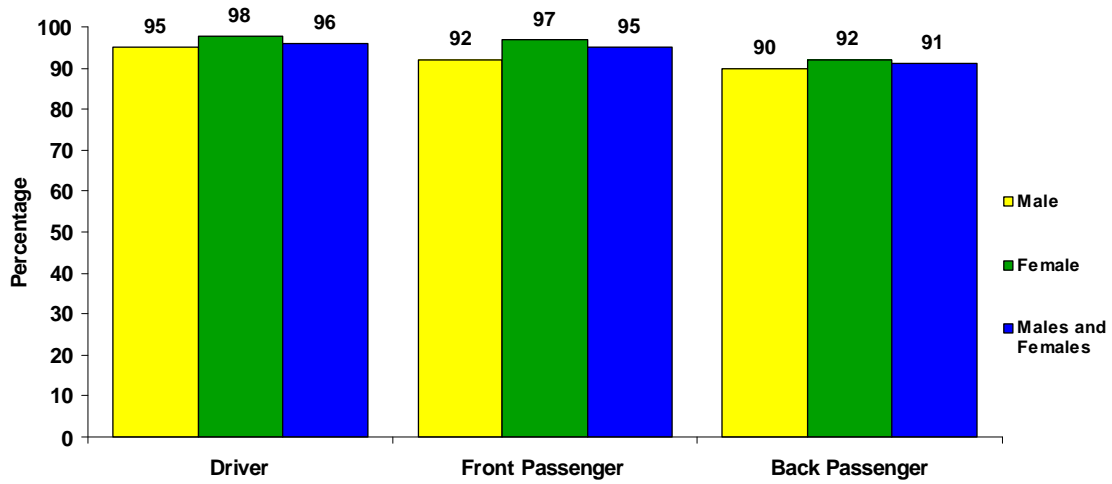
Figure 1: 2008 wearing rate of drivers, front seat passengers, and back seat passengers by type of site.



Wearing rate by gender 2008

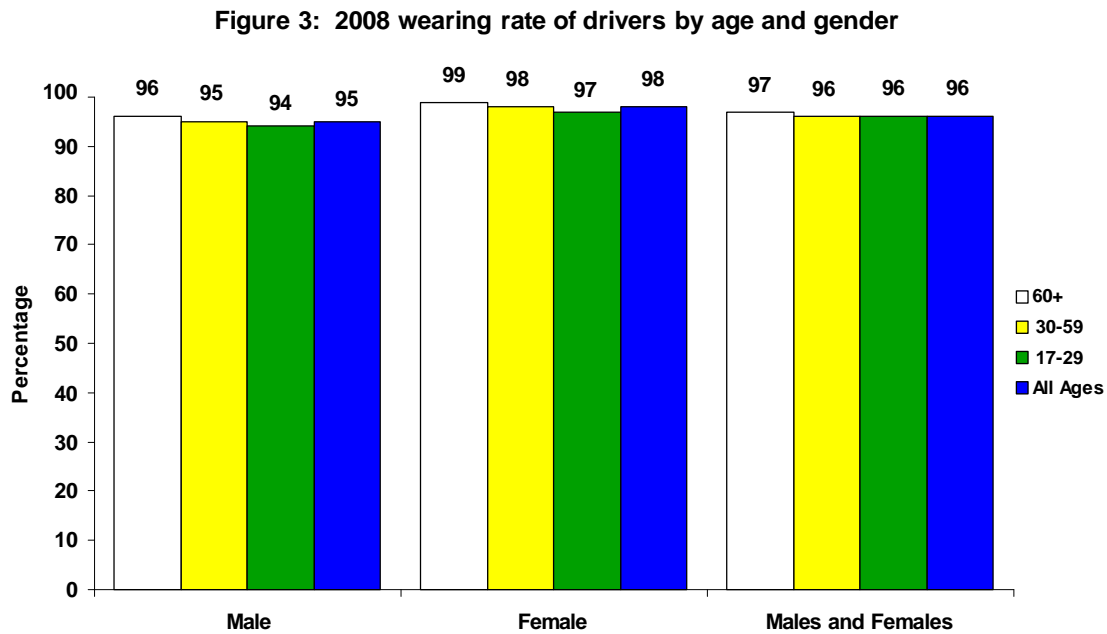
Back seat passenger wearing rates are similar, irrespective of gender. Female drivers and front seat passengers are more likely to be restrained than their male counterparts (see figure 2).

Figure 2: 2008 wearing rate of drivers, front seat passengers, and back seat passengers by gender



Driver wearing rate by age 2008

In adult age groups, restraint wearing rates are similar, irrespective of age of driver (see figure 3).



Front and back seat passenger wearing rates by age 2008

While wearing rates for adult front seat passengers were similar to those observed for child front seat passengers, adult back seat passengers were less likely to wear a restraint than child back seat passengers (see figures 4 and 5).

Figure 4: 2008 wearing rate of front seat passengers and back seat passengers by age

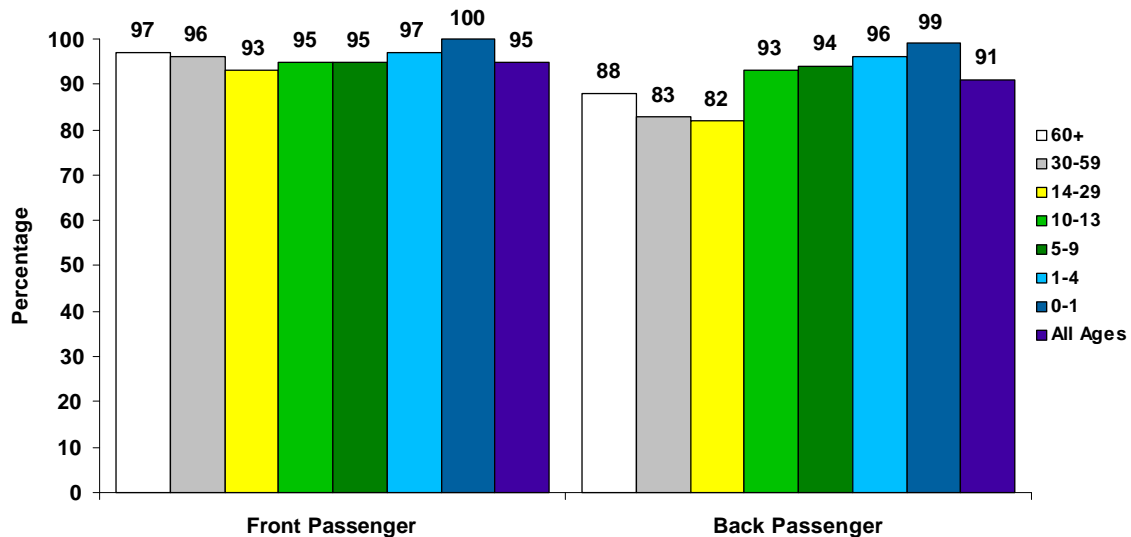
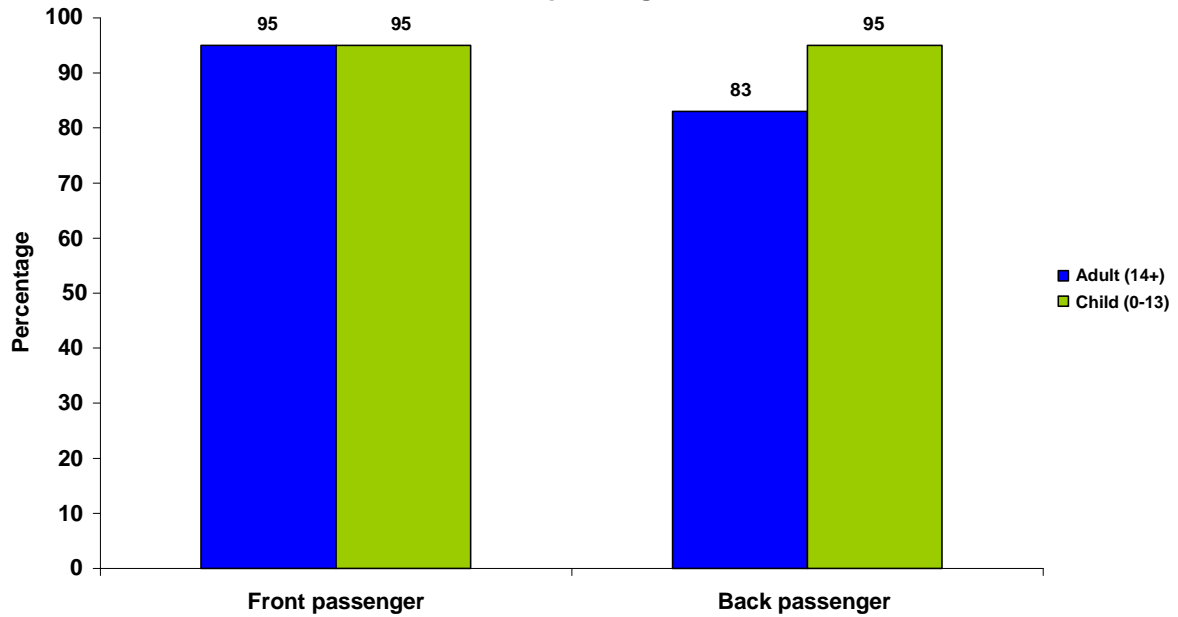


Figure 5: 2008 wearing rate of adult (14+) and child (0-13) front and back seat passengers



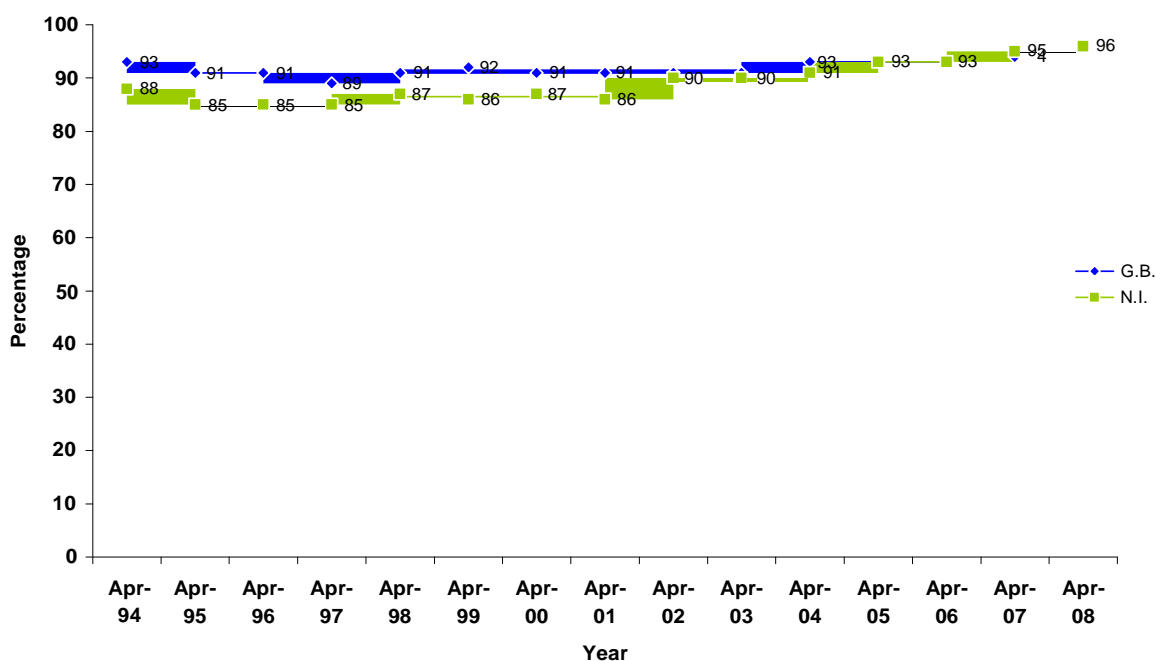
The effect of driver wearing rates on passenger wearing rates 2008

When drivers were restrained, 96% of front seat passengers and 92% of back seat passengers were also restrained. When drivers were unrestrained, 60% of front seat passengers were restrained (see tables 19 and 20).

NI and GB seatbelt wearing rates

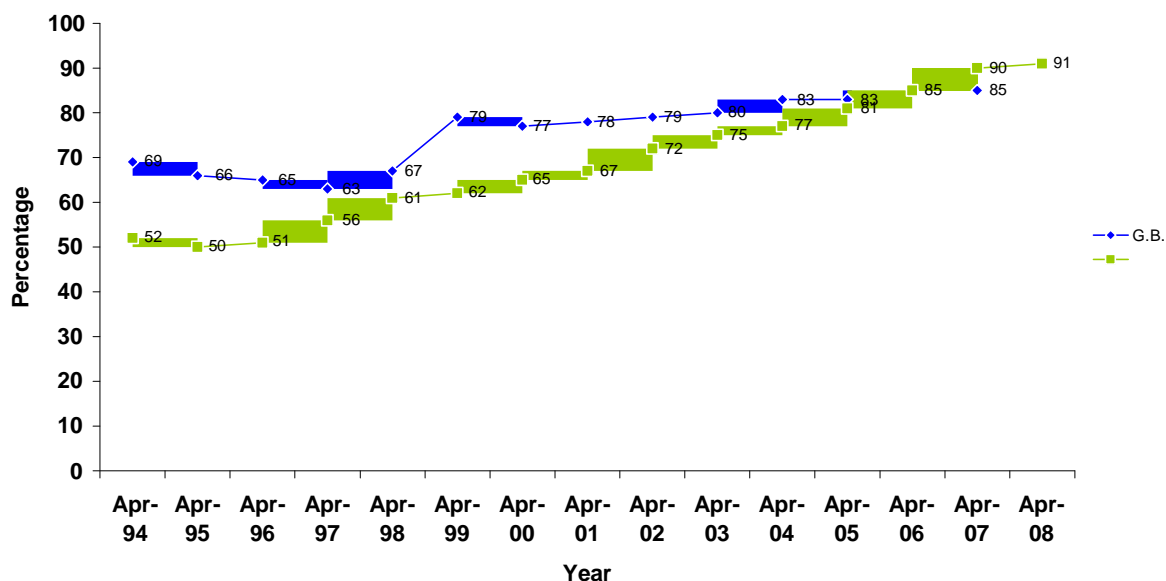
Figures 6-9 show a comparison of driver and passenger restraint wearing rates over the last 14 years for Northern Ireland and Great Britain. In Great Britain the observed wearing rate was 94% for drivers, 94% for front seat passengers and 85% for back seat passengers in 2007 (latest figures available), compared to Northern Ireland figures of 96%, 95% and 91% respectively in April 2008.

Figure 6: Comparison of Driver Wearing Rates between Northern Ireland and Great Britain from April 1994 to April 2008



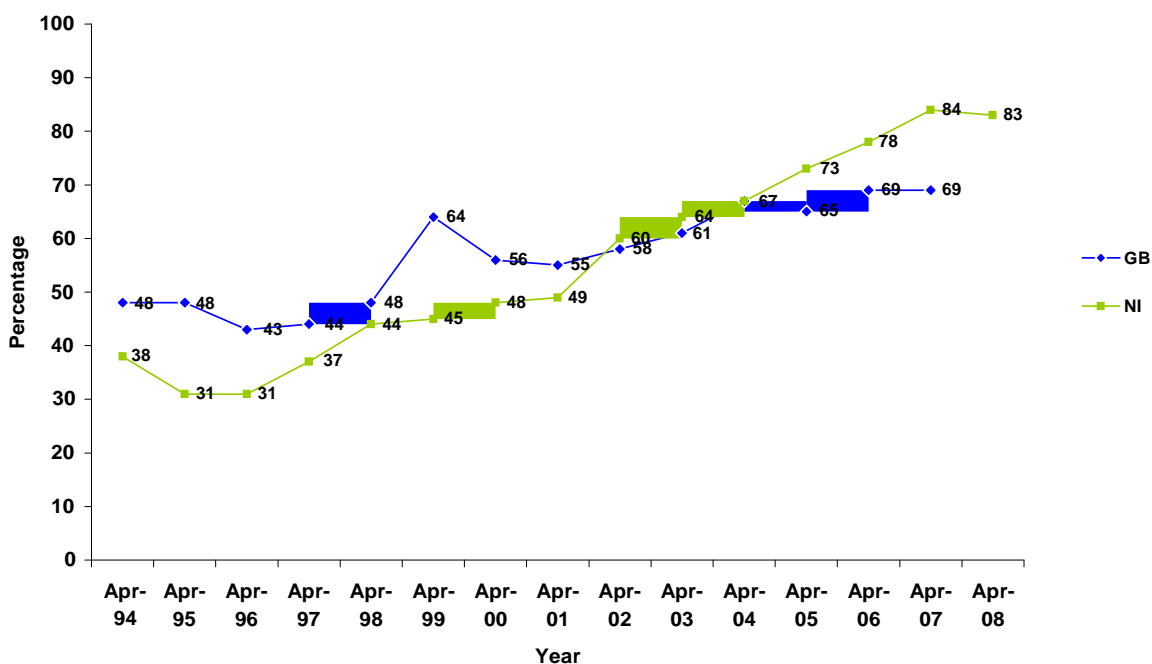
In Northern Ireland back seat passenger wearing rates have risen to 91% continuing a steady rise from 50% in April 1995 (see figure 7).

Figure 7: Comparison of Back Seat Passenger Wearing Rates between Northern Ireland and Great Britain from April 1994 to April 2008



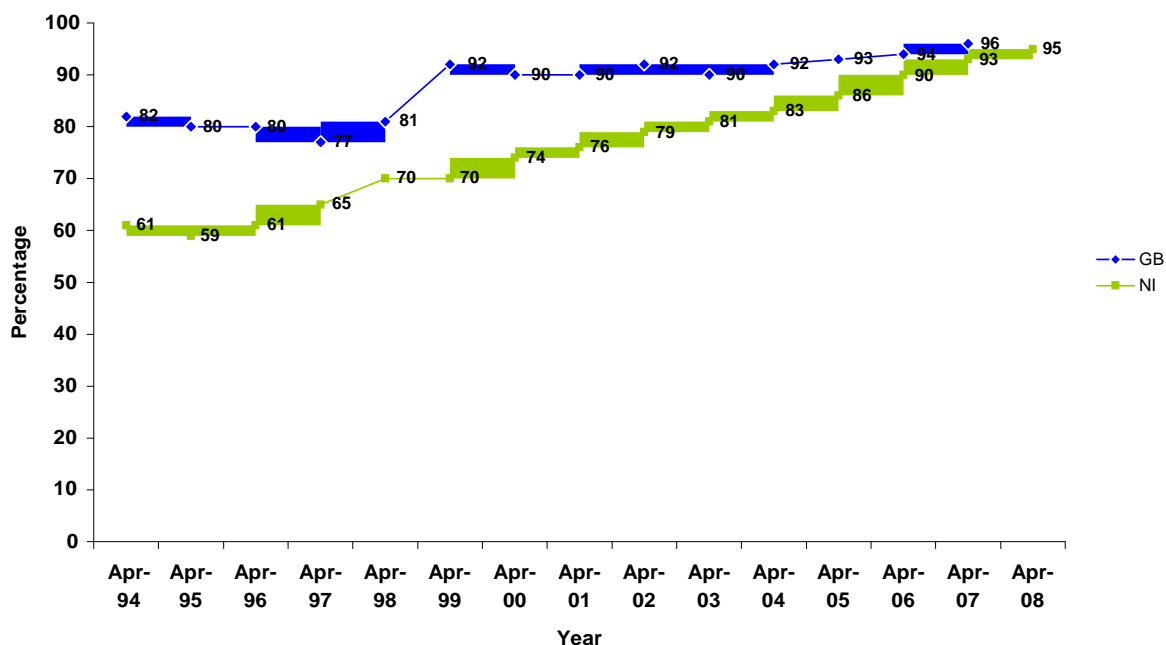
Adult back seat passenger wearing rates in NI have more than doubled since 1994, having reached 83% in April 2008. Since April 2005, the wearing rate has been higher than that observed in GB (see figure 8).

Figure 8: Comparison of adult (14+) back seat passenger wearing rates between Northern Ireland and Great Britain



The percentage of back seat passengers wearing seatbelts has consistently been higher for child passengers than adult passengers, and has risen from 61% (1994) to 95% in 2008 (see figure 9).

Figure 9: Comparison of child (0-13) back seat passenger wearing rates between NI and GB



NI and GB mobile phone use in cars

In Great Britain eleven Seatbelt Surveys have observed the use of mobile phones to date, however in Northern Ireland this is only the sixth. One and a half percent of car drivers in Great Britain were using a mobile phone in 2007 (1.0% hand-held and 0.5% hands-free). In Northern Ireland, 1.0% of drivers were observed using a mobile phone in April 2008 (0.7% hand-held and 0.3% hands-free).

Appendix 1: Detailed tables

Occupancy rates of cars 2008

Table 2: Occupancy rates of cars

<i>All cars</i> <i>Base = 100%</i>	Position of Passengers		Number of cars observed
	Front Seat	Back Seat	
	%	%	
Occupancy Rate	36	17	16,487

Overall wearing rates 2008

Table 3: Wearing rate (%) of drivers

<i>All drivers</i> <i>Base = 100%</i>	Type of restraint worn by driver			Number of drivers
	Seat Belt used	Seat Belt unused	Not fitted	
	%	%	%	
Wearing rate	96	4	0	16,487

Table 4: Wearing rate (%) of all front seat passengers

<i>All front seat passengers</i> <i>Base = 100%</i>	Restraint usage				Number of front seat passengers
	Seat Belt used	Child restraint used	Seat Belt unused	Not fitted	
	%	%	%	%	
Wearing rate	94	1	4	0	5,900

Table 5: Wearing rate (%) of all back seat passengers

<i>All back seat passengers</i> <i>Base = 100%</i>	Type of restraint worn				Number of back seat passengers
	Seat Belt used	Child restraint	Restraint unused	Not fitted	
	%	%	%	%	
Wearing Rate	56	35	9	0	2,853

Table 6: Wearing rate (%) of all car occupants

<i>All occupants</i> <i>Base = 100%</i>	Type of restraint worn				Number of occupants
	Seat Belt used	Child restraint used	Restraint unused	Not fitted	
	%	%	%	%	
Wearing Rate	91	4	4	0	25,240

Wearing rates by type of site 2008

Table 7: Wearing rate (%) of drivers by type of site

<i>All drivers</i> <i>Base = 100%</i>	Type of restraint worn by driver			Number of drivers
	Seat Belt used	Seat Belt unused	Not fitted	
	%	%	%	
Motorway	97	3	0	3,195
Urban	96	4	0	6,673
Rural	96	3	0	6,619
All site types	96	4	0	16,487

Table 8: Wearing rate (%) of all front seat passengers by type of site

<i>All front seat passengers</i> <i>Base = 100%</i>	Restraint usage				Number of front seat passengers
	Seat Belt used	Child restraint used	Seat Belt unused	Not fitted	
	%	%	%	%	
Motorway	94	1	5	0	1,172
Urban	94	1	5	0	2,348
Rural	94	2	4	0	2,380
All site types	94	1	4	0	5,900

Table 9: Wearing rate (%) of all back seat passengers by type of site

<i>All back seat passengers</i> <i>Base = 100%</i>	Type of restraint worn				Number of back seat passengers
	Seat Belt used	Child restraint used	Restraint unused	Not fitted	
	%	%	%	%	
Motorway	53	29	18	0	542
Urban	59	33	8	0	1,233
Rural	54	40	5	0	1,078
All site types	56	35	9	0	2,853

Wearing rates by gender 2008

Table 10: Wearing rate (%) of drivers by gender

<i>All drivers</i> <i>Base = 100%</i>	Type of restraint worn by driver			
	Seat Belt used	Seat Belt unused	Not fitted	Number of drivers
	%	%	%	
Male	95	5	0	9,646
Female	98	2	0	6,841
All drivers	96	4	0	16,487

Table 11: Wearing rate (%) of all front seat passengers by gender

<i>All front seat passengers</i> <i>Base = 100%</i>	Type of restraint worn				Number of front seat passengers
	Seat Belt used	Child restraint used	Restraint unused	Not fitted	
	%	%	%	%	
Male	90	2	7	0	1,834
Female	96	1	3	0	4,066
All front seat passengers	94	1	4	0	5,900

Table 12: Wearing rate (%) of all back seat passengers by gender

<i>All back seat passengers Base = 100%</i>	Type of restraint worn				Number of back seat passengers
	Seat Belt used	Child restraint used	Restraint unused	Not fitted	
	%	%	%	%	
Male	55	35	10	0	1,316
Female	57	36	8	0	1,537
All back seat passengers	56	35	9	0	2,853

Wearing rates by age 2008

Table 13: Wearing rate (%) of drivers by age

<i>All drivers Base = 100%</i>	Type of restraint worn by driver			Number of drivers
	Seat Belt used	Seat Belt unused	Not fitted	
	%	%	%	
60+	97	3	0	2,491
30-59	96	4	0	9,275
17-29	96	4	0	4,721
All ages	96	4	0	16,487

Table 14: Wearing rate (%) of all front seat passengers by age

<i>All front seat passengers Base = 100%</i>	Type of restraint worn				Number of front seat passengers
	Seat Belt used	Child restraint used	Restraint unused	Not fitted	
	%	%	%	%	
60+	97		3		1,139
30-59	96		4	0	2,379
14-29	93		7	0	1,755
10-13	94	1	5		329
5-9	81	14	5		244
1-4	[8]	[22]	[1]		31
Under 1		[23]			23
All ages	94	1	4	0	5,900

Table 15: Wearing rate (%) of all back seat passengers by age

<i>All back seat passengers</i> <i>Base = 10%</i>	Type of restraint worn				Number of back seat passengers
	Seat Belt used	Child restraint used	Restraint unused	Not fitted	
	%	%	%	%	
60+	88		12		144
30-59	83		17	0	248
14-29	82		18	0	502
10-13	89	4	7		420
5-9	55	39	6		776
1-4	9	87	4		585
Under 1		99	1		178
All ages	56	35	9	0	2,853

Wearing rates by age and gender 2008

Table 16: Wearing rate (%) of drivers by age and gender

<i>All drivers</i> <i>Base = 100%</i>		Type of restraint worn			Number of drivers
		Seat Belt used	Restraint unused	Not fitted	
		%	%	%	
60+	Male	96	4	0	1,820
	Female	99	1		671
30 to 59	Male	95	5	0	5,717
	Female	98	2	0	3,558
17 to 29	Male	94	5	0	2,109
	Female	97	3	0	2,612
All Male drivers		95	5	0	9,646
All Female drivers		98	2	0	6,841

Table 17: Wearing rate (%) of all front seat passengers by age and gender

<i>All front seat passengers</i> <i>Base = 100%</i>		Type of restraint worn				Number of front seat passengers
		Seat Belt used %	Child restraint used %	Restraint unused %	Not fitted %	
60+	Male	97		3		210
	Female	97		3		929
30 to 59	Male	93		7	0	617
	Female	98		2	0	1,762
14 to 29	Male	90		10	0	668
	Female	95		4	1	1,087
10 to 13	Male	92	1	7		179
	Female	97	1	3		150
5 to 9	Male	80	15	5		141
	Female	82	14	5		103
1 to 4	Male	[4]	[7]			11
	Female	[4]	[15]	[1]		20
Under 1	Male		[8]			8
	Female		[15]			15
All Male front seat passengers		90	2	7	0	1,834
All Female front seat passengers		96	1	3	0	4,066

Table 18: Wearing rate (%) of all back seat passengers by age and gender

<i>All back seat passengers</i> <i>Base = 100%</i>		Type of restrain worn				Number of back seat passengers
		Seat Belt used	Child restraint used	Restraint unused	Not fitted	
		%	%	%	%	
60+	Male	[32]		[4]		36
	Female	88		12		108
30 to 59	Male	[67]		[21]	[1]	89
	Female	87		13		159
14 to 29	Male	77		23		237
	Female	87		13	0	265
10 to 13	Male	90	3	7		214
	Female	88	5	7		206
5 to 9	Male	55	38	7		404
	Female	55	40	5		372
1 to 4	Male	11	85	4		258
	Female	7	88	5		327
Under 1	Male		[78]			78
	Female		99	1		100
All Male back seat passengers		55	35	10	0	1,316
All Female back seat passengers		57	36	8	0	1,537

Wearing rates by whether driver is restrained 2008

Table 19: Wearing rate (%) of all front seat passengers by wearing rate (%) of drivers

<i>All front seat passengers</i> <i>Base = 100%</i>		Front seat passenger restrained		Number of front seat passengers
		Yes	No	
		%	%	
Whether driver restrained	Yes	96	4	5,759
	No	60	40	141
	All drivers	95	5	5,900

Table 20: Wearing rate (%) of all back seat passengers by wearing rate (%) of drivers

<i>All back seat passengers</i> <i>Base = 100%</i>		Back seat passenger restrained		Number of back seat passengers
		Yes	No	
		%	%	
Whether driver restrained	Yes	92	8	2,774
	No	[49]	[30]	79
	All drivers	91	9	2,853

Driver wearing rates by number of occupants in car 2008

Table 21: Wearing rate (%) of drivers by number of occupants in car

<i>All drivers</i> <i>Base = 100%</i>	Type of restraint worn by driver			
	Seat Belt used	Seat Belt unused	Not fitted	Number of drivers
	%	%	%	
Driver only	95	5	0	10,040
Driver + 1 passenger	98	2	0	4,825
Driver + 2 passengers	97	3		1,086
Driver + 3 passengers	98	2		401
Driver + 4 or more passengers	96	4		135
All drivers	96	4	0	16,487

Table 22: Wearing rate (%) of all drivers by gender and number of occupants in car

<i>All drivers - by gender</i> <i>Base = 100%</i>		Type of restraint worn by driver			Number of drivers
		Seat Belt used	Seat Belt unused	Not fitted	
		%	%	%	
Driver only	Male	94	6	0	5,669
	Female	98	2	0	4,371
Driver + 1 passenger	Male	97	3	0	2,995
	Female	99	1	0	1,830
Driver + 2 passengers	Male	97	3		618
	Female	97	3		468
Driver + 3 passengers	Male	99	1		270
	Female	97	3		131
Driver + 4 or more passengers	Male	[90]	[4]		94
	Female	[39]	[2]		41
All Male drivers		95	5	0	9,646
All Female drivers		98	2	0	6,841

Table 23: Percentage of cars with occupants restrained by the number of occupants in the car

<i>All drivers</i> <i>Base = 100%</i>	Number of restrained occupants						Number of drivers
	0	1	2	3	4	5+	
	%	%	%	%	%	%	
Driver only	5	95					10,040
Driver + 1 passenger	1	5	94				4,825
Driver + 2 passengers	1	2	12	85			1,086
Driver + 3 passengers		1	3	8	88		401
Driver + 4 or more passengers	1	1	6	4	7	80	135
All drivers	3	60	28	6	2	1	16,487

Mobile phones usage 2008

Table 24: Proportion of drivers (%) observed using a mobile phone

<i>All drivers</i> <i>Base = 100%</i>	Type of phone			
	Hand-held	Hands-free	Neither	Number of drivers
	%	%	%	
Proportion of drivers	.7	.3	99	16,487

Table 25: Proportion of drivers (%) observed using a mobile phone by age

<i>All drivers</i> <i>Base = 100%</i>	Type of phone			
	Hand-held	Hands-free	Neither	Number of drivers
	%	%	%	
60+	.2	.1	99.8	2,491
30-59	.6	.3	99.1	9,275
17-29	1.1	.4	98.5	4,721
All ages	.7	.3	99.0	16,487

Table 26: Proportion of drivers (%) observed using a mobile phone by type of site

<i>All drivers</i> <i>Base = 100%</i>	Type of phone			
	Hand-held	Hands-free	Neither	Number of drivers
	%	%	%	
Motorway	.8	.3	98.8	3,195
Urban	.7	.3	99.0	6,673
Rural	.6	.2	99.1	6,619
All site types	.7	.3	99.0	16,487

Table 27: Proportion of drivers (%) observed using a mobile phone by gender

<i>All drivers</i> <i>Base = 100%</i>	Type of phone			
	Hand-held	Hands-free	Neither	
	%	%	%	Number of drivers
Male	.7	.3	99.0	9,646
Female	.6	.2	99.2	6,841
All drivers	.7	.3	99.0	16,487

Table 28: Proportion of drivers (%) observed using a mobile phone by age and gender

<i>All driver- by gender</i> <i>Base = 100%</i>		Type of phone			
		Hand-held	Hands-free	Neither	
		%	%	%	Number of drivers
60+	Male	.2	.1	99.7	1,820
	Female	.1		99.9	671
30 to 59	Male	.6	.3	99.1	5,717
	Female	.5	.3	99.2	3,558
17 to 29	Male	1.4	.5	98.1	2,109
	Female	.8	.3	98.9	2,612
All Male drivers		.7	.3	99.0	9,646
All Female drivers		.6	.2	99.2	6,841

Appendix 2

Number of cars observed by time of session and site

Day: Tuesday

Base = 100%	Time								Number of cars recorded
	08.30	09.30	10.30	11.30	14.00	15.00	16.00	17.00	
M1 at Broadway	41	70	71	66	68	68	81	7	538
M2 at Duncrue	87	78	81	80	79	77	80	7	641
M1 at Black s Road	12	18	38	37	53	53	52	7	340
Antrim Rd/D gall Park Ave	55	54	46	47	59	72	77	7	487
Knock Dual Carriageway	80	77	75	73	77	71	76	7	607
Saintfield Road	84	81	80	75	85	82	83	8	652
Derriaghv	74	73	65	71	73	79	77	7	590
Strand Rd, L derry	41	40	41	40	48	43	41	5	346
Anne St, Enniskillen	78	80	76	72	80	76	81	7	621
Milltown Rd/Shaw s Bridge	80	73	79	78	84	76	82	8	632
Banbridge	82	53	37	48	45	48	46	7	433
Hillhead Rd, Ballyclare	83	81	64	63	69	63	63	8	570
Ballysallagh Rd, Bangor	52	44	34	48	42	53	55	6	388
A505 Cookstown to Omagh	85	76	75	77	68	79	75	7	612
Carrickfergus/Greenisland	83	70	76	78	79	72	77	7	611
All sites	1,017	968	938	953	1,009	1,012	1,046	1,125	8,068

Day: Saturday

Base = 100%	Time								Number of cars recorded
	08.30	09.30	10.30	11.30	14.00	15.00	16.00	17.00	
M1 at Broadway	80	79	76	72	78	78	88	83	634
M2 at Duncrue	83	87	80	81	88	87	85	86	677
M1 at Black s Road	23	34	45	53	39	55	55	61	365
Antrim Rd/D gall Park Ave	48	52	57	68	49	59	57	58	448
Knock Dual Carriageway	85	87	85	82	83	86	86	90	684
Saintfield Road	79	84	88	86	88	87	86	89	687
Derriaghv	72	75	76	80	80	79	81	78	621
Strand Rd, L derry	31	31	37	29	53	37	39	27	284
Anne St, Enniskillen	82	75	78	84	84	81	80	82	646
Milltown Rd/Shaw s Bridge	81	81	87	85	86	85	86	85	676
Banbridge	54	60	64	64	67	66	60	77	512
Hillhead Rd, Ballyclare	77	77	49	86	86	77	79	83	614
Ballysallagh Rd, Bangor	25	39	35	49	53	65	45	48	359
A505 Cookstown to Omagh	76	83	81	79	84	82	82	82	649
Carrickfergus/Greenisland	73	69	73	66	80	64	74	64	563
All sites	969	1,013	1,011	1,064	1,098	1,088	1,083	1,093	8,419