

## **Child restraints – general instructions for carrying out surveys.**

*Sample size:* A minimum sample size of 60 vehicles with children under five is required at each site. In past surveys this has taken between 40 minutes and two hours to achieve. At some sites traffic flows may be too light to enable collection of 60 unique vehicles with children in them within 3 hours. At these sites surveys should be terminated after 3 hours and the collected data used.

### *Site selection:*

Sites are to be chosen in places where a reasonable rate of vehicles with children is to be expected, for example, town centres, supermarket car parks, The Warehouse. Try to choose a place or places that are used by the whole community. Using only places like outside Plunket rooms, kindergarten, kohanga reo can give a misleading result, as the people who use these services may not be typical of the whole community.

As far as budget allows, sites should be chosen in a range of suburbs/ towns across the city or region. The same sites should be used in each survey so that results can be compared over time.

Sites must be at places where vehicles are travelling slowly and the surveyor must have a good view down into the vehicle. Entrances to carparks and roundabouts are examples of good locations.

*Timing:* Surveys are to be conducted on weekdays (excluding school and public holidays) between the hours of 9am and 2.45pm, beginning in 2009.

*Sampling frame:* All children under five years in cars, light vans and taxis. Passengers in trucks, buses or motorcycles are not included in this survey.

*Methodology:* Observational survey of traffic travelling slowly. Suitable sites are roundabouts and car park entrances used by cross section of community. Surveyor must be able to see right into vehicle as small children and infant seats may be below window level.

The following variables are recorded for each observed vehicle occupied by children under five: gender of driver and whether the driver is wearing a seatbelt. For each child in the vehicle, record the location of the child as front/ rear/ luggage compartment (e.g. of a station wagon), the type of restraint used (infant seat, child restraint, booster seat, child harness, adult seatbelt or no restraint). If the child is unrestrained or in adult seatbelt, record whether any suitable restraint was available in the vehicle.

Survey times have been chosen to reduce the number of school-age children travelling, but inevitably there will be some. Surveyors will need to use their judgement as to the age of the child. If a vehicle contains children of mixed age groups (i.e. under and over 5), then details should be recorded for all children and the age groups marked in the column provided.

*Recording of results:* Results are to be recorded on the form provided. Results are to be recorded for every car whose details were wholly or partially observed. To avoid sampling bias, (ie noticing the most “interesting” vehicles), surveyors should record the details of one vehicle, then look up and record details of the next vehicle (i.e. do not attempt to memorise the details of several vehicles).

Each panel allows for up to four children per vehicle. If there are more, use the next panel on the page and indicate with brackets or similar that this is the same vehicle.

When deciding what details you wish to collect, you may decide not to record some details, eg gender of driver, position of child in vehicle, or to add some such as child under or over 2 years, etc. The form is supplied as a Word document so it can be edited to suit.

*Impartiality:* Surveyors must try not to let their own personal biases (or hopes) affect what they record. This is harder than it sounds - it is very easy to see a car full of unrestrained children or a van full of car seats and think 'I must get that one'. The best way to avoid this unconscious bias creeping in, is to make sure to observe the very next car in your chosen direction that has children in it. If several cars go past in a row, take the first, not the most interesting! It also helps if the people doing the survey aren't hoping for a particular result. When surveying you will remember the unusual cases, eg 'there were lots of kids not in restraints' and forget the ordinary ones - you will often be surprised when you actually tally up the results.

*Avoiding double counting:* In places where traffic is light or where cars frequently do a circuit of the same area, try not to observe the same vehicles more than once on the same day. (If you think this is likely you may need to make notes of car make & colour with the first letters of the number plate, so you can check back if a vehicle seems familiar). If you are surveying in a mall or supermarket it pays to observe just the vehicles entering the carpark, to make sure you aren't counting the same vehicle on the way in and again on the way out. (This is also essential if two people are surveying different entrances to the same carpark at the same time). Similarly, two surveyors on streets in the same area should choose traffic directions which mean the same cars aren't counted by both surveyors.

*General instructions:* Surveyors must be competent at identifying the different types of child restraint and at judging which children are of pre-school age. The exercise also requires some expertise in appreciating the differences between forward- and rear- facing infant seats and child seats (some models are designed to do both).

This is a more complex survey than the front and rear observational surveys and requires more detailed training and practice.

*Security:* ID should be carried to identify the surveyor as having a legitimate reason to peer into cars. It is advisable to gain permission from business owners/ managers before surveying on their premises. For personal safety surveyors should have a cellphone and/ or a vehicle nearby, and should wear appropriate clothing for the weather.

*Weather:* Unless you really have to, don't survey on a wet day. Car windows get steamed up so you can't see in. In addition, people tend to stay home when it's raining, so there are fewer children out and about, your biro won't work on wet paper, and you get wet.

*For further information contact the Transport Monitoring team at the Ministry of Transport, ph 04 439 9000 or email [info@transport.govt.nz](mailto:info@transport.govt.nz).*