

Child restraint use by children aged 5–9 years: Results of a national survey 2011

The first national survey of restraint use in New Zealand by children aged 5–9 years old was carried out in October 2011. Children in more than 6,300 cars were observed at 112 sites throughout New Zealand. Sites were surveyed during school holidays. To determine national wearing rates the rates for local authorities were weighted to adjust for the proportion of the national population aged 5–9 years in each local authority.

In 2011, **95 percent** of children aged 5–9 years were either in a child seat, booster seat, child harness, or restrained by an adult seatbelt.

Twenty three percent of the children in the survey were restrained in child restraints of various types. Of these, 17 percent were in booster seats, 5 percent were in child seats and 1 percent were in child harnesses. Seventy two percent were restrained by adult safety belts. The remaining 5 percent were not restrained, including less than 1 percent who were held on the knee of other passengers (see Table 1).

Table 1: Restraint type used by children aged 5–9 years

Category	2011
Child seat	5%
Booster seat	17%
Child harness	1%
Adult safety belt used	72%
Unrestrained	5%
Total	100%

Regional Wearing Rates

This national survey is designed to be conducted biennially and to provide a consistent measure of child restraint use over time, by surveying the same sites in each region each time. Although a range of sites are surveyed in each region and area, the survey is not designed for comparison of rates between regions, but rather to monitor changes over time within a region. In 2011 at least 150 children were surveyed in each region, except in Gisborne where 132 were observed.

Table 2 shows restraint use wearing rates for children aged 5–9 years for the local government regions.

Table 2: Restraint wearing rates, by region, 2011

Local Government Region	Children in sample	Percentage using booster seat / child seat / harness	Total percentage restrained
Northland	301	11%	93%
Auckland	1,501	27%	93%
Waikato	682	16%	96%
Bay of Plenty	457	27%	93%
Gisborne	132	48%	89%
Hawkes Bay	328	9%	96%
Taranaki	158	43%	94%
Manawatu-Wanganui	315	18%	98%
Wellington	1,288	34%	98%
Nelson-Marlborough-Tasman	387	7%	94%
West Coast	224	13%	99%
Canterbury	782	19%	98%
Otago	215	4%	91%
Southland	258	27%	92%
All New Zealand	7,028	23%	95%

Metropolitan Area Wearing Rates

Restraint wearing rates for 5–9 year olds for selected metropolitan areas are presented in Table 3.

Table 3: Child restraint wearing rates, by metropolitan area, 2011

Metropolitan area	Children in sample	Percentage using booster seat / child seat / harness	Total percentage restrained
Northern Auckland urban zone	355	5%	100%
Western Auckland urban zone	248	42%	97%
Central Auckland urban zone	365	28%	94%
Southern Auckland urban zone	391	26%	86%
Hamilton	151	13%	95%
Tauranga	120	7%	98%
Wellington	469	21%	99%
Christchurch	435	15%	97%
Dunedin	80	0%	89%
All New Zealand	7,028	23%	95%

Local Authority Wearing Rates

Child restraint wearing rates at territorial local authority (TLA) level are presented in Table 4. At 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 error¹ is approximately 9 percent. It should be noted that small samples make it difficult to detect small changes in the wearing rate from year to year. Where fewer than 70 children were sampled in a TLA, neighbouring local bodies have been combined for estimation.

² Margin of error based on 95 percent confidence interval.

Table 4: Restraint wearing rates by territorial local authority, 2011

Local authority / authorities	Children in sample	% in restraints	Local authority / authorities	Children in sample	% in restraints
<i>Northland</i>			<i>Wellington</i>		
Far North / Kaipara	178	87	Kapiti Coast	117	98
Whangarei	123	100	Porirua	205	96
<i>Auckland</i>			Masterton / Carterton	80	93
Auckland	1,501	93	Upper Hutt	132	98
<i>Waikato</i>			Hutt City	225	97
Waipa	114	99	Wellington City	469	99
Matamata – Piako / Waikato	108	93	<i>Nelson / Marlborough / Tasman</i>		
South Waikato	201	100	Nelson	83	95
Hamilton	151	95	Tasman	157	91
Taupo	108	99	Marlborough / Kaikoura	147	96
<i>Bay of Plenty</i>			<i>West Coast</i>		
Tauranga	120	98	Westland / Grey	103	98
Western Bay of Plenty	131	97	Buller	121	100
Rotorua	100	88	<i>Canterbury</i>		
Whakatane / Kawerau	106	90	Christchurch	459	97
<i>Gisborne</i>			Waimakariri	103	100
Gisborne	132	89	Ashburton	100	98
<i>Hawke's Bay</i>			Timaru	120	98
Wairoa / Hastings	165	96	<i>Otago</i>		
Napier	132	96	Waitaki / Central Otago	71	94
Hastings	116	97	Clutha / Dunedin	144	91
Hastings / Central Hawke's Bay	147	97	<i>Southland</i>		
<i>Taranaki</i>			Gore	117	96
New Plymouth	90	91	Invercargill	141	89
New Plymouth / Stratford / South Taranaki	158	94			
<i>Manawatu-Wanganui</i>					
Ruapehu / Rangitikei / Whanganui	146	100			
Manawatu / Tararua / Horowhenua	169	97			
Manawatu / Palmerston North	118	97			

Police District Wearing Rates

The national survey is designed to provide a consistent measure of child restraint use over time, by surveying the same sites in each Police District each time. Restraint use rates for 5–9 year olds by police district are shown in Table 5.

In 2011, at least 300 children were surveyed in each district.

Table 5: Percentage of children in child restraints, by police district, 2011

Police District	Children in sample	Percentage using booster seat / child seat / harness	Total percentage restrained
Northland	301	11%	93%
Waitemata	695	27%	98%
Auckland	365	28%	94%
Counties / Manukau	441	27%	88%
Waikato	481	17%	96%
Bay of Plenty	658	24%	94%
Eastern	460	19%	94%
Central	520	26%	96%
Wellington	1,241	34%	98%
Tasman	611	8%	95%
Canterbury	782	19%	98%
Southern	473	10%	92%
New Zealand	7,028	23%	95%

Police Area Wearing Rates

Restraint wearing rates for 5–9 year olds at the Police Area level are presented in Table 6. At police area 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 error² is approximately 9 percent. It should be noted that small samples make it difficult to detect small changes in the wearing rate from year to year. Where fewer than 70 children were sampled in a police area, neighbouring local areas have been combined for estimation.

² Margin of error based on a 95 percent confidence interval.

Table 6: Restraint wearing rates for 5–9 year olds by police area, 2011

Police Area	Children in sample	% in restraints	Police Area	Children in sample	% in restraints
<i>Northland</i>			<i>Eastern cont</i>		
Far North	139	83	Hastings	147	97
Whangarei	162	100	<i>Central</i>		
<i>Waitemata</i>			New Plymouth	90	91
Rodney	92	98	New Plymouth / Taranaki Rural	124	98
North Shore	355	100	Whanganui / Ruapehu	146	100
Waitakere	248	97	Palmerston North Rural	162	97
<i>Auckland</i>			Palmerston North City / Rural	216	96
Auckland West	149	95	<i>Wellington</i>		
Auckland East	216	93	Kapiti - Mana	420	98
<i>Counties / Manukau</i>			Wellington	384	99
Counties-Manukau West	107	83	Lower Hutt	225	97
Counties-Manukau East	175	88	Upper Hutt	132	98
Counties-Manukau Central	81	85	Wairarapa	80	93
Counties-Manukau South	78	96	<i>Tasman</i>		
<i>Waikato</i>			Nelson Bays	240	93
Hamilton	151	95	Marlborough	147	96
Waikato East / Waikato West	222	96	West Coast	224	99
Waikato West	164	96	<i>Canterbury</i>		
<i>Bay of Plenty</i>			Northern Canterbury	321	98
Taupo	309	99	Christchurch Central	90	93
Western Bay of Plenty	251	98	Mid-South Canterbury	151	100
Eastern Bay of Plenty	106	90	Southern Canterbury	220	98
Rotorua	100	88	<i>Southern</i>		
<i>Eastern</i>			Dunedin	144	91
Gisborne	181	89	Otago Rural	71	94
Napier	132	96	Southland	258	92

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