

## Child restraint use by children under 5 years: Results of national survey, 2008.

The latest annual national survey of child restraint use in New Zealand by children under 5 years was carried out in September 2008. Children in more than 4,800 cars were observed at 112 sites throughout New Zealand. As in previous years, sites were surveyed during school hours in the school term in order to target pre-schoolers. Results were weighted to reflect the population under five in each local authority.

The results from 2008 showed that across all sites, **90%** of children under the age of 5 years were either in an infant seat, child seat, booster seat, or restrained by a child harness.

Fifty two percent of the children in the survey were appropriately restrained in child seats, 23% in booster seats, 13% in infant seats and 1% in child harnesses. A further 5% were restrained by adult safety belts only. The remaining 5% were not restrained, including less than 1% who were held on the knee of other passengers (see Table 1).

**Table 1: Restraint type used by children under 5 (%)**

Category	1999	2000	2001	2002	2003 <sup>1</sup>	2004	2005	2006 <sup>1</sup>	2007	2008
Appropriate restraint used	75	79	82	86	86	87	89	91	91	90
Adult safety belt used	11	11	9	9	8	8	7	6	7	5
Unrestrained	14	11	9	5	5	5	4	4	2	5

### Regional Wearing Rates

National surveys are designed to provide a consistent measure of child restraint use over time, by surveying the same sites in each region each year. Table 2 shows the child restraint wearing rates by children under the age of five years in each Local Government region. In 2008 at least 200 children were surveyed in each region, except in Gisborne where 83 were observed, the West Coast where 67 were observed and Otago where 145 were observed.

Overall, the wearing of child restraints has changed little since 2007. Child restraint wearing in Northland, Gisborne, and Wellington decreased this year. Wearing rates have increased in Waikato, Bay of Plenty, Hawkes Bay, Nelson/Marlborough, the West Coast, Canterbury and Southland. Wearing rates in all other regions are being maintained.

<sup>1</sup> Rounded figures given; actual percentages add to 100%.

**Table 2: Child restraint wearing rates, by region (%)**

Local Government Region	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Northland	61	70	69	85	84	95	98	100	95	88
Auckland	70	75	77	83	82	81	86	92	90	90
Waikato	80	78	81	88	90	87	89	87	89	93
Bay of Plenty	75	79	78	87	78	81	91	89	86	87
Gisborne	47	68	79	69	76	88	92	83	100	94
Hawkes Bay	74	67	90	94	83	92	98	89	92	92
Taranaki	82	77	78	95	91	94	87	95	96	96
Manawatu - Wanganui	71	83	81	84	89	94	91	94	97	95
Wellington	81	81	83	82	90	89	91	92	90	81
Nelson - Marlborough	65	73	79	94	92	93	91	93	91	96
West Coast	80	82	84	92	92	92	92	93	96	99
Canterbury	87	88	94	91	93	93	83	85	90	91
Otago	89	87	97	97	90	95	91	91	98	96
Southland	84	87	76	81	88	83	94	92	90	95
All NZ	75	79	82	86	86	87	89	91	91	90

### Metropolitan Area Wearing Rates

Child restraint wearing rates for selected metropolitan areas are presented in Table 3. The observed wearing rates have increased for Hamilton and Christchurch and decreased for Dunedin. All other metropolitan areas showed a steady wearing rate.

**Table 3: Child restraint wearing rates, by metropolitan area (%)**

Metropolitan areas	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
North Shore	84	91	90	79	88	80	94	93	92	98
Waitakere	76	80	78	86	91	95	91	90	89	82
Auckland City	71	81	82	88	85	88	86	86	89	95
Manukau	59	64	69	82	68	66	76	96	91	86
Hamilton	84	81	84	90	95	80	94	87	88	96
Wellington City	88	91	87	86	84	86	87	87	89	84
Christchurch	84	88	94	90	93	91	77	85	89	98
Dunedin	87	85	98	99	91	96	91	98	100	97

## Local Authority Wearing Rates

At Local Authority 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 80%, the margin of error (based on a 95% confidence interval for the wearing rate) is approximately 8%.

Child restraint wearing rates at Local Authority level are presented in Table 4. Results are likely to fluctuate where sample sizes are small and caution should be taken, particularly when samples are smaller than 100. No wearing rate has been estimated where fewer than 60 children were sampled. Where appropriate, neighbouring local authority areas have been combined to enable estimation of the child restraint wearing rate.

**Table 4: Child restraint wearing rates by Territorial Local Authority, 2008**

Local authority / authorities	Children in sample	% in child restraints	Local authority / authorities	Children in sample	% in child restraints
<i>Northland</i>			<i>Hawkes Bay</i>		
Far North/Kaipara <sup>2</sup>	122	79	Wairoa/ Napier	226	92
Whangarei	178	91	Napier	163	95
<i>Auckland</i>			Hastings	93	90
North Shore	263	98	Hastings / Central Hawkes Bay	110	92
Rodney/North Shore	299	93	<i>Taranaki</i>		
Waitakere	151	82	New Plymouth	134	96
Auckland	412	95	Stratford	84	89
Manukau	311	86	South Taranaki	96	97
Franklin/Papakura/ Manukau	401	87	<i>Manawatu-Wanganui</i>		
<i>Waikato</i>			Ruapehu / Rangitikei/ Wanganui	161	86
Waikato / Waipa	168	93	Manawatu / Tararua / Horowhenua/ Palmerston North	156	98
Waipa	132	95	Manawatu/ Palmerston North	122	97
Matamata – Piako/ South Waikato	105	92	<i>Wellington</i>		
Hamilton	106	96	Kapiti Coast / Porirua	156	72
Taupo / South Waikato	118	92	Masterton / Carterton	24	Sample too small
<i>Bay of Plenty</i>			Upper Hutt / Hutt City	124	89
Tauranga	153	86	Hutt City	79	91
Western Bay of Plenty	109	99	Wellington City	166	84
Rotorua	87	86	<i>Nelson-Marlborough / Tasman</i>		
Whakatane / Kawerau / Rotorua	148	82	Nelson / Tasman	222	97
<i>Gisborne</i>			Marlborough / Kaikoura	108	94
Gisborne	83	94	<i>West Coast</i>		
			Westland / Buller / Grey	67	99

<sup>2</sup> Kaitia excluded from sample in 2007 due to sampling issues.

Table 4 continued. Child restraint wearing rates by Territorial Local Authority, 2008

Local authority / authorities	Children in sample	% in child restraints	Local authority / authorities	Children in sample	% in child restraints
<i>Canterbury</i>			<i>Southland</i>		
Christchurch	203	98	Gore / Invercargill	143	95
Waimakariri	43	Sample too small	Invercargill	88	90
Ashburton / Timaru	122	95			
<i>Otago</i>					
Waitaki / Clutha / Central Otago	124	94			
Dunedin	78	97			

### Police District Wearing Rates

National surveys are designed to provide a consistent measure of child restraint use over time, by surveying the same sites in each Police District each year. Waikato, Tasman, Canterbury and Southern all show a continuing trend upwards. Wellington appears to have decreased sharply. This will be monitored to determine whether this is part of a trend or just a one-off fluctuation.

In 2008, at least 350 children were surveyed in each district, except in Northland (where 300 children were surveyed) and in Southern (345 children).

Table 5: Percentage of children in child restraints, by Police District (%)

Police District	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Northland	61	70	69	85	84	95	98	100	95	88
Waitemata	79	84	82	83	91	89	93	93	90	87
Auckland	71	81	82	88	86	88	86	84	89	95
Counties - Manukau	63	64	69	75	69	68	86	97	91	87
Waikato	80	80	83	87	91	86	90	86	87	93
Bay of Plenty	76	77	76	88	78	83	90	90	87	88
Eastern	63	68	86	88	81	91	96	87	94	92
Central	77	80	80	88	90	93	90	94	95	95
Wellington	81	81	84	80	90	89	91	92	91	81
Tasman	70	75	80	94	92	93	91	93	92	97
Canterbury	87	88	94	90	93	93	83	85	90	91
Southern	88	87	89	93	89	91	92	92	95	96
All NZ	75	79	82	86	86	87	89	91	91	90

## Police Area Wearing Rates

Child restraint wearing rates at Police Area level are presented in Table 6. Results are likely to fluctuate where sample sizes are small and caution should be taken, particularly when samples are smaller than 100. No wearing rate has been estimated where fewer than 60 children were sampled. Where appropriate, neighbouring police areas have been combined to enable estimation of the child restraint wearing rate.

**Table 6: Child restraint wearing rates by Police Area, 2008**

Police Area	Children in sample	% in child restraints	Police Area	Children in sample	% in child restraints
<i>Northland</i>			<i>Central</i>		
Far North	93 <sup>3</sup>	70	New Plymouth	134	96
Whangarei	207	92	Taranaki Rural	180	95
<i>Waitemata</i>			Wanganui	60	93
Rodney / North Shore	399	93	Ruapehu / Wanganui	161	86
North Shore	263	98	Palmerston North Rural	117	96
Waitakere	151	82	Palmerston North City / Rural	156	98
<i>Auckland</i>			<i>Wellington</i>		
Auckland West	108	89	Kapiti - Mana	165	66
Auckland East	304	98	Wellington	130	92
<i>Counties / Manukau</i>			Lower Hutt	79	91
Counties-Manukau West / Central / East / South	401	87	Upper Hutt / Lower Hutt	124	89
<i>Waikato</i>			Wairarapa	24	Sample too small
Hamilton	106	96	<i>Tasman</i>		
Waikato East / West	238	93	Nelson Bays	222	97
Waikato West	186	93	Marlborough	108	94
<i>Bay of Plenty</i>			West Coast	67	99
Taupo	118	92	<i>Canterbury</i>		
Western Bay of Plenty	262	89	Northern Canterbury	113	85
Eastern Bay of Plenty	61	82	Christchurch Central	66	98
Rotorua	87	86	Southern Canterbury	122	95
<i>Eastern</i>			Mid-South Canterbury	67	96
Gisborne	146	88	<i>Southern</i>		
Napier	163	95	Dunedin	135	97
Hastings	110	92	Otago Rural	67	94
			Southland	143	95

<sup>3</sup> Kaitaia excluded from sample in 2007 due to sampling issues.