



## Safety belt wearing by adult rear seat passengers: Results of national survey, November/December 2010

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 2010. More than 10,000 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.

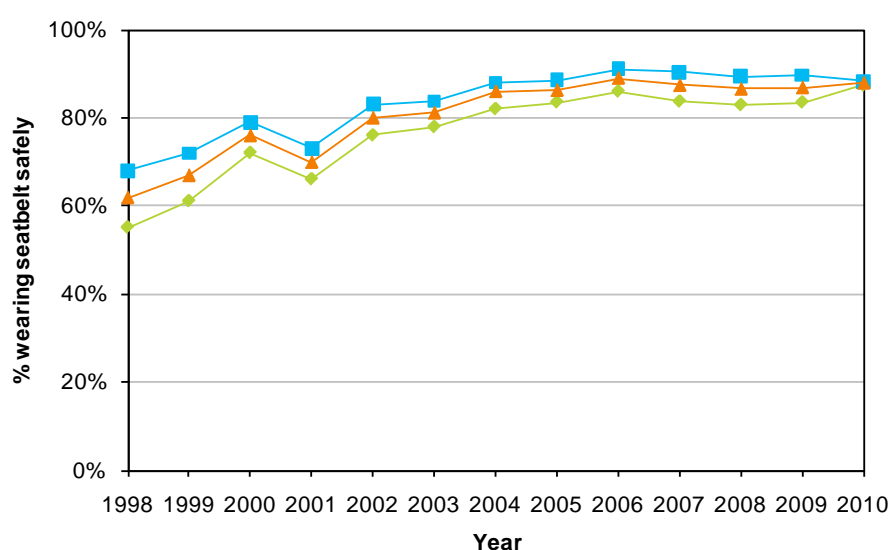
In 2010, the safety belt wearing rate for rear seat adult passengers was **88 percent**. This is an increase from 87 percent in 2007, 2008 and 2009 (see Table 1).

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

Category	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Males	72	66	76	78	82	84	86	84	83	84	87
Females	79	73	83	84	88	89	91	90	89	90	88
Van passengers	67	50	69	72	72	75	79	75	75	75	78
New Zealand	76	70	80	81	86	86	89	87	87	87	88

Female rear seat passengers continued to have a slightly higher rear seat safety belts wearing rate than males, but there was less of a gap in wearing rate than previous years (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 88 percent. More teenage girls were wearing their safety belts (90 percent) than teenage boys (86 percent). These are similar to the corresponding adult rates.

**Figure 1: Safety belt wearing rates for adults in the rear seat, 1999–2010**



In this report, changes from previous years have been commented on in the text only if statistically significant at the 5 percent level.

## 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 2010, at least 200 vehicle occupants were surveyed in each region, except in Gisborne where only 56 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 slightly over the last year in Otago from 90 percent in 2009 to 85 percent in 2010. Waikato, Bay of Plenty, Taranaki, Manawatu/Wanganui, Nelson/Marlborough/Tasman and Canterbury have all increased.

Wearing rates in Northland, Auckland, Wellington, Hawke's Bay, West Coast and Southland have not changed markedly since last year.

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

Local Government	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Northland	72	84	87	89	94	99	71	73	94	93
Auckland	84	84	82	90	82	93	92	88	76	77
Waikato	80	78	82	85	83	83	88	83	91	93*
Bay of Plenty	53	79	70	78	85	90	76	86	87	95*
Gisborne	55	54	69	59	97	86	92	Sample too small	79	Sample too small
Hawke's Bay	52	81	76	87	96	90	84	87	94	96
Taranaki	65	81	83	81	92	91	93	94	94	98*
Manawatu-Wanganui	73	79	85	85	87	94	92	92	87	91*
Wellington	71	77	82	87	84	89	87	89	84	83
Nelson-Marlborough-Tasman	82	77	90	93	89	88	87	83	85	94*
Canterbury	82	79	78	85	89	95	91	91	87	92*
West Coast	58	76	82	88	85	87	91	92	93	89
Otago	85	88	79	78	88	92	84	79	90	85*
Southland	76	67	88	74	70	64	71	78	77	77
All NZ	70	80	81	86	86	89	87	87	87	88*

*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. \* indicates statistically significant change from previous year.*

## Local Authority Wearing Rates

At territorial local authority (TLA) level, sample sizes are relatively small and results should be treated with caution. For example, with a sample size of 100 and a wearing rate of 75 percent the margin of error<sup>1</sup> is approximately 9 percent. While small samples make it difficult to detect small changes in the wearing rate from year to year, these results are useful to local authorities as an indication of how much improvement is needed. Where fewer than 70 people were sampled in a TLA, neighbouring local bodies have been combined for estimation.

**Table 3: Rear seat adult safety belt wearing rates by territorial local authority, 2010**

Local authority/ authorities	People in sample	% restrained	Local authority/ authorities	People in sample	% restrained
<i>Northland</i>			<i>Hawke's Bay</i>		
Far North	114	80	Napier / Hastings	205	95
Whangarei	179	100	Napier	143	96
Whangarei / Kaipara	236	100	Central Hawke's Bay / Hastings	129	93
<i>Auckland</i>			Wairoa	220	97
Auckland	1801	77	<i>Taranaki</i>		
<i>Waikato</i>			New Plymouth	357	97
Thames-Coromandel	397	100	Stratford	94	99
Hauraki	140	83	South Taranaki	133	100
Waikato	238	83	<i>Manawatu-Wanganui</i>		
Hamilton City	223	93	Rangitikei / Ruapehu	139	91
Matamata-Piako / Hauraki	194	84	Whanganui / Ruapehu	97	92
Waipa	161	94	Manawatu	103	92
South Waikato	266	100	Palmerston North	206	89
Waitomo	102	94	Tararua	78	88
Otorohanga	119	79	Horowhenua	132	92
Taupo	142	94	<i>Wellington</i>		
<i>Bay of Plenty</i>			Kapiti Coast	244	91
Tauranga	226	98	Porirua	135	87
Western Bay of Plenty	176	98	Upper Hutt	79	84
Rotorua	191	90	Hutt City	179	85
Whakatane / Kawerau	163	95	Wellington City	85	75
Opotiki	91	93	Masterton	141	75
<i>Gisborne</i>			Carterton / South Wairarapa	153	78
Gisborne	53	Sample too small			

<sup>1</sup> Margin of error based on 95% confidence interval.

**Table 3: Rear seat adult safety belt wearing rates by Territorial Local Authority, 2010 cont.**

<b>Local authority/ authorities</b>	<b>People in sample</b>	<b>% restrained</b>	<b>Local authority/ authorities</b>	<b>People in sample</b>	<b>% restrained</b>
<i>Nelson / Marlborough / Tasman</i>			Ashburton	91	99
Nelson / Marlborough	149	89	Timaru	82	83
Tasman	154	98	Mackenzie / Waimate	155	82
<i>West Coast</i>			<i>Otago</i>		
Buller	101	93	Waitaki / Central Otago	134	93
Grey / Westland	114	87	Queenstown-Lakes	157	79
<i>Canterbury</i>			Dunedin	133	77
Kaikoura / Hurunui	83	83	Clutha / Dunedin	207	85
Waimakariri	84	96	<i>Southland</i>		
Christchurch City	204	99	Gore	123	65
Selwyn	128	98	Invercargill / Southland	122	89

## 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 2010, at least 350 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.

Overall, rear safety belt wearing stayed relatively constant in 2010. Bay of Plenty, Central, and Canterbury police districts showed an increase in rear safety belt wearing. Auckland also showed an increase in rear seatbelt wearing from 59 percent to 78 percent, but has not returned to the levels observed in 2006 and 2007. Wearing rates in all other police districts were approximately constant over the last year, increasing or decreasing by 3 percent or less.

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

Police District	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Northland	72	84	87	89	94	99	71	73	94	93
Waitemata	94	85	82	93	91	96	96	86	74	71
Auckland	72	78	87	80	72	98	97	83	59	78*
Counties Manukau	79	86	78	89	70	83	83	95	89	91
Waikato	80	79	81	85	83	84	86	83	91	91
Bay of Plenty	60	79	74	81	85	88	84	84	87	96*
Eastern	53	77	75	84	96	89	87	84	92	94
Central	68	80	85	84	89	93	92	93	90	94*
Wellington	71	77	82	87	84	89	87	89	84	83
Tasman	82	74	89	91	88	89	85	85	88	91
Canterbury	58	78	81	87	85	87	93	93	88	93*
Southern	59	81	82	77	83	84	81	79	85	82
All NZ	70	80	81	86	86	89	87	87	87	88*

\* indicates statistically significant change from previous year.

## Police Area Wearing Rates

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 error<sup>2</sup> is approximately 7 percent. While a sample as small as this makes it difficult to detect small changes in the wearing rate from year to year, these results are useful to local police as an indication of how much improvement is needed. No wearing rate has been estimated where fewer than 70 people were sampled. Instead, neighbouring police areas have been combined for estimation.

**Table 5: Rear seat adult safety belt wearing rates by police area, 2010**

<b>Police Area</b>	<b>People in sample</b>	<b>% restrained</b>	<b>Police Area</b>	<b>People in sample</b>	<b>% restrained</b>
<i>Northland</i>			<i>Central</i>		
Far North	114	80	New Plymouth	357	97
Whangarei	236	100	Taranaki Rural	227	100
<i>Waitemata</i>			Whanganui	166	96
North Shore	239	72	Whanganui / Ruapehu	201	94
Waitakere	617	70	Palmerston North City	206	89
Rodney	322	73	Palmerston North Rural	313	91
<i>Auckland</i>			<i>Wellington</i>		
Auckland	690	78	Kapiti-Mana	379	89
<i>Counties Manukau</i>			Wellington	85	75
Manukau West	137	81	Lower Hutt	179	85
Manukau Central	90	89	Upper Hutt	79	84
Manukau South	239	97	Wairarapa	294	77
<i>Waikato</i>			<i>Tasman</i>		
Hamilton	223	93	Nelson Bays	246	96
Waikato East	591	95	Marlborough	109	83
Waikato West	620	87	West Coast	215	89
<i>Bay of Plenty</i>			<i>Canterbury</i>		
Western Bay of Plenty	402	98	Northern Canterbury	115	94
Eastern Bay of Plenty	254	94	Christchurch Central	103	99
Rotorua	191	90	Southern Canterbury	237	82
Taupo	408	98	Mid-South Canterbury	320	99
<i>Eastern</i>			<i>Southern</i>		
Gisborne	273	93	Dunedin	207	85
Napier	143	96	Otago Rural	291	85
Hastings	129	93	Southland	245	77

More information is available from [www.transport.govt.nz](http://www.transport.govt.nz)

<sup>2</sup> Margin of error based on a 95% confidence interval.