Serious injury outcome indicators for children: 2000–13
Contents

List of tables and figures.............................................................................................................4

1 Purpose and context..................................................................................................................5
   Acknowledgements ..................................................................................................................5
   Abbreviations..........................................................................................................................5

2 Background and methods .......................................................................................................6
   Defining a serious injury event ...............................................................................................6
   Development of the indicators ...............................................................................................7
   Frequently asked questions .....................................................................................................7

3 Changes from previous publications .....................................................................................10
   NMDS (hospital data) extract update cycle ...........................................................................10

4 Serious injury outcome indicator graphs for children ..........................................................11
   All injury .................................................................................................................................12
   Assault ..................................................................................................................................15
   Intentional (assault and self-harm) .......................................................................................16
   Falls ......................................................................................................................................18
   Motor-vehicle traffic crashes (MVTC) ..................................................................................20

References....................................................................................................................................25
List of tables and figures

Tables
1 Priority areas for national injury prevention by lead agency or agencies ................................6
2 Viability of serious injury outcome indicators for children aged 0–14 years .........................9

Figures
1.1 All fatal injury, children (I11), number of injuries .................................................................12
1.2 All fatal injury, children (I12), age standardised rate .............................................................12
2.1 All serious non-fatal injury, children (I01), number of injuries ............................................13
2.2 All serious non-fatal injury, children (I02), age standardised rate ........................................13
3.1 All serious (fatal and non-fatal) injury, children (I21), number of injuries ..........................14
3.2 All serious (fatal and non-fatal) injury, children (I22), age standardised rate ......................14
4.1 Serious (fatal and non-fatal) assault injury, children (A21), number of injuries .................15
4.2 Serious (fatal and non-fatal) assault injury, children (A22), age standardised rate ............15
5.1 Serious non-fatal intentional injury, children (In01), number of injuries ..........................16
5.2 Serious non-fatal intentional injury, children (In02), age standardised rate .......................16
6.1 Serious (fatal and non-fatal) intentional injury, children (In21), number of injuries ............17
6.2 Serious (fatal and non-fatal) intentional injury, children (In22), age standardised rate .....17
7.1 Serious non-fatal falls injury, children (F01), number of injuries ........................................18
7.2 Serious non-fatal falls injury, children (F02), age standardised rate ......................................18
8.1 Serious (fatal and non-fatal) falls injury, children (F21), number of injuries .......................19
8.2 Serious (fatal and non-fatal) falls injury, children (F22), age standardised rate ....................19
9.1 Fatal MVTC injury, children (M11), number of injuries .......................................................20
9.2 Fatal MVTC injury, children (M12), age standardised rate ..................................................20
10.1 Serious non-fatal MVTC injury, children (M01), number of injuries ..................................21
10.2 Serious non-fatal MVTC injury, children (M02), age standardised rate .............................21
11.1 Serious (fatal and non-fatal) MVTC injury, children (M21), number of injuries ..............22
11.2 Serious (fatal and non-fatal) MVTC injury, children (M22), age standardised rate ...........22
12.1 Serious (fatal and non-fatal) pedestrian injury, children (P21), number of injuries ...........23
12.2 Serious (fatal and non-fatal) pedestrian injury, children (P22), age standardised rate .......23
13.1 Serious (fatal and non-fatal) car occupant injury, children (C21), number of injuries ......24
13.2 Serious (fatal and non-fatal) car occupant injury, children (C22), age standardised rate 24
1 Purpose and context

Serious injury outcome indicators for children: 2000–13 presents long-term trends in the incidence and rate of injury for children aged 0–14 years. This report and its two companion reports:

- are at the forefront of reporting the burden of injury to society in New Zealand
- provide the most robust and reliable measures of serious injury outcomes currently available
- summarise injury trends for the whole population, based on national administrative datasets, and using injury indicators originally developed and validated at the University of Otago Injury Prevention Research Unit
- help support the injury prevention sector working to achieve better outcomes for injury prevention, treatment, and rehabilitation, and to minimise the personal, social, and economic costs of injury.

This report accompanies Serious injury outcome indicators: 2000–13 (Statistics NZ, 2014a) and Serious injury outcome indicators for Māori: 2000–13 (Statistics NZ, 2014b). These three annual reports provide a measure of New Zealand’s progress in reducing the incidence and annual rates of injury since 2000. In each report, the main focus is the graphs (see section 4), which visually represent the changes in the annual incidence and rate of injury.

This report shows variations and trends in injuries over time, for the number, and age standardised rates, of fatal and serious non-fatal injury for ‘all injury’ as well as four of the six priority areas identified under the 2003 New Zealand Injury Prevention Strategy (NZIPS). These four areas are: assault, suicide and intentional self-harm, falls, and motor-vehicle traffic crashes. We include an indicator combining self-harm and assault under the label ‘Intentional injury’. Additional motor-vehicle traffic crash indicators are produced for car occupant and pedestrian injuries.

The description of the background and methods surrounding the development of the indicators is intentionally limited in this report. Please see Serious injury outcome indicators – concepts and methods for 2000–11 (Statistics NZ, 2012) and Serious injury outcome indicators – technical report 2014 (Statistics NZ, 2014d) for technical details.

Acknowledgements

We acknowledge the contribution of the Injury Prevention Research Unit of the University of Otago in developing the serious injury outcome indicators presented in this report. We also acknowledge Analytical Services at the Ministry of Health as the source of data used for the calculation of indicators.

Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC</td>
<td>Accident Compensation Corporation</td>
</tr>
<tr>
<td>ICD</td>
<td>WHO International Classification of Diseases</td>
</tr>
<tr>
<td>ICD-10-AM</td>
<td>ICD-10, Australian Modification</td>
</tr>
<tr>
<td>MVTC</td>
<td>Motor-vehicle traffic crashes</td>
</tr>
<tr>
<td>NMDS</td>
<td>National Minimum Dataset of hospital discharges</td>
</tr>
<tr>
<td>NZIPS</td>
<td>2003 New Zealand Injury Prevention Strategy</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
2 Background and methods

This chapter provides background information about the serious injury outcome indicators. It introduces the rationale for developing the indicators and defines ‘serious injury’ in the context of the indicators. It also answers frequently asked questions.

The serious injury outcome indicators were originally developed by the University of Otago Injury Prevention Research Unit to monitor key injury priority areas identified by the 2003 New Zealand Injury Prevention Strategy (NZIPS). NZIPS established a framework for the injury prevention activities of government agencies, local government, non-government organisations, communities, and individuals.

The strategy identified six priority areas for national injury prevention, which together make up more than 80 percent of injury deaths and serious injuries in New Zealand.

Table 1
Priority areas for national injury prevention by lead agency or agencies

<table>
<thead>
<tr>
<th>Priority area</th>
<th>Lead agency or agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assault</td>
<td>Ministry of Justice, Ministry of Social Development</td>
</tr>
<tr>
<td>Work-related injuries</td>
<td>WorkSafe NZ</td>
</tr>
<tr>
<td>Suicide and intentional self-harm</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>Falls</td>
<td>Accident Compensation Corporation</td>
</tr>
<tr>
<td>Motor-vehicle traffic crashes</td>
<td>Ministry of Transport</td>
</tr>
<tr>
<td>Drowning and near-drowning</td>
<td>Accident Compensation Corporation</td>
</tr>
</tbody>
</table>

Since 2013, these priority areas have formed part of the business-as-usual responsibilities of the lead agencies. Serious injury outcome indicators were developed for each area. The indicators include fatal, serious non-fatal, and serious (fatal and non-fatal combined) injury indicators.

This report presents an adaptation of the serious injury outcome indicators for children aged 0–14 years, for four of the former NZIPS priority areas (assault, suicide and intentional self-harm, falls, and motor-vehicle traffic crashes).

See ‘Frequently asked questions’ section (below) for more detail about the priority areas.

Defining a serious injury event

For the serious injury outcome indicators the word ‘injury’ refers to an injury event. That is, an event in which an injury or injuries occurred.

A serious injury is one that results in death (fatal injury), or an injury where a patient is admitted to hospital with a probability of death of 6.9 percent or more (serious non-fatal injury). A serious non-fatal injury must also have a primary diagnosis of injury, and must be the first admission to hospital (ie re-admissions for the same injury are excluded).

See Serious injury outcome indicators – technical report 2014 (Statistics NZ, 2014d) for a full description of the methods used to identify cases of fatal and serious non-fatal injury.
Development of the indicators

The serious injury outcome indicators are summary measures that reflect, directly or indirectly, variations and trends in injuries over time. They were a key tool for measuring the progress and effect of the former NZIPS, and continue to have value as a tool for the sound and valid measurement of variations and trends in injuries over time.

In April 2010, leading central government agencies signed the enduring Protocol for government agency reporting on injury incidence in New Zealand, (Statistics NZ, 2010). This protocol ensures that agencies use the serious injury outcome indicators to adopt consistent, high-level injury measures when reporting on injury trends.


Frequently asked questions

What data are the indicators based on?
All the serious injury outcome indicators for children are based on the Ministry of Health’s Mortality Collection data (Ministry of Health, nd(a)) and National Minimum Dataset (NMDS) of hospital discharges (Ministry of Health, nd(b)).

What do the numbers and injury rates reflect?
The number of injuries is the number of fatal or serious non-fatal injury events in a given year. The number provides a national count of injury events.

Age-standardised rates estimate an individual’s average annual risk of being injured. Age standardisation is a process of adjusting the rate of injury to account for changes in the age structure of a population over time.

Why is there a serious (fatal and non-fatal) injury indicator?
The ‘serious (fatal and serious non-fatal)’ indicator is the relevant fatal, and serious non-fatal, indicator counts combined:

\[
\text{fatal + serious non-fatal} = \text{serious (fatal and serious non-fatal)}
\]

The combined indicators are included to present a more comprehensive picture of serious injury trends in New Zealand. By examining fatal and serious non-fatal injury events together we can account for the potential effect of independent factors, such as improved medical treatment. For example, improvements in treatment may mean that more people survive their injuries than before, which results in a decline in the number or rate of fatal injuries. However, this change would not result in fewer injury cases, but in a shift of cases from fatal to serious non-fatal. The serious (fatal and non-fatal) injury indicators reflect this shift.

What coding scheme is used for injury diagnosis?
The coding scheme used for classifying injury diagnosis and external cause of injury in the Mortality Collection and NMDS is the World Health Organization’s International Classification of Diseases and Health Related Problems (ICD) (World Health Organization, 1992). The 10th revision of the ICD (the ICD-10) was introduced into hospitalisation coding on 1 July 1999 and into mortality coding on 1 January 2000. As 2000 is the first full calendar year of ICD-10 reporting, the serious injury outcome indicators begin reporting from this time.
See *Serious injury outcome indicators – technical report 2014* (Statistics NZ, 2014d) for more detail.

**What period is presented in the graphs?**
For serious non-fatal injuries the period is the calendar years 2000 to 2013. For fatal injuries, the period is the 2000 to 2011 calendar years. Many cases of injury-related death must be reviewed by a coroner, so there is a time delay in recording the cause of fatal injury. This delay is typically two years.

**Why are there provisional indicators?**
The provisional indicators are based on data sources other than the Ministry of Health’s Mortality Collection or NMDS. They have not yet been through the formal validation process described in *Developing valid injury outcome indicators: A report for the New Zealand Injury Prevention Strategy* (Cryer, Langley, & Stephenson, 2004).

**What is the significance of the colours used in the graphs?**
The colours in the graphs were chosen to signal the status of each indicator (validated or provisional).

<table>
<thead>
<tr>
<th>Colour</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aqua</td>
<td>validated</td>
</tr>
<tr>
<td>Light green</td>
<td>provisional</td>
</tr>
</tbody>
</table>

**Why aren’t all priority areas covered in this report?**
For some priority areas, there are only a small number of cases each year in the 0–14-year age group. As a result, the indicators are not reliable, and are not produced. For this reason, we exclude indicators for work-related injury and drowning from the serious injury outcome indicators for children. In other cases, we calculated a serious (fatal and non-fatal) indicator to overcome the difficulty of small numbers.

Two extra traffic-related indicators were developed for children: pedestrian injuries and car occupant injuries. Both indicators are subsets of those for motor-vehicle traffic crashes. They provide more information about the role of children in motor-vehicle traffic crashes, recognising that children suffer more injuries than adults as car occupants and as pedestrians.

Additionally, the priority areas ‘assault’ and ‘intentional self-harm’ are combined into one ‘intentional’ indicator. This is in addition to the assault indicator. Table 4 outlines the viability of indicators for children, for each injury priority area.
## Serious injury indicators for children

### Table 2
**Viability of serious injury outcome indicators for children aged 0–14 years**

By injury priority area

<table>
<thead>
<tr>
<th>Injury priority area</th>
<th>Type of indicator</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fatal</td>
<td>Serious non-fatal</td>
</tr>
<tr>
<td>All injury</td>
<td>✓ (2)</td>
<td>✓ (2)</td>
</tr>
<tr>
<td>Assault</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Work-related</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Intentional self-harm</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Falls</td>
<td>X</td>
<td>✓ (2)</td>
</tr>
<tr>
<td>Motor-vehicle traffic crashes</td>
<td>✓ (2)</td>
<td>✓ (2)</td>
</tr>
<tr>
<td>Pedestrian</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Car occupant</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Drowning and near-drowning</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Intentional (assault and self-harm)</td>
<td>X</td>
<td>✓ (2)</td>
</tr>
</tbody>
</table>

**Symbols:**

✓ = number of cases per year makes the indicators viable  
X = indicator not viable because of small numbers each year  
(2) = number of viable indicators

### Why are some injury indicators presented as a three-year moving average? What does this mean?

The exact number of deaths and injuries fluctuates randomly from year to year, even when there is no underlying trend. For most injury priority areas, these fluctuations are small compared with the overall numbers of injuries and deaths, so the trends are still clear. However, when the overall number is small, these fluctuations may hide trends in the numbers and rates of injury.

To overcome this effect, we estimate three-year moving averages when the number of deaths or injuries shown is less than 100 a year. This means, for example, that we use data from 2000, 2001, and 2002 to estimate an indicator value for 2001. In these cases, we can’t calculate a moving average figure for the first and last year in the series, so these are not shown on the graphs and tables.

### What are the vertical black lines on the graphs’ bars? What do they mean?

The vertical black lines in the graphs for each annual indicator are error bars. Error bars represent 95 percent confidence intervals. Confidence intervals are useful when gauging change from one point to another. The more that the error bars for each set of annual indicator results overlap, the less confidence we have that there is a real difference between the time periods. If there is no overlap, that is a very strong indication of a difference between the underlying numbers. However, we should not conclude there is a difference if the overlap is more than one-third of the bars’ length.

A significant difference tells us nothing about its cause (many causes are possible, for example, safety campaigns or weather conditions).
3 Changes from previous publications

We have omitted the former NZIPS baselines and key trends from this report. This decision followed feedback from the Injury Information Working Group that key users of this data (e.g. leading central government agencies) no longer required them.

A summary of key injury trends has not been included in the report this year in the absence of the NZIPS baselines. In previous years, the key trends have been summarised in terms of changes above or below the NZIPS baseline year. Without the baseline figure, descriptions of the trends become more challenging and could potentially mislead. To assist with interpretation of variations in injuries over time, we have provided confidence intervals (or error bars) with the graphs.

There are no other changes to the indicator series methodology in 2014.

See Serious injury outcome indicators – technical report 2014 (Statistics NZ, 2014d) for a full description of all methodological and process changes introduced in the indicators in 2012.

NMDS (hospital data) extract update cycle

The NMDS is a dynamic database. Data within it changes as it is updated or corrected so extracts at different times will show different information. At any point in time, the NMDS holds the most accurate data available.

Until 2011, the NMDS data used in the serious injury outcome indicators was updated for only the two most-recent years of data available (one new year of data and a final extract of the previous year’s provisional data).

For the 2012 publication, we used an updated extract of the NMDS database from 1994 to 2011. The data were extracted in April 2012.

We subsequently further analysed the NMDS injury events data and determined that updating the latest two years of data available provides an acceptable level of stability and completeness. This indicator publication is therefore based on:

- data from 2000–09, as recorded in the NMDS at April 2012
- data from 2010–11, as recorded in the NMDS at September 2013
- data from 2012–13, as recorded in the NMDS at May 2014.
This chapter presents the graphs for the serious injury outcome indicators for children, for ‘all injury’ and for four of the former NZIPS injury priority areas, plus the two additional traffic-related indicators (pedestrian injuries and car occupant injuries), and an intentional injury indicator.

The serious injury outcome indicators present a high-level overview of serious injury trends over time. Where confidence intervals do not overlap, real changes in the injury number or rate are likely.

See chapter 5 of Serious injury outcome indicators – technical report 2014 (Statistics NZ, 2014d) for more information on interpreting the graphs.

See ‘Available files’ on the Serious injury outcome indicators for children web page for tables presenting the data from which the graphs are derived.

The graphs are numbered to correspond with the appropriate table. For example, there are two graphs for ‘all fatal injury for children’: the graph for number of injuries (I11) is titled figure 1.1; the graph for age standardised rate (I12) is titled figure 1.2. The data from which we derived these graphs are in table 1.
All injury

Figure 1.1

All fatal injury, children (I11)
Number of injuries
2000–11

Note: The error bars show 95 percent confidence intervals.
Source: Ministry of Health, Mortality Collection.

Figure 1.2

All fatal injury, children (I12)
Age standardised rate
2000–11

Note: The error bars show 95 percent confidence intervals.
Source: Ministry of Health, Mortality Collection, Statistics New Zealand.
Figure 2.1

All serious non-fatal injury, children (I01)
Number of injuries
2000–13

Note: Data for 2013 are provisional. The error bars show 95 percent confidence intervals.
Source: Ministry of Health, National Minimum Dataset.

Figure 2.2

All serious non-fatal injury, children (I02)
Age standardised rate
2000–13

Note: Data for 2013 are provisional. The error bars show 95 percent confidence intervals.
Figure 3.1

All serious (fatal and non-fatal) injury, children (I21)
Number of injuries
2000–11

Note: The error bars show 95 percent confidence intervals.
Source: Ministry of Health, National Minimum Dataset and Mortality Collection.

Figure 3.2

All serious (fatal and non-fatal) injury, children (I22)
Age standardised rate
2000–11

Note: The error bars show 95 percent confidence intervals.
Source: Ministry of Health, National Minimum Dataset and Mortality Collection; Statistics New Zealand.
Assault

Figure 4.1

Serious (fatal and non-fatal) assault injury, children (A21)
Number of injuries
2000–11

Note: Three-year moving averages have been calculated due to the small number of injuries. No data appears for 2000 and 2011 because three-year moving averages are calculated (due to small numbers of injuries). The error bars show 95 percent confidence intervals.

Figure 4.2

Serious (fatal and non-fatal) assault injury, children (A22)
Age standardised rate
2000–11

Note: Three-year moving averages have been calculated due to the small number of injuries on which the rates are based. No data appears for 2000 and 2011 because three-year moving averages are calculated (due to small numbers of injuries). The error bars show 95 percent confidence intervals.

Intentional (assault and self-harm)

Figure 5.1

Serious non-fatal intentional injury, children (In01)
Number of injuries
2000–13

Note: Three-year moving averages have been calculated due to the small number of injuries. No data appears for 2000 and 2013 because three-year moving averages are calculated (due to small numbers of injuries). The error bars show 95 percent confidence intervals. Figures for 2012 are provisional. Source: Ministry of Health, National Minimum Dataset.

Figure 5.2

Serious non-fatal intentional injury, children (In02)
Age standardised rate
2000–13

Note: Three-year moving averages have been calculated due to the small number of injuries. No data appears for 2000 and 2013 because three-year moving averages are calculated (due to small numbers of injuries). The error bars show 95 percent confidence intervals. Figures for 2012 are provisional. Source: Ministry of Health, National Minimum Dataset; Statistics New Zealand.
Figure 6.1

**Serious (fatal and non-fatal) intentional injury, children (In21)**

**Number of injuries**

2000–11

Note: Three-year moving averages have been calculated due to the small number of injuries. No data appears for 2000 and 2011 because three-year moving averages are calculated (due to small numbers of injuries). The error bars show 95 percent confidence intervals. Source: Ministry of Health, National Minimum Dataset and Mortality Collection.

Figure 6.2

**Serious (fatal and non-fatal) intentional injury, children (In22)**

**Age standardised rate**

2000–11

Note: Three-year moving averages have been calculated due to the small number of injuries on which the rates are based. No data appears for 2000 and 2011 because three-year moving averages are calculated (due to small numbers of injuries). The error bars show 95 percent confidence intervals. Source: Ministry of Health, National Minimum Dataset and Mortality Collection; Statistics New Zealand.
Falls

Figure 7.1

![Bar chart showing serious non-fatal falls injury, children (F01) number of injuries, 2000–13.](image)

Note: Data for 2013 are provisional. The error bars show 95 percent confidence intervals. Source: Ministry of Health, National Minimum Dataset.

Figure 7.2

![Bar chart showing serious non-fatal falls injury, children (F02) age standardised rate, 2000–13.](image)

Note: Data for 2013 are provisional. The error bars show 95 percent confidence intervals. Source: Ministry of Health, National Minimum Dataset, Statistics New Zealand.
Figure 8.1

**Serious (fatal and non-fatal) falls injury, children (F21)**

*Number of injuries*  
2000–11

Note: The error bars show 95 percent confidence intervals.  
Source: Ministry of Health, National Minimum Dataset and Mortality Collection.

Figure 8.2

**Serious (fatal and non-fatal) falls injury, children (F22)**

*Age standardised rate*  
2000–11

Note: The error bars show 95 percent confidence intervals.  
Source: Ministry of Health, National Minimum Dataset and Mortality Collection; Statistics New Zealand.
Motor-vehicle traffic crashes (MVTC)

Figure 9.1

Fatal MVTC injury, children (M11)
Number of injuries
2000–11

Note: Three-year moving averages have been calculated due to the small number of injuries. No data appears for 2000 and 2011 because three-year moving averages are calculated (due to small numbers of injuries). The error bars show 95 percent confidence intervals.
Source: Ministry of Health, Mortality Collection.

Figure 9.2

Fatal MVTC injury, children (M12)
Age standardised rate
2000–11

Note: Three-year moving averages have been calculated due to the small number of injuries on which the rates are based. No data appears for 2000 and 2011 because three-year moving averages are calculated (due to small numbers of injuries). The error bars show 95 percent confidence intervals.
Source: Ministry of Health, Mortality Collection; Statistics New Zealand.
Figure 10.1

**Serious non-fatal MVTC injury, children (M01)**

*Number of injuries*

2000–13

![Graph showing number of serious non-fatal MVTC injuries, children (M01) from 2000 to 2013.](image)

*Note:* Data for 2013 are provisional. The error bars show 95 percent confidence intervals.


Figure 10.2

**Serious non-fatal MVTC injury, children (M02)**

*Age standardised rate*

2000–13

![Graph showing age standardised rate of serious non-fatal MVTC injuries, children (M02) from 2000 to 2013.](image)

*Note:* Data for 2013 are provisional. The error bars show 95 percent confidence intervals.

Figure 11.1

Serious (fatal and non-fatal) MVTC injury, children (M21)
Number of injuries
2000–11

Note: The error bars show 95 percent confidence intervals.
Source: Ministry of Health, National Minimum Dataset and Mortality Collection.

Figure 11.2

Serious (fatal and non-fatal) MVTC injury, children (M22)
Age standardised rate
2000–11

Note: The error bars show 95 percent confidence intervals.
Source: Ministry of Health, National Minimum Dataset and Mortality Collection; Statistics New Zealand.
Pedestrian

Figure 12.1

Serious (fatal and non-fatal) pedestrian injury, children (P21)
Number of injuries
2000–11

![Bar chart showing number of serious pedestrian injuries from 2000 to 2011]

Note: Three-year moving averages have been calculated due to the small number of injuries. No data appears for 2000 and 2011 because three-year moving averages are calculated (due to small numbers of injuries). The error bars show 95 percent confidence intervals.
Source: Ministry of Health, National Minimum Dataset and Mortality Collection.

Figure 12.2

Serious (fatal and non-fatal) pedestrian injury, children (P22)
Age standardised rate
2000–11

![Bar chart showing age-standardised rate of serious pedestrian injuries from 2000 to 2011]

Note: Three-year moving averages have been calculated due to the small number of injuries on which the rates are based. No data appears for 2000 and 2011 because three-year moving averages are calculated (due to small numbers of injuries). The error bars show 95 percent confidence intervals.
Source: Ministry of Health, National Minimum Dataset and Mortality Collection; Statistics New Zealand.
Serious injury outcome indicators for children 2000–13

Car occupant

Figure 13.1

Serious (fatal and non-fatal) car occupant injury, children (C21)
Number of injuries
2000–11

Note: Three-year moving averages have been calculated due to the small number of injuries. No data appears for 2000 and 2011 because three-year moving averages are calculated (due to small numbers of injuries). The error bars show 95 percent confidence intervals.
Source: Ministry of Health, National Minimum Dataset and Mortality Collection.

Figure 13.2

Serious (fatal and non-fatal) car occupant injury, children (C22)
Age standardised rate
2000–11

Note: Three-year moving averages have been calculated due to the small number of injuries on which the rates are based. No data appears for 2000 and 2011 because three-year moving averages are calculated (due to small numbers of injuries). The error bars show 95 percent confidence intervals.


