



Department of the
Environment
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Northern Ireland Seat Belt Survey April 2009: Wearing Rates in Cars

July 2009



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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 observations in category	- cell is empty
Value of category is less than 0.5%	- cell is 0%

5. 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 twentieth 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 21st and Saturday 25th April 2009. In total 16,871 cars were observed and details of 25,811 occupants recorded.

Summary

Overall restraint wearing rates in 2009

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

Restraint wearing rates by type of site in 2009

Ninety-six percent of drivers on urban roads and ninety-seven percent of drivers on rural roads were restrained. Ninety-eight percent of drivers at motorway sites were restrained. Front seat passengers observed wearing rate was 95% on rural roads and motorway sites, and 97% on urban roads. Back seat passengers observed wearing rates varied from 94% on rural roads to 91% on motorways (see tables 7-9).

Restraint wearing rates by gender in 2009

Ninety-eight percent of female and 96% of male drivers were restrained. With regard to front seat passengers, 97% of females and 93% of males were restrained (see tables 10-11).

Adult restraint wearing rates in 2009

The wearing rate of drivers was the same across the three adult groups, ninety-seven percent of drivers aged 60+, aged 17 – 29 and aged 30 - 59 were restrained (see table 13).

Child restraint wearing rates in 2009

Four percent of children aged 10-13, and 5% of those aged 5-9 and aged 1-4 were unrestrained when travelling in the back of a car (see table 15).

Wearing rates by whether driver is restrained 2009

When the driver wore a seatbelt, the wearing rate of front seat passengers was 96%. When the driver was not wearing a seatbelt, over three fifths (64%) of front seat passengers were restrained (See table 19).

Mobile phone usage in 2009

This is the seventh Northern Ireland Seatbelt Survey that has observed the use of mobile phones by drivers. Just over one percent (1.1%) of drivers were using a mobile phone (0.8% 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 97%, while front seat wearing rates have increased from 88% to 96%. Back seat wearing rates have increased fairly consistently from 52% in 1994 to a high of 93% in 2009 (See table 1 and figures 6-7).

Comparison with Great Britain

According to the latest GB figures available (2008) the wearing rates were 95% for drivers, 96% for front seat passengers and 88% for back seat passengers. This last figure has risen considerably from 63% in April 1997. The 2009 Great Britain Seatbelt Survey will be carried out in October 2009 (See figures 6-9).

**Table 1: Summary of Key Results from NI Seatbelt Surveys
1994 – 2009**

	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	Apr-09
% of car occupants wearing seatbelts																	
Driver	88	85	85	85	87	86	87	86	88	90	90	91	93	93	95	96	97
Front Seat	88	86	85	86	88	86	87	86	89	89	89	90	92	93	95	95	96
Back Seat	52	50	51	56	61	62	65	67	71	72	75	77	81	85	90	91	93
Of which:																	
Under 1 year	96	96	97	95	96	93	97	98	97	95	97	98	98	96	98	99	98
1-4 years	70	65	72	78	78	78	82	86	86	85	87	88	92	96	96	96	95
5-9 years	50	49	50	54	61	62	68	65	73	71	75	77	82	84	90	94	95
10-13 years	47	47	47	51	58	65	65	68	70	72	75	78	82	86	92	93	96
Overall																	
Wearing Rate %	82	80	80	81	84	83	84	84	87	88	88	89	91	93	95	95	96
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	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	0.17

Main Findings

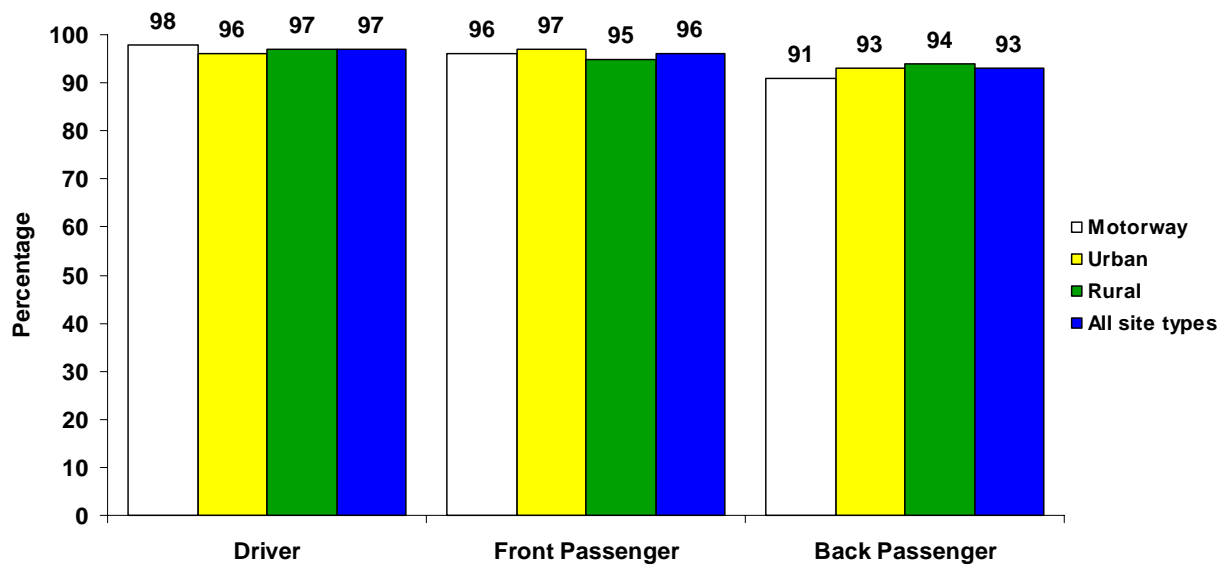
Occupancy rates 2009

Thirty-six percent of all vehicles contained front seat passengers. In addition there was an average of 0.17 back seat passengers per vehicle observed (see table 2).

Wearing rate by type of site 2009

Irrespective of type of road, back seat passengers are less likely to be restrained than drivers (see figure 1).

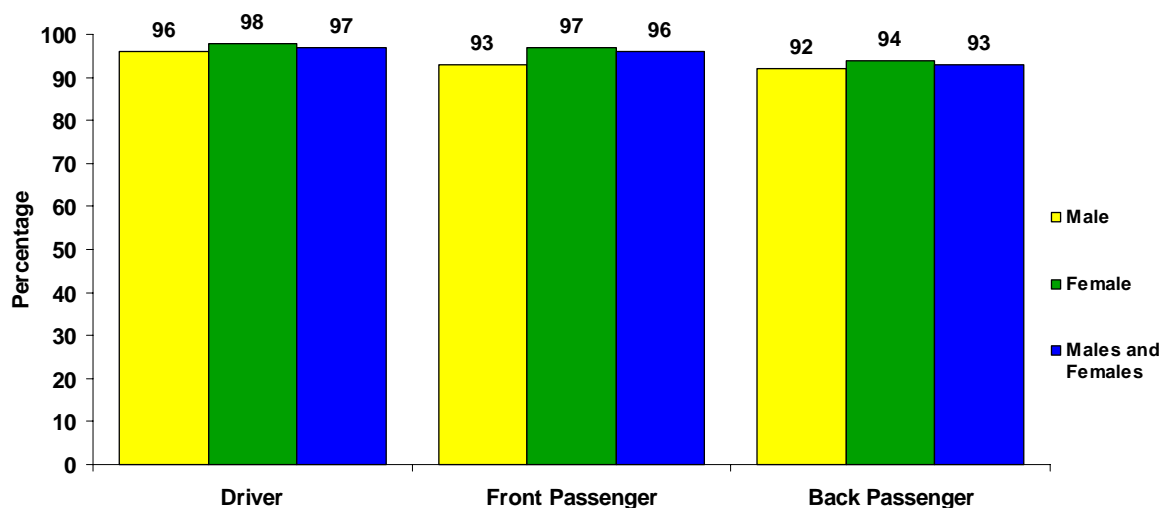
Figure 1: 2009 wearing rate of drivers, front seat passengers, and back seat passengers by type of site.



Wearing rate by gender 2009

Female drivers, female front seat passengers and female back seat passengers observed were more likely than their male counterparts to be restrained (see figure 2).

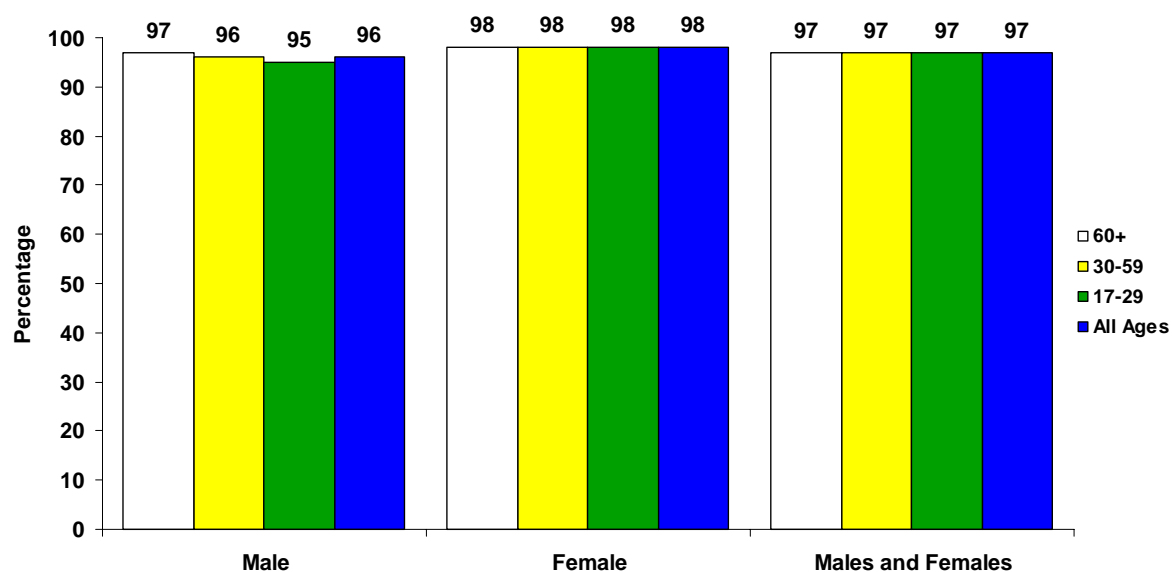
Figure 2: 2009 wearing rate of drivers, front seat passengers, and back seat passengers by gender



Driver wearing rate by age 2009

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

Figure 3: 2009 wearing rate of drivers by age and gender



Front and back seat passenger wearing rates by age 2009

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 (87%) to wear a restraint than child back seat passengers (96%) (see figures 4 and 5).

Figure 4: 2009 wearing rate of front seat passengers and back seat passengers by age

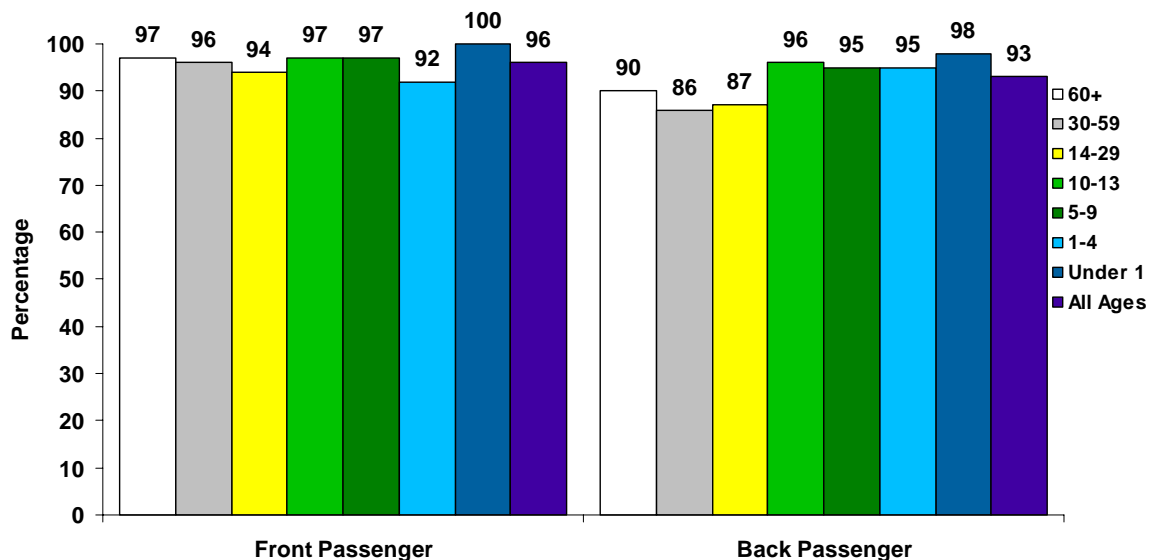
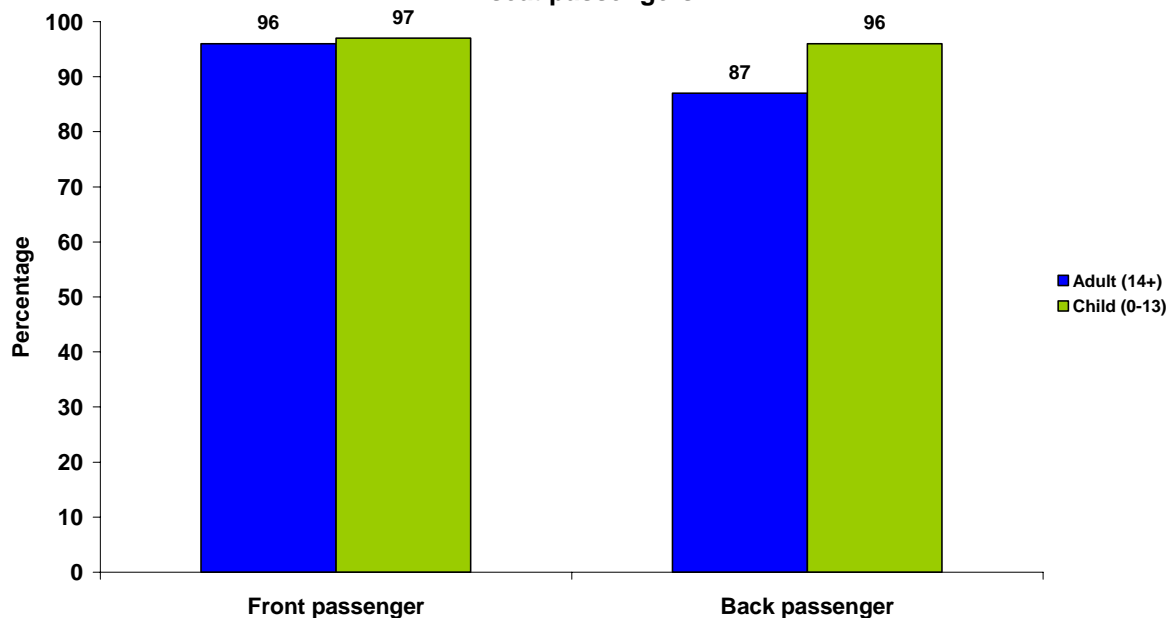


Figure 5: 2009 wearing rate of adult (14+) and child (0-13) front and back seat passengers



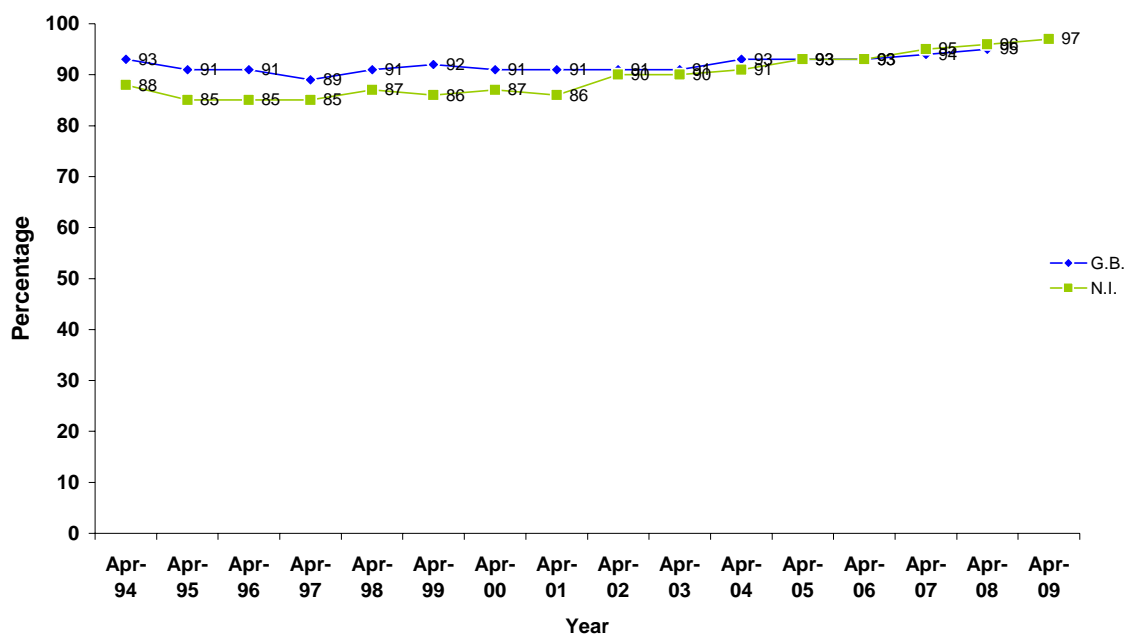
The effect of driver wearing rates on passenger wearing rates 2009

When drivers were restrained, 96% of front seat passengers and 94% of back seat passengers were also restrained. When drivers were unrestrained, 64% of front seat passengers were restrained (see tables 19 and 20).

NI and GB seatbelt wearing rates

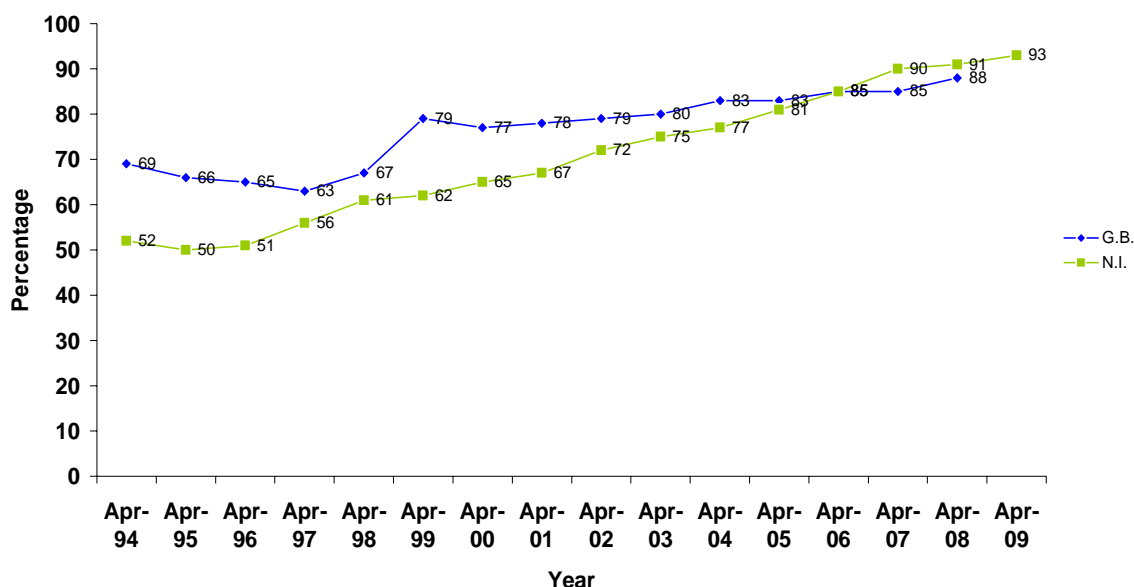
Figures 6-9 show a comparison of driver and passenger restraint wearing rates for Northern Ireland and Great Britain. In Great Britain the observed wearing rate was 95% for drivers, 96% for front seat passengers and 88% for back seat passengers in 2008 (latest figures available). The corresponding figures for Northern Ireland (in April 2009) were 97%, 96% and 93% respectively.

Figure 6: Comparison of Driver Wearing Rates between Northern Ireland and Great Britain from April 1994 to April 2009



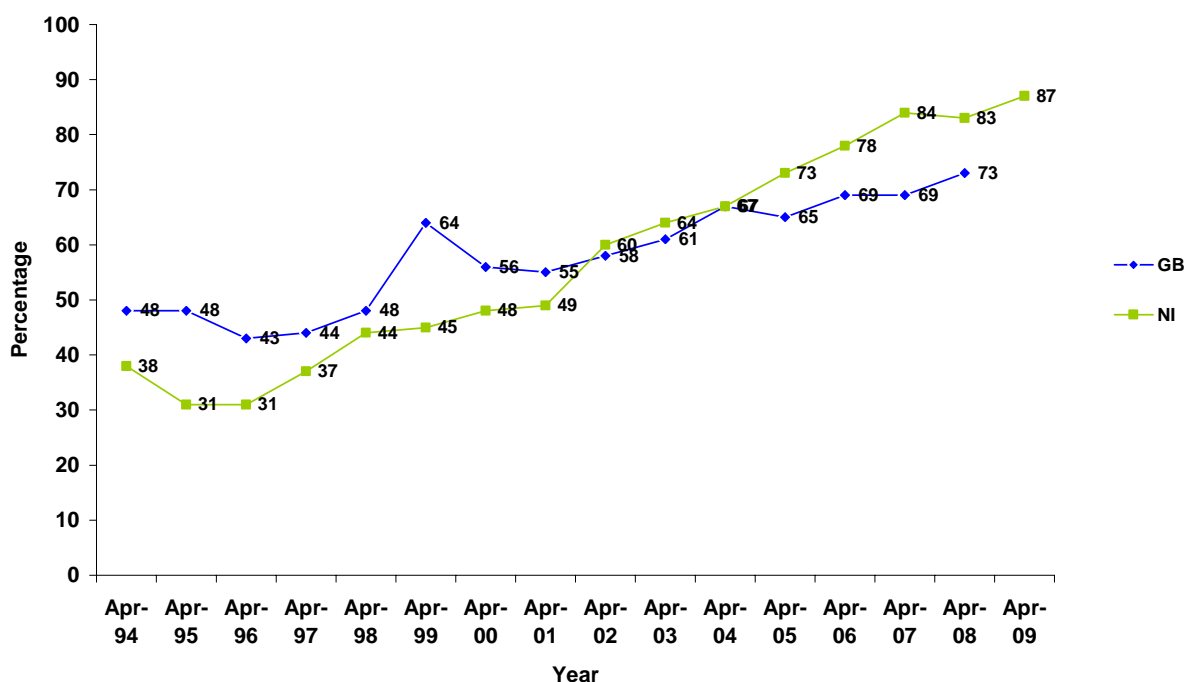
In Northern Ireland back seat passenger wearing rates have risen to 93% continuing a steady rise from around 51% in the early years of the survey (see figure 7).

Figure 7: Comparison of Back Seat Passenger Wearing Rates between Northern Ireland and Great Britain from April 1994 to April 2009



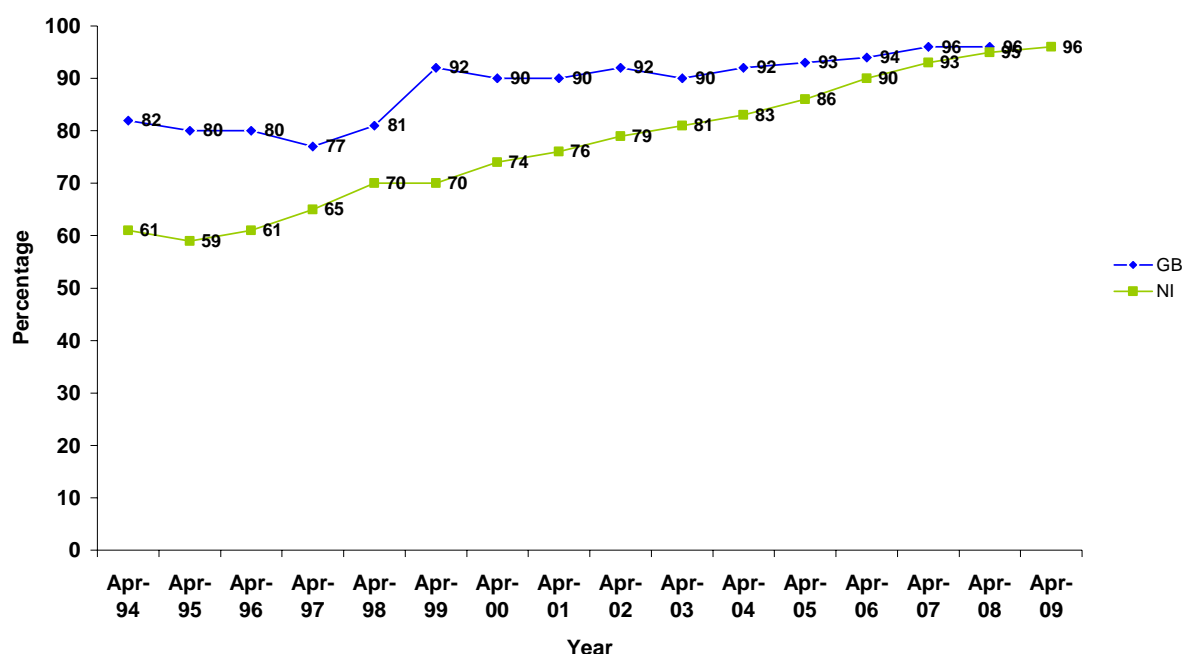
Adult back seat passenger wearing rates in NI have more than doubled since 1994, having reached 87% in April 2009. Since April 2005, the wearing rate in NI has been higher than that observed in GB (see figure 8).

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 around 60% in the early years of the survey to 96% in 2009 (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 twelve Seatbelt Surveys have observed the use of mobile phones to date, however in Northern Ireland this is only the seventh. One and a half percent of car drivers in Great Britain were observed using a mobile phone in 2008 (1.1% hand-held and 0.5% hands-free). In Northern Ireland, 1.1% of drivers were observed using a mobile phone in April 2009 (0.8% hand-held and 0.3% hands-free).

Appendix 1: Detailed tables

Occupancy rates of cars 2009

Table 2: Occupancy rates of cars

<i>All cars</i> <i>Base = 100%</i>	Position of Passengers		Number of cars observed
	Front	Back Seat	
	%	%	
Occupancy rate	36	17	16,871

Overall wearing rates 2009

Table 3: Wearing rate (%) of drivers

<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
	%	%	%	
Wearing rate	97	3	0	16,871

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

<i>All front seat passengers</i> <i>Base = 100%</i>	Restraint usage				
	Seat Belt used	Child restraint used	Seat Belt unused	Not fitted	Number of front seat passengers
	%	%	%	%	
Wearing rate	94	2	4	0	6,121

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

<i>All back seat passengers</i> <i>Base = 100%</i>	Type of restraint worn				
	Seat Belt used	Child restraint	Restraint unused	Not fitted	Number of back seat passengers
	%	%	%	%	
Wearing rate	58	36	7		2,819

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

<i>All occupants</i> <i>Base = 100%</i>	Type of restraint worn				
	Seat Belt used	Child restraint used	Restraint unused	Not fitted	
	%	%	%	%	Number of occupants
Wearing rate	92	4	4	0	25,811

Wearing rates by type of site 2009

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

<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
Motorwa	98	2	0	3,412
Urba	96	4	0	6,689
Rura	97	3	0	6,770
All site types	97	3	0	16,871

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				
	Seat Belt used	Child restraint used	Seat Belt unused	Not fitted	
	%	%	%	%	Number of front seat passengers
Motorwa	95	1	4	0	1,231
Urba	95	2	3		2,448
Rura	93	2	5	0	2,442
All site types	94	2	4	0	6,121

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				
	Seat Belt used	Child restraint used	Restraint unused	Not fitted	
	%	%	%	%	Number of back seat passengers
Motorwa	58	33	9		469
Urba	59	34	7		1,304
Rura	56	39	6		1,046
All site types	58	36	7		2,819

Wearing rates by gender 2009

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	96	4	0	9,804
Female	98	2	0	7,067
All drivers	97	3	0	16,871

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				
	Seat Belt used	Child restraint used	Restraint unused	Not fitted	
	%	%	%	%	Number of front seat passengers
Male	91	2	7	0	1,938
Female	95	1	3	0	4,183
All front seat passengers	94	2	4	0	6,121

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

<i>All back seat passengers</i> <i>Base = 100%</i>	Type of restraint worn				
	Seat Belt used	Child restraint used	Restraint unused	Not fitted	
	%	%	%	%	Number of back seat passengers
Male	55	37	8		1,219
Female	60	34	6		1,600
All back seat passengers	58	36	7		2,819

Wearing rates by age 2009

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

<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
60+	97	3	0	2,557
30-59	97	3	0	9,006
17-29	97	3	0	5,308
All drivers	97	3	0	16,871

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

<i>All front seat passengers</i> <i>Base = 100%</i>	Type of restraint worn				
	Seat Belt used	Child restraint used	Restraint unused	Not fitted	
	%	%	%	%	Number of front seat passengers
60+	97		3		1,164
30-59	96		4	0	2,296
14-29	94		5	0	1,958
10-13	97	0	3		345
5-9	85	12	3		277
1-4	[19]	[29]	[4]		52
Under 1	[1]	[28]			29
All front seat passengers	94	2	4	0	6,121

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

<i>All back seat passengers</i> <i>Base = 100%</i>	Type of restraint worn				
	Seat Belt used	Child restraint used	Restraint unused	Not fitted	
	%	%	%	%	Number of back seat passengers
60+	90		10		156
30-59	86		14		219
14-29	86	0	13		461
10-13	91	4	4		408
5-9	61	35	5		753
1-4	11	85	5		644
Under 1		98	2		178
All back seat passengers	58	36	7		2,819

Wearing rates by age and gender 2009

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

<i>All drivers</i> <i>Base = 100%</i>		Type of restraint worn			
		Seat Belt used	Restraint	Not fitted	
		%	%	%	Number of drivers
60+	Male	97	3	0	1,889
	Female	98	2		668
30 to 59	Male	96	4	0	5,514
	Female	98	2		3,492
17 to 29	Male	95	4	0	2,401
	Female	98	2	0	2,907
All Male drivers		96	4	0	9,804
All Female drivers		98	2	0	7,067

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 used	Restraint unused	Not fitted	
		%	%	%	%	
60+	Male	93		7		227
	Female	97		3		937
30 to 59	Male	93		7	0	639
	Female	97		3		1,657
14 to 29	Male	92		8	0	699
	Female	96		4	0	1,259
10 to 13	Male	97	1	2		184
	Female	96		4		161
5 to 9	Male	88	8	3		153
	Female	81	16	3		124
1 to 4	Male	[10]	[12]	[3]		25
	Female	[9]	[17]	[1]		27
Under 1	Male		[11]			11
	Female	[1]	[17]			18
All Male front seat passengers		91	2	7	0	1,938
All Female front seat passengers		95	1	3	0	4,183

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

All back seat passengers Base = 100%		Type of restrain worn				Number of back seat passengers
		Seat Belt used	Child restraint used	Restraint unused	Not fitted	
		%	%	%	%	
60+	Male	[29]		[3]		32
	Female	90		10		124
30 to 59	Male	[63]		[10]		73
	Female	86		14		146
14 to 29	Male	84	0	16		210
	Female	88	0	12		251
10 to 13	Male	91	4	5		192
	Female	92	4	4		216
5 to 9	Male	57	36	7		348
	Female	64	33	3		405
1 to 4	Male	10	86	5		299
	Female	12	84	4		345
Under 1	Male		[65]			65
	Female		97	3		113
All male back seat		55	37	8		1,219
All female back seat		60	34	6		1,600

Wearing rates by whether driver is restrained 2009

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

All front seat passengers Base = 100%		Front seat passenger restrained		Number of front passengers
		Yes	No	
		%	%	
Whether driver restrained	Yes	96	4	5,973
	No	64	36	148
All drivers with a front seat passenger		96	4	6,121

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	94	6	2,778
	No	[24]	[17]	41
All drivers with a back seat passenger		93	7	2,819

Driver wearing rates by number of occupants in car 2009

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	96	4	0	10,146
Driver + 1 passenger	97	2	0	5,127
Driver + 2 passengers	98	2		1,081
Driver + 3 passengers	99	1		415
Driver + 4 or more passengers	98	2		102
All drivers	97	3	0	16,871

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

All drivers Base = 100%		Type of restraint worn by driver			Number of drivers
		Seat Belt used	Seat Belt unuse	Not fitted	
		%	%	%	
Driver only	Male	95	5	0	5,612
	Female	98	2	0	4,534
Driver + 1 passenger	Male	97	3	0	3,227
	Female	98	2	0	1,900
Driver + 2 passengers	Male	98	2		615
	Female	99	1		466
Driver + 3 passengers	Male	99	1		280
	Female	100			135
Driver + 4 or more passengers	Male	[68]	[2]		70
	Female	[32]			32
All male drivers		96	4	0	9,804
All female drivers		98	2	0	7,067

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

All cars Base = 100%	Percentage of restrained occupants						Number of cars
	0	1	2	3	4	5+	
	%	%	%	%	%	%	
Driver only	4	96					10,146
Driver + 1 passenger	1	5	94				5,127
Driver + 2 passengers	1	1	9	89			1,081
Driver + 3 passengers	0	1	3	7	89		415
Driver + 4 or more passengers	1	2	7	1	10	79	102
All cars	3	60	29	6	2	0	16,871

Mobile phones usage 2009

Table 24: Percentage of drivers observed using a mobile phone

<i>All drivers</i> <i>Base = 100%</i>	Type of			
	Hand-held	Hands-free	Neither	
	%	%	%	Number of drivers
All drivers	<i>0.8</i>	<i>0.3</i>	<i>98.9</i>	<i>16,871</i>

Table 25: Percentage of drivers observed using a mobile phone by age

<i>All drivers</i> <i>Base = 100%</i>	Type of			
	Hand-held	Hands-free	Neither	
	%	%	%	Number of drivers
60+	<i>0.2</i>	<i>0.2</i>	<i>99.6</i>	<i>2,557</i>
30-59	<i>0.6</i>	<i>0.3</i>	<i>99.1</i>	<i>9,006</i>
17-29	<i>1.5</i>	<i>0.2</i>	<i>98.3</i>	<i>5,308</i>
All drivers	<i>0.8</i>	<i>0.3</i>	<i>98.9</i>	<i>16,871</i>

Table 26: Percentage of drivers observed using a mobile phone by type of site

<i>All drivers</i> <i>Base = 100%</i>	Type of			
	Hand-held	Hands-free	Neither	
	%	%	%	Number of drivers
Motorwa	<i>1.1</i>	<i>.2</i>	<i>98.7</i>	<i>3,412</i>
Urba	<i>0.7</i>	<i>0.3</i>	<i>99.0</i>	<i>6,689</i>
Rura	<i>0.8</i>	<i>0.2</i>	<i>99.0</i>	<i>6,770</i>
All site types	<i>0.8</i>	<i>0.3</i>	<i>98.9</i>	<i>16,871</i>

Table 27: Percentage of drivers observed using a mobile phone by gender

<i>All drivers</i> <i>Base = 100%</i>	Type of			
	Hand-held	Hands-free	Neither	
	%	%	%	Number of drivers
Male	<i>0.9</i>	<i>0.3</i>	<i>98.8</i>	<i>9,804</i>
Female	<i>0.7</i>	<i>0.2</i>	<i>99.1</i>	<i>7,067</i>
All drivers	<i>0.8</i>	<i>0.3</i>	<i>98.9</i>	<i>16,871</i>

Table 28: Percentage of drivers observed using a mobile phone by age and gender

All drivers Base = 100%		Type of			
		Hand-held	Hands-free	Neither	
		%	%	%	Number of drivers
60+	Male	0.2	0.3	99.6	1,889
	Female	0.1		99.9	668
30 to 59	Male	0.7	0.4	98.9	5,514
	Female	0.5	0.2	99.3	3,492
17 to 29	Male	1.9	0.2	97.8	2,401
	Female	1.1	0.2	98.7	2,907
All male drivers		0.9	0.3	98.8	9,804
All female drivers		0.7	0.2	99.1	7,067

Appendix 2

Number of cars observed by time of session and site

Day: Tuesday

All cars Base = 100%	Tim								Number of cars observed
	08.30	09.30	10.30	11.30	14.00	15.00	16.00	17.00	
M1 at	80	65	64	63	71	66	76	80	565
M2 at	84	82	77	72	81	81	75	85	637
M1 at Black s Road	24	40	42	54	57	76	80	70	443
Antrim Rd/D gall Park Ave	65	75	60	44	67	57	64	72	504
Knock Dual Carriageway	79	75	72	78	80	76	78	74	612
Saintfield Road	79	75	75	74	82	85	88	78	636
Derriagh	76	69	71	69	76	78	75	80	594
Strand Rd, L derry	65	54	36	43	47	43	49	45	382
Anne St, Enniskillen	77	78	82	82	78	78	82	75	632
Milltown Rd/Shaw s Bridge	79	81	75	79	79	74	75	79	621
Banbridge	79	51	49	43	48	49	61	79	459
Hillhead Rd, Ballyclare	78	67	64	74	73	60	80	79	575
Ballysallagh Rd, Bangor	61	41	26	40	37	43	45	50	343
A505 Cookstown to Omagh	76	74	78	79	73	77	78	78	613
Carrickfergus/Greenisland	90	81	76	78	82	86	80	80	653
All sites	1092	1008	947	972	1031	1029	1086	1104	8269

Day: Saturday

All cars Base = 100%	Tim								Number of cars observed
	08.30	09.30	10.30	11.30	14.00	15.00	16.00	17.00	
M1 at	79	80	71	79	85	78	81	84	637
M2 at	82	83	83	86	86	81	81	88	670
M1 at Black s Road	28	45	62	68	68	58	57	74	460
Antrim Rd/D gall Park Ave	37	36	50	59	65	60	49	59	415
Knock Dual Carriageway	82	85	86	87	81	89	82	90	682
Saintfield Road	74	79	86	84	83	86	86	89	667
Derriagh	73	73	77	79	79	82	84	83	630
Strand Rd, L derry	27	32	25	36	51	42	43	49	305
Anne St, Enniskillen	81	86	84	85	83	68	65	78	630
Milltown Rd/Shaw s Bridge	83	88	83	84	81	86	84	84	673
Banbridge	50	62	68	67	64	72	51	58	492
Hillhead Rd, Ballyclare	86	86	84	80	88	82	76	81	663
Ballysallagh Rd, Bangor	27	38	40	44	52	50	48	43	342
A505 Cookstown to Omagh	78	82	81	84	82	87	81	82	657
Carrickfergus/Greenisland	84	88	81	83	86	86	85	86	679
All sites	971	1043	1061	1105	1134	1107	1053	1128	8602