

Safety belt wearing by adult rear seat passengers: Results of a national survey November/December 2011

The latest annual national survey of safety belt use in New Zealand by adults in the rear seats of cars was carried out in November and December 2011. More than 11,000 adults seated in the rear seats of cars were observed at 139 sites around the country. As in previous years, each site was surveyed between 2 pm and 4 pm on Sunday afternoons during the school term. Only adults seated in the rear left and right window positions were included in the survey.

In 2011, the safety belt wearing rate for rear seat adult passengers was **90 percent**. This is an increase from 88 percent in 2010 and 87 percent in 2007, 2008 and 2009 (see Table 1).

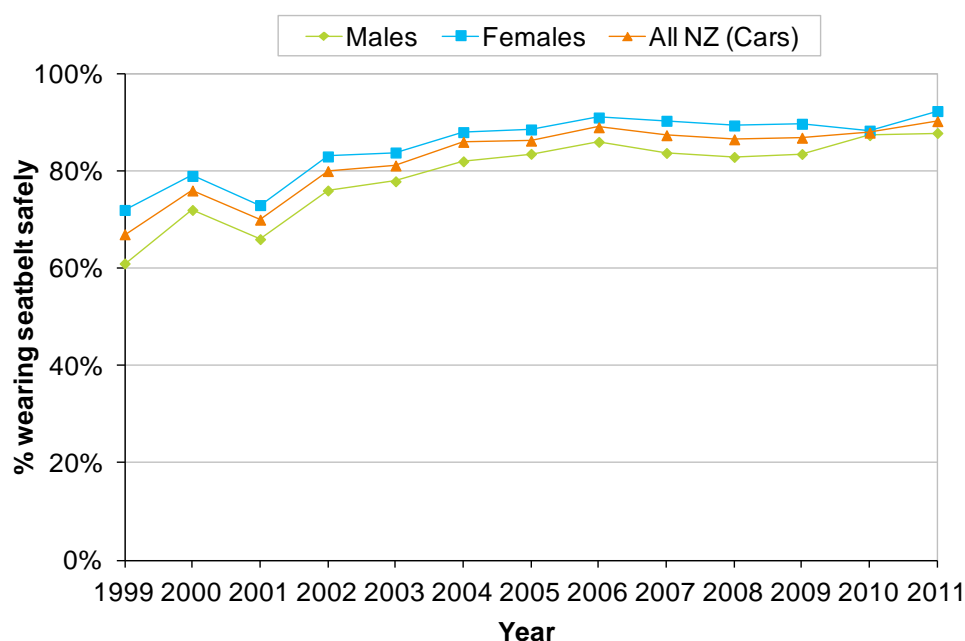
Table 1: Safety belt wearing rates for adults in the rear seat (%)

Category	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Males	76	78	82	84	86	84	83	84	87	88
Females	83	84	88	89	91	90	89	90	88	92*
Van passengers	69	72	72	75	79	75	75	75	78	87*
New Zealand	80	81	86	86	89	87	87	87	88	90*

* Statistically significant change from last year.

Female rear seat passengers continued to have a higher rear seat safety belts wearing rate than males (see Table 1). All adult passengers had a lower wearing rate in vans. Rear seat passengers who appeared to be aged 15–19 years were recorded as teenagers. The wearing rate among teenagers was 87 percent. More teenage girls were wearing their safety belts (90 percent) than teenage boys (85 percent). These are slightly lower than the corresponding adult rates.

Figure 1: Safety belt wearing rates for adults in the rear seat, 1999–2011



Regional Wearing Rates

National restraint wearing surveys are designed to provide a consistent measure of safety belt use over time, by surveying the same sites in each region each year. In 2011, at least 200 vehicle occupants were surveyed in each region, except in Gisborne where only 99 rear seat adult passengers were observed during the survey period.

Table 2 shows the rear seat safety belt wearing rates in each local government region over the last 10 years. Overall, the wearing of rear seat safety belts has decreased from last year in Bay of Plenty, Hawke's Bay, and Nelson/Marlborough/Tasman. Auckland, Waikato, and Wellington have all increased.

Wearing rates in Northland, Gisborne, Taranaki, Manawatu/Wanganui, Canterbury, West Coast, Otago and Southland show no statistically significant change from last year.

Table 2: Rear seat adult safety belt wearing rates by region (%)

Local Government	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Northland	84	87	89	94	99	71	73	94	93	94
Auckland	84	82	90	82	93	92	88	76	77	80*
Waikato	78	81	85	83	83	88	83	91	93	95*
Bay of Plenty	79	71	78	85	90	76	86	87	95	89*
Gisborne	55	72	59	97	86	92	Sample too small	79	Sample too small	75
Hawke's Bay	81	76	87	96	90	84	87	94	96	88*
Taranaki	81	82	81	92	91	93	94	94	98	99
Manawatu-Wanganui	79	84	85	87	94	92	92	87	91	89
Wellington	77	82	87	84	89	87	89	84	83	93*
Nelson-Marlborough-Tasman	77	89	97	91	88	87	83	85	94	90*
Canterbury	76	83	88	85	87	91	91	87	92	93
West Coast	79	80	85	89	95	91	92	93	89	92
Otago	88	79	78	88	92	84	79	90	85	85
Southland	67	87	74	70	64	71	78	77	77	75
All NZ	80	81	86	86	89	87	87	87	88	90*

* Statistically significant change from last year.

Note. The accuracy of the wearing rates shown here depends on the sample sizes (the number of car occupants observed). If the sample size is small, the data may show large random fluctuations in the observed wearing rate.

Local Authority Wearing Rates

Rear seat safety belt wearing rates at territorial local authority (TLA) level are presented in Table 3. Where fewer than 70 people were sampled in a TLA, neighbouring local bodies have been combined for estimation.

* indicates statistically significant change from previous year.

Table 3: Rear seat adult safety belt wearing rates by TLA (last 2 years)

Local Authority		2010	2011
Northland			
Far North	Sample	114	377
	Wearing rate	80	89 *
Whangarei	Sample	179	221
	Wearing rate	100	99
Whangarei / Kaipara	Sample	236	344
	Wearing rate	100	99
Auckland			
Auckland	Sample	2095	1459
	Wearing rate	75	80 *
Waikato			
Thames - Coromandel	Sample	397	440
	Wearing rate	100	100
Hauraki	Sample	140	139
	Wearing rate	83	95 *
Waikato	Sample	238	201
	Wearing rate	83	86
Hamilton City	Sample	223	267
	Wearing rate	93	92
Matamata - Piako	Sample	54	109
	Wearing rate	89	88
Waipa	Sample	161	149
	Wearing rate	94	96
South Waikato	Sample	266	312
	Wearing rate	100	98
Waitomo	Sample	102	169
	Wearing rate	94	99
Otorohanga	Sample	119	168
	Wearing rate	79	99 *
Taupō	Sample	142	175
	Wearing rate	94	93
Bay of Plenty			
Tauranga / Western Bay of Plenty	Sample	226	231
	Wearing rate	98	86 *
Western Bay of Plenty	Sample	176	180
	Wearing rate	98	91 *
Rotorua	Sample	191	426
	Wearing rate	90	94
Local Authority (cont)			
		2010	2011
Whakatane / Opotiki / Kawerau	Sample	254	101
	Wearing rate	94	78 *
Gisborne			
Gisborne	Sample	53	99
	Wearing rate	75	75
Hawkes Bay			
Napier / Hastings	Sample	205	220
	Wearing rate	93	90
Napier	Sample	143	162
	Wearing rate	96	89 *
Central Hawkes Bay	Sample	67	163
	Wearing rate	99	98
Wairoa	Sample	220	163
	Wearing rate	97	75 *
Taranaki			
New Plymouth	Sample	357	320
	Wearing rate	97	98
Stratford / South Taranaki	Sample	227	207
	Wearing rate	100	100
Manawatu-Wanganui			
Rangitikei / Ruapehu	Sample	139	162
	Wearing rate	98	76 *
Wanganui	Sample	62	145
	Wearing rate	92	94
Manawatu	Sample	103	104
	Wearing rate	89	97 *
Palmerston North	Sample	206	226
	Wearing rate	89	97 *
Tararua/ Horowhenua	Sample	210	262
	Wearing rate	91	85
Horowhenua	Sample	132	196
	Wearing rate	92	83 *
Wellington			
Kapiti Coast	Sample	244	424
	Wearing rate	91	93
Porirua	Sample	135	251
	Wearing rate	87	94
Upper Hutt	Sample	79	132
	Wearing rate	84	98 *

Local Authority (cont)		2010	2011
Wellington (cont)			
Hutt City	Sample	179	293
	Wearing rate	85	90
Wellington City	Sample	85	64
	Wearing rate	75	100 *
Masterton	Sample	141	135
	Wearing rate	75	79
Carterton / South Wairarapa	Sample	153	212
	Wearing rate	78	100 *
Nelson / Marlborough / Tasman			
Nelson / Tasman	Sample	246	240
	Wearing rate	96	94
Marlborough	Sample	57	153
	Wearing rate	86	83
West Coast			
Buller / Westland	Sample	137	122
	Wearing rate	93	96
Grey	Sample	78	75
	Wearing rate	82	87
Canterbury			
Kaikoura / Hurunui	Sample	83	143
	Wearing rate	83	87
Waimakariri	Sample	84	207
	Wearing rate	96	100
Christchurch City	Sample	204	296
	Wearing rate	99	93 *

Local Authority (cont)		2010	2011
Selwyn	Sample	128	160
	Wearing rate	98	97
Ashburton	Sample	91	111
	Wearing rate	99	99
Timaru	Sample	82	187
	Wearing rate	83	97 *
Mackenzie / Waimate	Sample	155	254
	Wearing rate	82	81
Otago			
Waitaki / Central Otago	Sample	134	129
	Wearing rate	93	84 *
Queenstown - Lakes	Sample	157	102
	Wearing rate	79	89 *
Dunedin	Sample	133	102
	Wearing rate	77	83
Clutha	Sample	74	154
	Wearing rate	99	84 *
Southland			
Gore	Sample	123	113
	Wearing rate	65	72
Invercargill / Southland	Sample	122	161
	Wearing rate	89	78 *

Police District Wearing Rates

National restraint wearing surveys are designed to provide a consistent measure of safety belt use over time, by surveying the same sites in each police district each year. In 2011, at least 390 vehicle occupants were surveyed in each district. Table 4 shows the rear safety belt wearing rates in each police district over the last 10 years.

Waitemata, Waikato, and Wellington police districts showed a statistically significant increase in rear safety belt wearing. Counties/Manukau, Bay of Plenty, and Eastern police districts showed a decrease in rear seatbelt wearing. Wearing rates in all other police districts showed no statistically significant difference from the previous year.

Table 4: Rear seat adult safety belt wearing rates by police district (%)

Police District	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Northland	84	87	89	94	99	71	73	94	93	94
Waitemata	85	82	93	91	96	96	86	74	71	78*
Auckland	78	86	80	72	98	97	83	59	78	75
Counties Manukau	86	79	89	70	83	83	95	89	91	85*
Waikato	79	81	85	83	84	86	83	91	91	95*
Bay of Plenty	79	74	81	85	88	84	84	87	96	92*
Eastern	77	75	84	96	89	87	84	92	94	86*
Central	80	83	84	89	93	92	93	90	94	93
Wellington	77	82	87	84	89	87	89	84	83	93*
Tasman	74	88	91	88	89	85	85	88	91	89
Canterbury	78	82	87	85	87	93	93	88	93	93
Southern	81	82	77	83	84	81	79	85	82	82
All NZ	80	81	86	86	89	87	87	87	88	90*

* Statistically significant change from last year.

Note. The accuracy of the wearing rates shown here depends on the sample sizes (the number of car occupants observed). If the sample size is small, the data may show large random fluctuations in the observed wearing rate.

Police Area Wearing Rates

Rear seat safety belt wearing rates at police area level are presented in Table 5.

Sample sizes for many police areas are relatively small compared to those for police districts and results should be treated with caution. For example, with a sample size of 150 and a wearing rate of 75 percent, the margin of error¹ is approximately 7 percent. It should be noted that a sample as small as this makes it difficult to detect small changes in the wearing rate from year to year. No wearing rate has been estimated where fewer than 70 people were sampled. Instead, neighbouring police areas have been combined for estimation.

* indicates statistically significant change from previous year.

Table 5: Rear seat adult safety belt wearing rates by police area (last 2 years)

Police Area		2010	2011
Northland			
Far North	Sample	114	377
	Wearing rate	80	89 *
Whangarei	Sample	236	344
	Wearing rate	100	99
Waitemata			
North Shore	Sample	239	98
	Wearing rate	72	100 *
Waitakere	Sample	617	210
	Wearing rate	70	60 *
Rodney	Sample	322	214
	Wearing rate	73	86 *
Auckland			
Auckland	Sample	690	396
	Wearing rate	78	75
Counties Manukau			
Manukau West	Sample	137	211
	Wearing rate	81	74
Manukau Central	Sample	90	122
	Wearing rate	89	85
Manukau South	Sample	239	208
	Wearing rate	97	96
Waikato			
Hamilton	Sample	223	267
	Wearing rate	93	92
Waikato East	Sample	591	688
	Wearing rate	95	97
Waikato West	Sample	620	687
	Wearing rate	87	94 *
Bay of Plenty			
Western Bay of Plenty	Sample	402	231
	Wearing rate	98	86 *
Eastern Bay of Plenty	Sample	254	101
	Wearing rate	94	78 *
Rotorua	Sample	191	426
	Wearing rate	90	94

Police Area (cont)		2010	2011
Taupo	Sample	408	487
	Wearing rate	98	97
Eastern			
Gisborne	Sample	273	262
	Wearing rate	93	75 *
Napier	Sample	143	162
	Wearing rate	96	89 *
Hastings	Sample	129	221
	Wearing rate	93	96
Central			
New Plymouth	Sample	357	320
	Wearing rate	97	98
Taranaki rural	Sample	227	207
	Wearing rate	100	100
Wanganui	Sample	166	264
	Wearing rate	96	86 *
Ruapehu	Sample	35	43
	Wearing rate	sample too small	sample too small
Wanganui / Ruapehu	Sample	201	307
	Wearing rate	94	85 *
Palmerston North City	Sample	206	226
	Wearing rate	89	97 *
Palmerston North rural	Sample	313	366
	Wearing rate	91	88
Wellington			
Kapiti-Mana	Sample	379	675
	Wearing rate	89	93 *
Wellington	Sample	85	64
	Wearing rate	75	100 *
Lower Hutt	Sample	179	293
	Wearing rate	85	90
Upper Hutt	Sample	79	132
	Wearing rate	84	98 *
Wairarapa	Sample	294	347
	Wearing rate	77	91 *

Police Area (cont)	2010	2011
--------------------	------	------

¹ Margin of error based on a 95% confidence interval.

Tasman			
Nelson Bays	Sample	246	240
	Wearing rate	96	94
Marlborough	Sample	109	247
	Wearing rate	83	83
West Coast	Sample	215	197
	Wearing rate	89	92
Canterbury			
Northern Canterbury	Sample	115	256
	Wearing rate	94	100 *
Christchurch Central	Sample	103	213
	Wearing rate	99	92 *

(cont)			
Southern Canterbury	Sample	237	441
	Wearing rate	82	88
Mid-South Canterbury	Sample	320	354
	Wearing rate	99	97
Southern			
Dunedin	Sample	207	256
	Wearing rate	85	84
Otago Rural	Sample	291	231
	Wearing rate	85	87
Southland	Sample	245	274
	Wearing rate	77	75

Police Area	2010	2011
--------------------	-------------	-------------

More information is available from www.transport.govt.nz