

Child restraint use by children aged 5-9 years: Results of a national survey 2013

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The Ministry of Transport conducts and collates information for a number of road safety surveys every year. Survey topics include child restraints, seatbelt use, speed and the annual Public Attitudes to Road Safety survey.

This is the second national survey of restraint use in New Zealand by children aged 5–9 years old. The survey was carried out in October 2013. 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 2013, **96 percent** of children aged 5–9 years were either in a child seat, booster seat, child harness, or restrained by an adult seatbelt. This is an increase from the rate of 95 percent observed in 2011¹.

21 percent of the children in the survey were restrained in child restraints of various types. Of these, 17 percent were in booster seats, 2 percent were in child seats and 1 percent were in child harnesses. 74 percent were restrained by adult safety belts. The remaining 4 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	2013 ²
Child seat	5%	2%
Booster seat	17%	17%
Child harness	1%	1%
Adult safety belt used	72%	74%
Unrestrained	5%	4%
Total	100%	100%

Regional wearing rates

This national survey is designed to be conducted every second year 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 2013 at least 150 children were surveyed in each region, except in Gisborne where 140 were observed.

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

¹ Changes from the previous survey are only commented on if they are found to be statistically significant at the 5 percent level.

² Rounded figures given; actual percentages add to 100 percent.

Table 2: Restraint wearing rates, by region, 2013

Local Government Region	Children in sample	Percentage using booster seat/child seat/harness	Total percentage restrained
Northland	487	14%	94%
Auckland	1,849	12%	94%
Waikato	656	29%	95%
Bay of Plenty	570	31%	96%
Gisborne	140	8%	97%
Hawkes Bay	253	18%	95%
Taranaki	327	10%	99%
Manawatu-Wanganui	608	47%	97%
Wellington	1,196	38%	98%
Nelson-Marlborough-Tasman	400	14%	97%
West Coast	248	13%	95%
Canterbury	686	15%	98%
Otago	433	33%	98%
Southland	315	15%	92%
All New Zealand	8,168	21%	96%

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, 2013

Metropolitan area	Children in sample	Percentage using booster seat / child seat / harness	Total percentage restrained
Northern Auckland urban zone	323	7%	100%
Western Auckland urban zone	304	10%	100%
Central Auckland urban zone	619	17%	99%
Southern Auckland urban zone	409	8%	84%
Hamilton	47	<i>Sample too small</i>	<i>Sample too small</i>
Tauranga	104	10%	99%
Wellington	289	36%	99%
Christchurch	394	15%	98%
Dunedin	204	40%	100%
All New Zealand	8,168	21%	96%

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 error³ 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.

³ Margin of error based on 95 percent confidence interval.

Table 4: Restraint wearing rates by territorial local authority, 2013

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	253	88	Kapiti Coast	178	98
Whangarei	234	100	Porirua	200	100
<i>Auckland</i>			Masterton/Carterton	89	100
Auckland	1,849	94	Upper Hutt	171	96
<i>Waikato</i>			Hutt City	269	96
Waipa	198	97	Wellington City	289	99
Waikato	92	77	<i>Nelson/Marlborough/Tasman</i>		
Matamata – Piako	96	90	Nelson	114	99
South Waikato	106	100	Tasman	139	97
Hamilton/Waikato	139	95	Marlborough/Kaikoura	147	95
Taupo	117	94	<i>West Coast</i>		
<i>Bay of Plenty</i>			Westland/Grey	145	92
Tauranga	104	99	Buller	103	98
Western Bay of Plenty	179	99	<i>Canterbury</i>		
Rotorua	104	96	Christchurch	410	98
Whakatane	89	92	Waimakariri/ Christchurch	460	98
Kawerau	94	81	Ashburton	100	98
<i>Gisborne</i>			Timaru	126	100
Gisborne	140	97	<i>Otago</i>		
<i>Hawke's Bay</i>			Waitaki/Central Otago	150	95
Wairoa/Hastings	120	96	Clutha	79	95
Napier	80	91	Dunedin	204	100
Hastings Central Hawke's Bay	112	97	<i>Southland</i>		
<i>Taranaki</i>			Gore	123	89
New Plymouth	159	98	Invercargill	192	94
Stratford South Taranaki	168	99			
<i>Manawatu-Wanganui</i>					
Ruapehu/Whanganui	165	98			
Rangitikei	140	99			
Manawatu/Tararua	114	95			
Horowhenua	89	98			
Palmerston North	100	98			

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 2013, at least 390 children were surveyed in each district.

Table 5: Percentage of children in child restraints, by police district, 2013

Police District	Children in sample	Percentage using booster seat/ child seat/harness	Total percentage restrained
Northland	487	14%	94%
Waitemata	765	10%	100%
Auckland	619	17%	99%
Counties/Manukau	465	10%	84%
Waikato	482	30%	94%
Bay of Plenty	744	30%	96%
Eastern	393	15%	96%
Central	1,011	36%	98%
Wellington	1,120	38%	98%
Tasman	648	14%	96%
Canterbury	686	15%	98%
Southern	748	28%	96%
New Zealand	8,168	21%	96%

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 error⁴ 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.

⁴ Margin of error based on a 95 percent confidence interval.

Table 6: Restraint wearing rates for 5–9 year olds by police area, 2013

Police Area	Children in sample	% in restraints	Police Area	Children in sample	% in restraints
<i>Northland</i>			<i>Central</i>		
Far North	191	86	New Plymouth	159	98
Whangarei	296	99	Taranaki Rural	168	99
<i>Waitemata</i>			Ruapehu	125	100
Rodney	138	100	Whanganui	180	97
North Shore	323	100	Palmerston North Rural	279	97
Waitakere	304	100	Palmerston North City	100	98
<i>Auckland</i>			<i>Wellington</i>		
Auckland West	202	100	Kapiti - Mana	363	100
Auckland East	417	99	Wellington	228	98
<i>Counties/Manukau</i>			Lower Hutt	269	96
Counties-Manukau West	119	82	Upper Hutt	171	96
Counties-Manukau East	183	83	Wairarapa	89	100
Counties-Manukau Central/Counties- Manukau South	163	87	<i>Tasman</i>		
<i>Waikato</i>			Nelson Bays	253	98
Hamilton/Waikato East	143	96	Marlborough	147	95
Waikato West	290	91	West Coast	248	95
<i>Bay of Plenty</i>			<i>Canterbury</i>		
Taupo	223	97	Northern Canterbury	170	97
Western Bay of Plenty	283	99	Christchurch Central	91	98
Eastern Bay of Plenty	183	86	Mid-South Canterbury	199	98
Rotorua	104	96	Southern Canterbury	226	99
<i>Eastern</i>			<i>Southern</i>		
Gisborne	201	98	Dunedin	283	99
Napier	80	91	Otago Rural	150	95
Hastings	112	97	Southland	315	92

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