Ministry of Transport
TE MANATŪ WAKA

Trucks

CRASH STATISTICS FOR THE YEAR ENDED 31 DEC 2007

Prepared by Strategy and Sustainability, Ministry of Transport

CRASH FACTSHEET

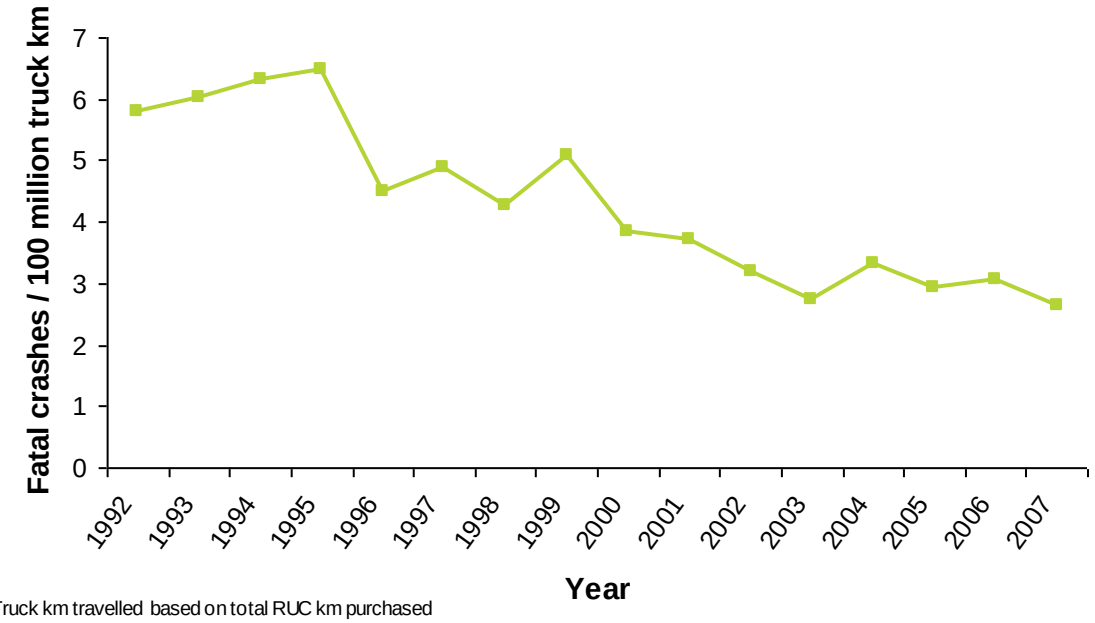
2008

In 2007, 74 people were killed and a further 1,176 were injured in road crashes involving trucks[1]. This was 18 percent of all deaths and seven percent of all reported injuries on our roads.

Safety levels improving

Taking into account the increase in truck traffic the level of safety has improved. The number of fatal crashes that involve a truck for every 100 million kilometres driven by trucks has halved since the early 1990's.

Fatal truck crashes per 100 million truck km



Truck km travelled based on total RUC km purchased

Because of their large mass trucks tend to be over represented in serious crashes. Deaths from crashes involving trucks make up around 18 percent of the total road toll, while only about seven percent of the total distance travelled on NZ roads is travelled by trucks.

In crashes involving trucks most of the deaths (about 83%) are not truck occupants, but rather the other road users involved. This reflects the fact that in a collision between a heavy vehicle and a light vehicle or vulnerable road user there is a much higher probability of death or serious injury than in a collision involving only light vehicles.

This is not to say that the fault lies primarily with the heavy vehicles or their drivers. As shown in a later section, truck drivers have the primary responsibility for just over a third (34%) of the fatal crashes in which they are involved.

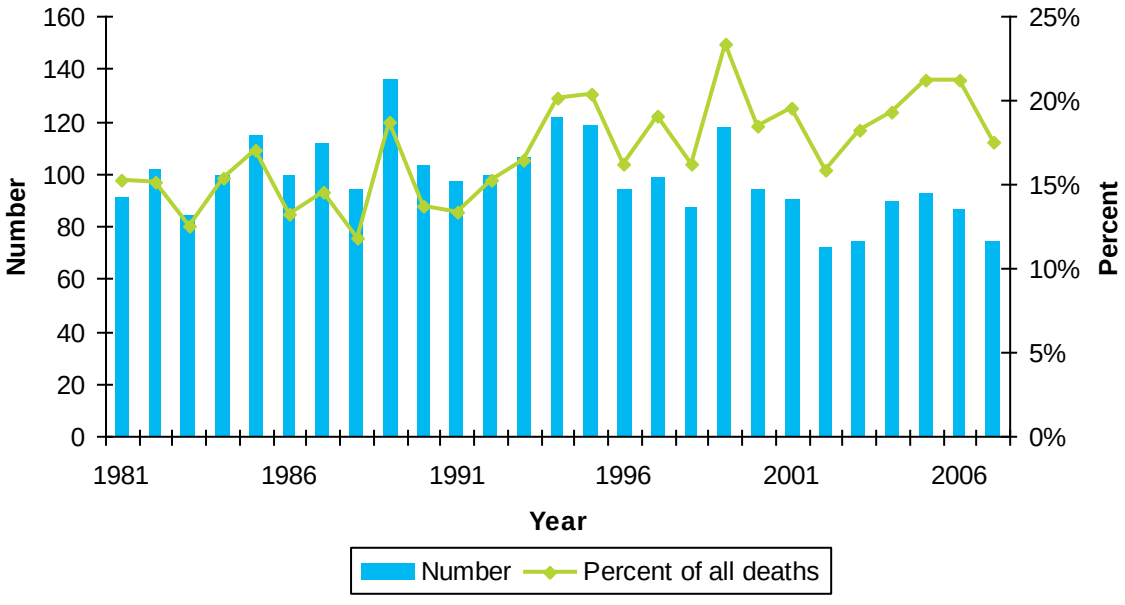
[1] Trucks include all trucks involved in Police reported crashes regardless of size.

Time series

Deaths and injuries in crashes involving trucks, 1980-2007

	Deaths				Injuries			
Year	Truck occupants	Other road users	Total	% road toll	Truck occupants	Other road users	Total	% road injuries
1980	15	53	68	12%	190	693	883	6%
1981	16	75	91	15%	186	712	898	6%
1982	12	89	101	15%	246	670	916	6%
1983	4	80	84	12%	203	675	878	5%
1984	13	86	99	15%	237	820	1057	6%
1985	15	99	114	17%	271	905	1176	6%
1986	15	84	99	13%	274	903	1177	6%
1987	16	95	111	14%	309	859	1168	6%
1988	11	83	94	12%	307	786	1093	6%
1989	14	122	136	19%	272	795	1067	6%
1990	7	96	103	14%	280	893	1173	7%
1991	15	82	97	13%	291	681	972	6%
1992	6	93	99	15%	258	736	994	6%
1993	12	94	106	16%	297	783	1080	7%
1994	24	97	121	20%	331	851	1182	7%
1995	13	105	118	20%	380	890	1270	8%
1996	26	68	94	16%	359	784	1143	8%
1997	12	86	98	19%	308	720	1028	8%
1998	11	76	87	16%	282	702	984	8%
1999	17	100	117	23%	288	637	925	8%
2000	16	78	94	18%	241	519	760	7%
2001	13	77	90	19%	284	634	918	7%
2002	13	59	72	16%	337	687	1024	7%
2003	16	58	74	18%	349	650	999	7%
2004	19	70	89	19%	401	724	1125	8%
2005	21	71	92	21%	367	766	1133	8%
2006	15	71	86	21%	375	766	1141	8%
2007	10	64	74	18%	396	780	1176	7%

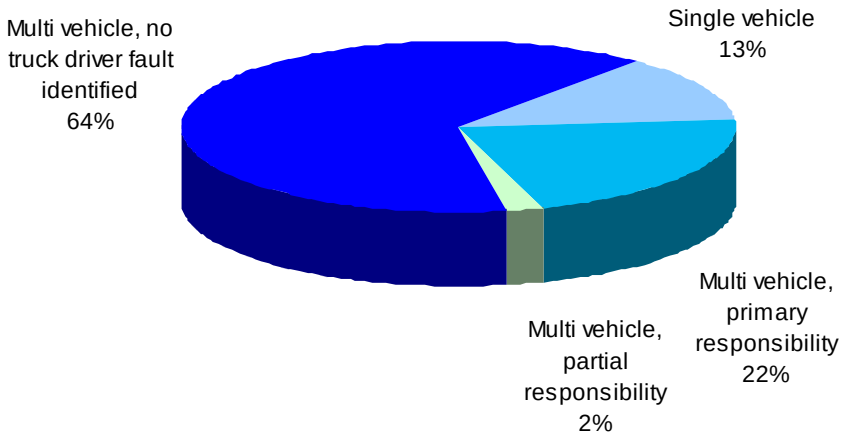
Deaths in crashes involving trucks



Who was at fault?

Note: In this section a 'single vehicle' crash is a crash in which there was only one truck and no other road users were involved. A 'multi vehicle' or 'multi road user' crash involves a truck and at least one other road user.

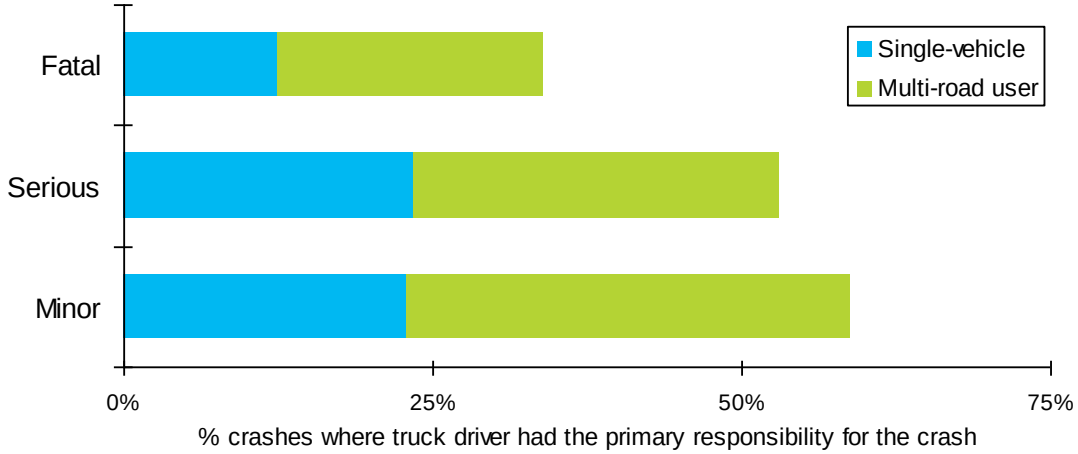
Truck driver fault in fatal crashes 2003-2007



Fault in truck crashes 2003-2007

Crash severity		Single vehicle truck crashes	Crashes involving another road user		
			Truck primary responsibility	Truck partial responsibility	No Truck fault
Fatal	Number	*44*	*76*	*7*	*226*
	Percent	12%	22%	2%	64%
Injury	Number	*920*	*1369*	*131*	*1567*
	Percent	23%	34%	3%	39%

Percentage of truck crashes in which a truck driver had the primary responsibility for the crash 2003- 2007



For more serious crashes, the truck driver was less likely to have the primary responsibility for the crash. The truck driver had the primary responsibility for just over a third (34%) of fatal crashes, as compared to well over a half (59%) for minor injury crashes.

For fatal crashes that involved a truck and another road user, the truck driver had the primary responsibility for one quarter (25%) of the crashes. For minor injury crashes this figure rises to 47 percent.

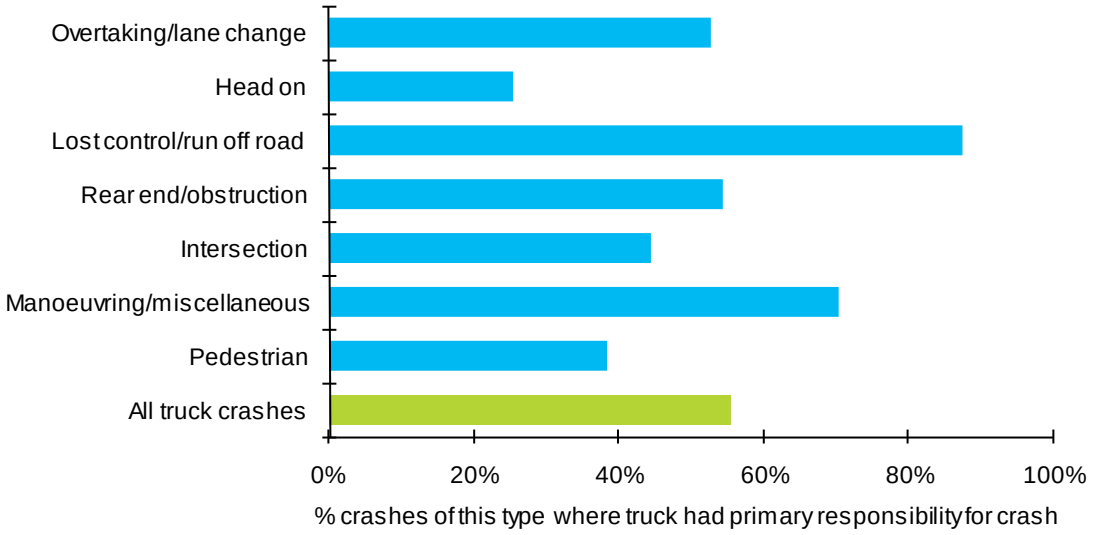
Types of crash

Type of crash by speed limit area and crash severity, 2003 - 2007

Movement type	Speed limit area				All truck crashes			
	Rural		Urban (70 km/h or less)		Fatal		Injury	
	Fatal	Injury	Fatal	Injury	Number	%	Number	%
Overtaking/lane change	21	237	7	98	28	8%	335	8%
Head on	142	406	12	115	154	43%	521	13%
Lost control/run off road	42	769	6	231	48	13%	1000	24%
Rear end/obstruction	13	334	5	417	18	5%	751	18%
Intersection	40	416	18	637	58	16%	1053	26%
Manoeuvring/miscellaneous	17	144	7	163	24	7%	307	7%
Pedestrian	14	16	15	128	29	8%	144	4%
Total	**289**	**2322**	**70**	**1789**	**359**	**100%**	**4111**	**100%**

Open road head-on crashes are a major feature in fatal truck crashes. The truck driver has the primary responsibility for only about a quarter of these crashes.

Percentage of truck crashes where the truck driver had the primary responsibility for the crash 2003-2007



Where do crashes happen?

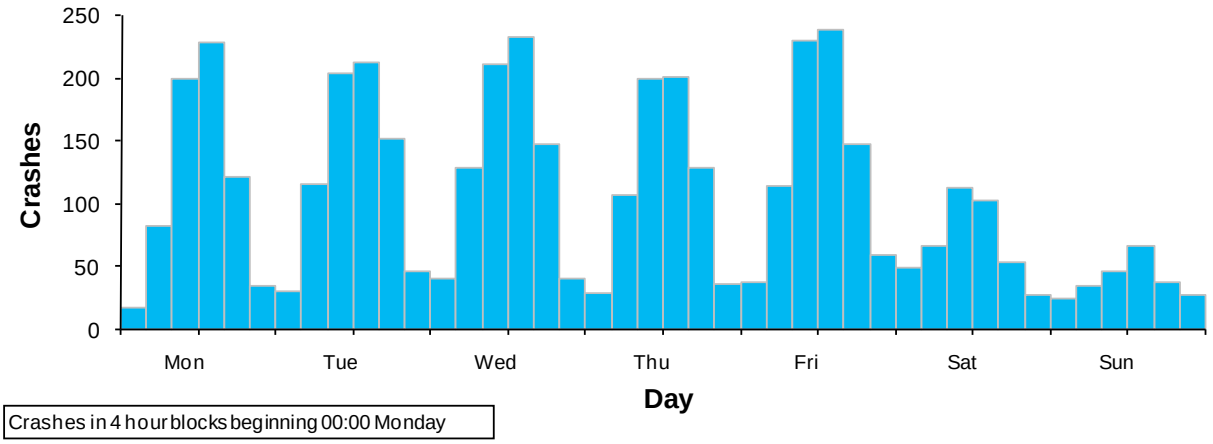
Urban roads (speed limit of 70 km/h or less) and open roads 2003–2007

Type of road	Fatal crashes	Injury crashes	Total crashes
Urban	70	1789	1859
Open road	289	2322	2611
Total	**359**	**4111**	**4470**

Eighty-one percent of fatal truck crashes and 56 percent of injury crashes occur on the open road.

When do crashes happen?

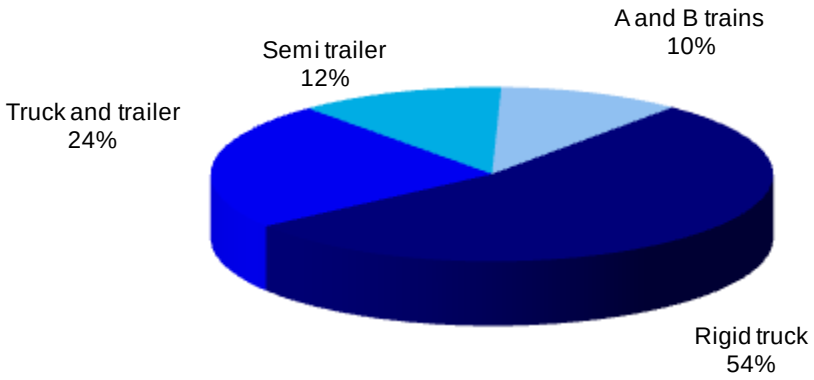
Fatal and injury truck crashes (2003-2007)



The peak times for truck accidents are during the main working hours between 8am and 4pm on weekdays.

Types of truck rig involved in crashes

Truck rigs involved in fatal crashes 2003 - 2007



Note A Train - A towing vehicle towing a semi trailer followed by a full trailer
B Train - A towing vehicle with two semi trailers attached

Heavy combination rigs as a percentage of all trucks involved in crashes, by crash severity and road type 2003–2007

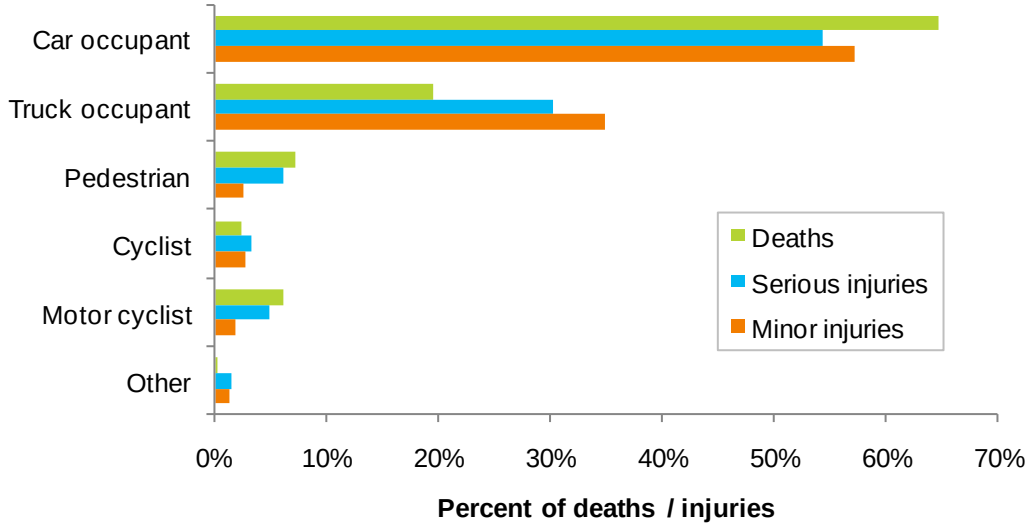
(Combinations include; truck and trailer, semi-trailer, and A or B train.)

Type of road	Fatal crashes	Serious injury crashes	Minor injury crashes
Urban	39%	24%	19%
Open road	48%	40%	34%
Total	**46%**	**34%**	**28%**

As would be expected the bigger combination rigs feature more in open road crashes than urban crashes. For all areas the bigger rigs feature more in fatal crashes than injury crashes. This simply reflects the fact that as the mass of one of the vehicles in a crash increases, so does the severity of the crash outcome.

Types of road users killed and injured in crashes involving trucks

Types of road users killed and injured in truck crashes, by injury severity, 2003-2007



Only about one in five deaths in truck crashes are truck drivers or passengers. Nearly two thirds are car or van drivers or passengers. The other 16 percent are the less well protected road users – pedestrians (7%), motorcyclists (6%) and cyclists (2%). For non-fatal injuries received in truck crashes the pattern changes a little to: 56 percent car occupants; 34 percent truck occupants; and 10 percent for other road users.

Most of the truck occupant casualties from road crashes (81%) are killed or injured in crashes that involve only trucks.

In collisions that involve only one car and one truck, 95 percent of the deaths, 93 percent of the serious injuries and 81 percent of the minor injuries are car occupants. These numbers reflect the fact that in collisions between large vehicles and small vehicles (or unprotected road users) the occupants of the smaller vehicles are more likely to be seriously injured than the occupants of the larger vehicles.

For further information on crash statistics see *Motor Vehicle Crashes in New Zealand*, the annual statistical statement produced by the Ministry of Transport. This publication is available in secondary school libraries and many public libraries and online at http://www.transport.govt.nz

Enquires relating to crash statistics may be directed to the Ministry of Transport, PO Box 3175, Wellington, or by email on info@transport.govt.nz. For more information about road safety, visit the Ministry of Transport website at www.transport.govt.nz.

"Truck Crashes" was prepared by Strategy and Sustainability, Ministry of Transport, July 2008.