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WORK RELATED FATAL INJURY STUDY - 3

Work-related Road Traffic Fatalities 1999-2014

The Work-Related Fatal Injury Study (WRFIS-3), funded by the Health Research Council of New Zealand, is utilising Coronial case review of all fatal injuries in New Zealand for the period 1995-2014.

Injury-related fatalities were initially identified from the Ministry of Health's Mortality Collection using selected underlying cause of death codes (ICD-10-AM). These deaths were then matched to Coronial case files and were subsequently reviewed for work-relatedness.

The main inclusion criteria are:

- death resulting from an unintentional injury within one year of incident;
- incident due to fatal injuries sustained while working (worker), while commuting to or from work (commuter), or due to another person's work activity (bystander);
- age at the time of injury between 0-84 years inclusive;
- occurred within New Zealand; and
- employed within the civilian labour force.

This analysis has been restricted to fatal injuries sustained on a public road due to a road traffic injury between 1999 and 2014. The previous Work-Related Fatal Traffic Injuries Study covered the period 1985 to 1998.

Work-related road traffic deaths

In total 6,169 road transport traffic-related deaths were identified in the Ministry of Health's Mortality Collection, of which 6,074 cases (98%) were matched to Coronial records.

Of the 6,074 cases with a Coronial record, 1,861 were work-related cases which is an average of 116 deaths per year (Table 1).

The purpose of journey could not be determined in 1,951 (32.6%) cases. As such the estimates presented are likely to be under-estimate the true burden of work to deaths due to road traffic incidents.

Table 1. Total number of work-related road traffic fatalities in New Zealand, aged 0-84yrs, 1999-2014.

	Frequency	Percent
Work-related	1,861	30.6
Not work-related	2,232	36.8
Indeterminate	1,952	32.1
Ineligible	29	0.5
Total	**6074**	

Following detailed case review of the 1,861 work-related road transport cases identified using the International Classification of Disease-9 & -10 coding a total of 1,817 work-related cases were confirmed as occurring on public roads. The following data are restricted to these cases.

Work Context

There were 365 workers who died as a result of a road traffic incident during the course of their employment between 1999 and 2014 in New Zealand (Table 2). The major contributor to the burden of work-related road traffic fatalities, however, were the 1,061 bystanders who died as a result of exposure to another person's work driving activity, regardless of fault. Commuters comprised a further 20% of the fatalities.

Table 2. Total number of work-related road traffic fatalities by work context in New Zealand, aged 0-84yrs, 1999-2014.

	Frequency	Percent
Workers	365	20.1
Commuters	368	20.3
Bystanders	1,061	58.2
Other	23	1.4
Total	**1817**	

The contribution of work-related road traffic fatalities to the national road toll was:

- Workers & bystanders 23% (range: 17% to 31%)
- Workers, bystanders & commuters 29% (range: 22% to 36%)

Occupation

Occupational groups with the largest number of road traffic deaths in workers were:

- Machinery operators & drivers 184 deaths (50%)
- Labourers 43 deaths (12%)
- Managers (including farmers) 39 deaths (11%)

Industry

The industry involved in the fatal injury event was determined, regardless of fault, for workers and bystander only. Industries with the largest number of road traffic deaths in workers and bystanders were:

- Transport, Postal & Warehousing 814 deaths (57%)
  - *Road transport (746 deaths, 52%)*
- Agriculture, Forestry & Fishing 108 deaths (8%)
- Construction 92 deaths (6%)

Work-related Fatal Injury Study Project

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