



**A profile of fatal injuries in South Africa
7th Annual Report of the
NATIONAL INJURY MORTALITY SURVEILLANCE SYSTEM
2005**



Section 5. Tshwane / PRETORIA Metropolitan Area

Background

This short report, which covers the period 1 January to 31 December 2005, describes the fatal injury profile in the Tshwane/Pretoria Metropolitan area, and includes data from two mortuaries: Pretoria and MEDUNSA.

This report has been generated by a software programme that interfaces with our database and produces a number of standard outputs. The Crime, Violence and Injury Lead Programme can provide more detailed analysis on request.

Year	2001		2002		2003		2004		2005	
Population#	1 985 983		2 013 868		2 033 824		2 053 978		2 082 817	
	Total deaths	Rate/100,000 pop. [§]	Total deaths	Rate/100,000 pop.	Total deaths	Rate/100,000 pop.	Total deaths	Rate/100,000 pop.	Total deaths	Rate/100,000 pop.
Violence	653	29.6	629	28.5	549	24.2	596	26.4	464	20.7
- firearm violence	398	17.8	384	16.9	320	13.8	329	14.1	221	9.6
Suicide	308	15.2	278	13.3	293	13.5	341	15.7	286	13.5
- firearm suicide	124	6.4	118	5.7	122	5.9	121	5.6	86	4.5
- hanging	84	3.8	76	3.6	89	3.8	110	4.8	111	5.0
Transport	716	40.3	677	35.8	694	34.4	779	37.8	780	37.4
- road traffic	684	33.6	646	32.1	657	32.1	738	35.8	744	35.6
<i>pedestrian</i>	238	11.9	237	11.7	231	11.9	250	12.4	269	13.1
<i>driver</i>	95	4.5	106	5.3	118	5.4	135	6.6	154	7.0
- railway deaths	31	1.6	27	1.2	37	1.6	41	1.9	36	1.9
Unintentional	240	13.0	183	10.2	213	11.3	237	11.6	193	9.8
- burns	56	2.8	48	2.6	72	3.9	76	3.9	66	3.5
- drowning	37	1.9	30	1.6	30	1.5	31	1.5	19	1.0
ALL INJURIES[‡]	2235	110.4	2035	99.9	2028	97.7	2266	107.6	1998	96.0

* WHO World Standard Population Distribution

[‡] City populations adjusted from 2001 Census using Actuarial Society of South Africa's provincial growth estimates (www.assa.org)

[§] Totals adjusted for missing ages.

[‡]Includes apparent manner of death undetermined.

Acknowledgements

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Purpose and Scope

The NIMSS produces and disseminates descriptive epidemiological information for deaths due to non-natural causes that, in terms of existing legislation, are subject to medico-legal investigation. The end goal is to establish a permanent system that will record all such deaths that occur annually in South Africa. The NIMSS will at a local level, regional and national level, provide information to:

- describe the incidence, causes and consequences of non-natural deaths;
- prioritise injury and violence prevention action directed at high risk groups and socio-economic risk factors;
- identify new injury trends and emerging problem areas;
- monitor seasonal and longitudinal changes in the profile of non-natural fatalities ; and
- evaluate direct and indirect violence and injury.

Contact details:

Lu-Anne Swart
Crime, Violence and Injury Lead Programme
UNISA Institute for Social and Health Sciences
Tel: 011 857 1142
Fax: 011 857 1770
swartl@unisa.ac.za

Megan Prinsloo
Crime, Violence and Injury Lead Programme
Medical Research Council
Tel: 021 938 0513
Fax: 021 938 0381
megan.prinsloo@mrc.ac.za

This report is available online at:
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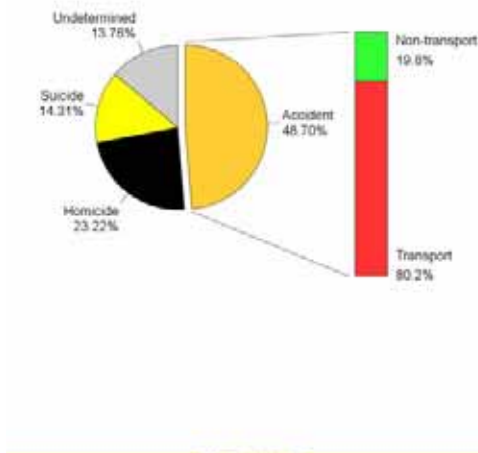
RESULTS

A total of 2373 cases were recorded in Tshwane/Pretoria for January 2005 to December 2005, including 375 (15.8%) cases that were due to natural causes. The rest of the analysis is restricted to the 1998 non-natural deaths that occurred in the catchment area.

1. Overall manner of death

The leading manner of death was transport fatalities (39%).

Figure 1. Overall manner of death (N = 1998)



Manner of death by age

The average age of the deceased was 35.3 (± 17 years). The leading manner(s) of death amongst the:

- 0-14 age group was transport (34.3%) followed by non-transport (32.3%);
- 15-24 age group was transport (34.3%)
- 25-34 age group was transport (36.1%) followed by violence (32.2%);
- 35-44 age group was transport (35.2%);
- 45-54 age group was transport (35.7%);
- 55-64 age group was transport (32.4%); and
- 65+ age group was transport (36%).

Figure 2.1. Violence/Homicide by age (n = 300)

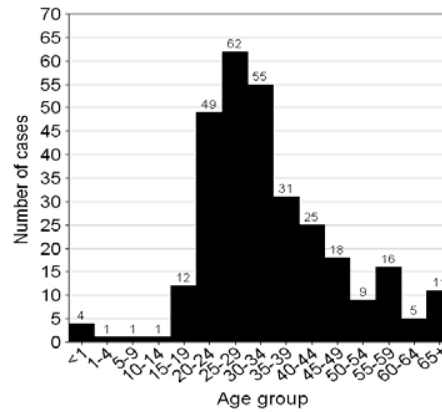


Figure 2.2. Suicide by age (n = 217)

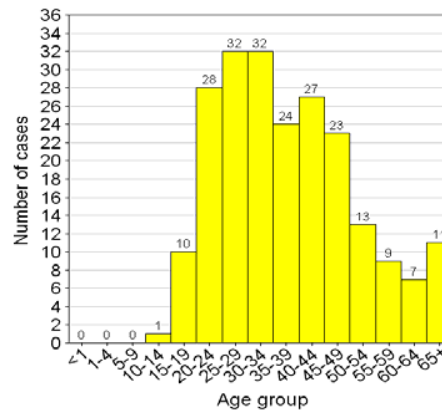


Figure 2.3. Transport deaths by age (n = 447)

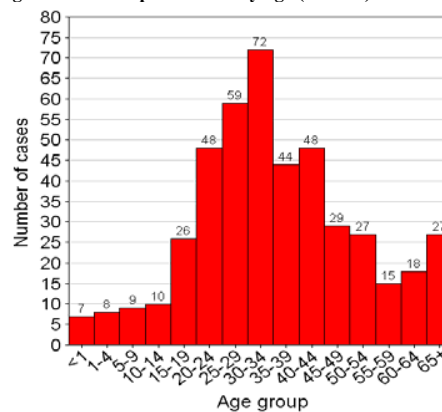


Figure 2.4. Other unintentional injury deaths (non-transport) by age (n = 136)

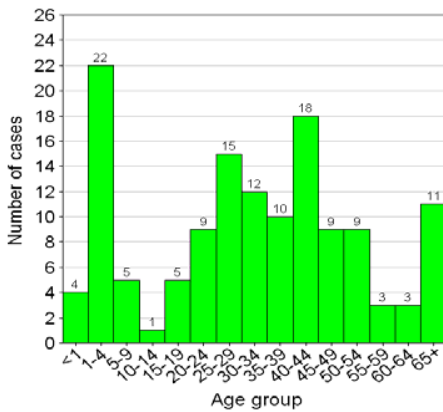
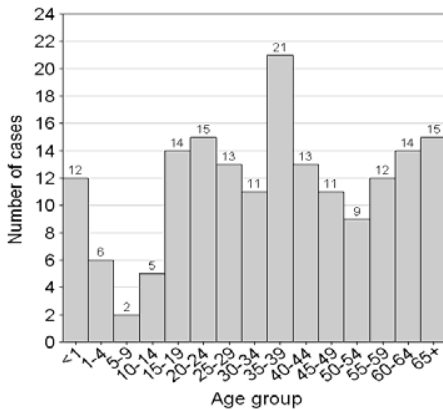


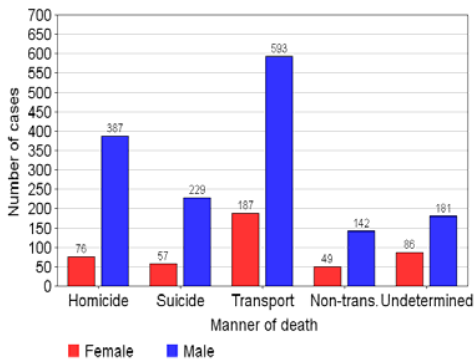
Figure 2.5. Undetermined deaths by age (n = 173)



Manner of death by sex

Of the cases recorded in Tshwane/ Pretoria, 1532 (77.1%) were male and 455 (22.9%) were female. The leading cause of death amongst males was transport (38.7%), as well as for females (41.1%).

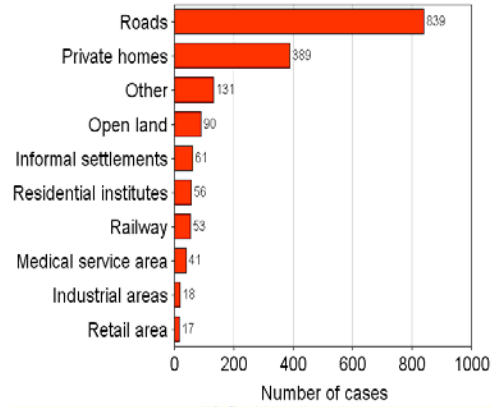
Figure 3. Manner of death by sex (n = 1987)



2. Scene of injury

The scene of injury was known in 1761 (88.1%) cases. The scene that accounted for the majority of deaths was roads (47.6%).

Figure 4. Top 10 scenes of injury (n = 1695)

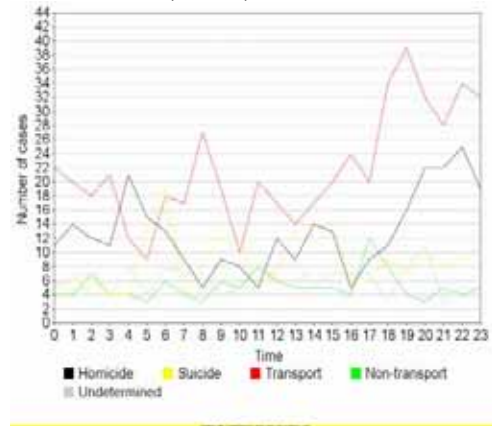


3. Time of death

The peak period(s) of death for:

- **violence** was 19h00 - 00h00 (33.6%) followed by 04h00 - 05h00 (6.8%);
- **suicide** was 13h00 - 16h00 (19.3%), followed by 05h00 - 07h00 (15.1%), followed by 09h00 - 11h00 (10.9%)
- **transport related deaths** was 18h00 - 00h00 (37.9%) followed by 08h00 - 09h00 (5.2%); and
- **other unintentional injury deaths (non-transport)** was 17h00 - 19h00 (16.2%), followed by 11h00 - 12h00 (6.5%).

Figure 5. Time of death (n = 1316)



4. Day of death

The peak days of death for:

- **violence** were Saturday (24.5%), followed by Sunday (19%), followed by Friday (12.6%);
- **suicide** were Saturday (19.1%), followed by Sunday (18.3%), followed by Monday (18%);
- **transport** related deaths were Saturday (23.8%), followed by Sunday (18.4%), followed by Monday (13.3%); and
- **other unintentional injury deaths (non-transport)** were Saturday (17.4%), followed by Sunday (16.8%), followed by Wednesday (14.7%).

Figure 6. Day of death (n = 1948)

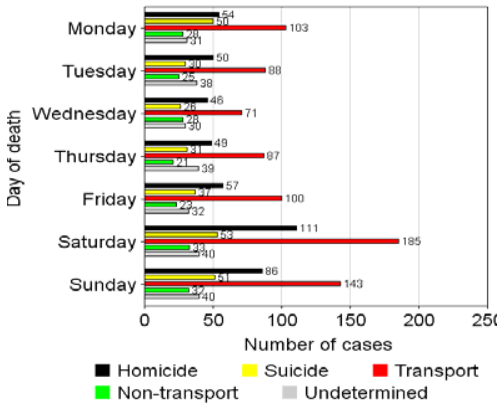


Figure 7. Day of violence-related deaths by sex (n = 452)

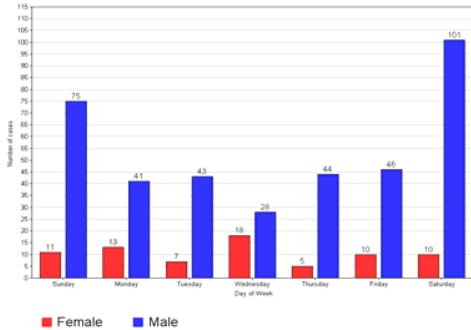


Figure 8. Day of suicide deaths by sex (n = 278)

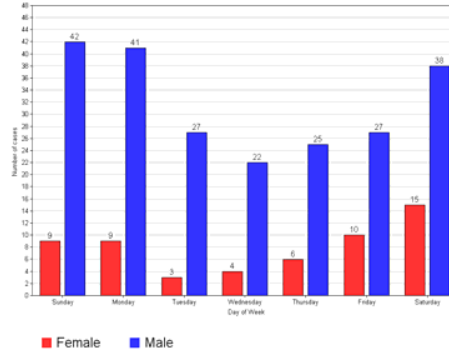
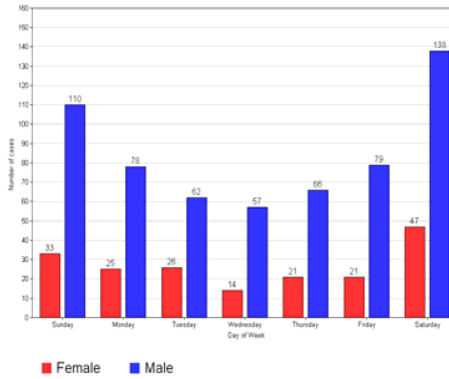


Figure 9. Day of transport deaths by sex (n = 777)

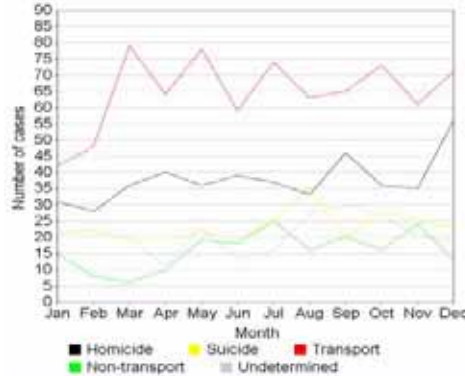


5. Seasonal variation

The peak month for:

- **violence** was December (12.4%), followed by September (10.2%), followed by April (8.8%);
- **suicide** was August (12.6%), followed by October (10.1%), followed by July (9.0%);
- **transport** related deaths was March (10.2%), followed by May (10.0%), followed by July (9.5%); and
- **other unintentional injury deaths (non-transport)** was July (13.2%), followed by November (12.6%), followed by September (10.5%).

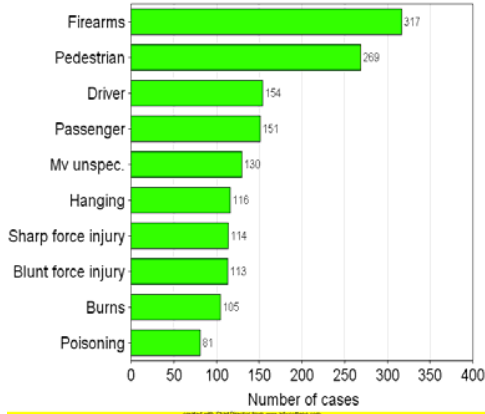
Figure 10. Seasonal variation (n = 1948)



6. External cause of death

The cause of death was unknown in 7.4% of the cases. The leading external cause of death was firearms (17.1%), followed by pedestrian injuries (14.5%), followed by motor vehicle driver (8.3%).

Figure 11. Top 10 external causes of death (n = 1550)



External cause of violence by age

Age was unknown in 164 of the 464 cases. Of the remaining cases, the average age of the deceased was 34 (± 13.9 yrs). The leading external cause of death for violence in the:

- 0-14 age group was poison ingestion (28.6%)
- 15-24 age group was firearms (47.5%) followed by sharp force injury (31.1%);
- 25-34 age group was firearms (48.7%);
- 35-44 age group was firearms (62.5%);
- 45-54 age group was firearms (37%) followed by blunt force injury (33.3%);
- 55-64 age group was blunt force injury (47.6%) followed by firearms (38.1%); and
- 65+ age group was blunt force injury (45.5%) followed by firearms (36.4%).

Figure 12.1. Firearm violence by age (n = 144)

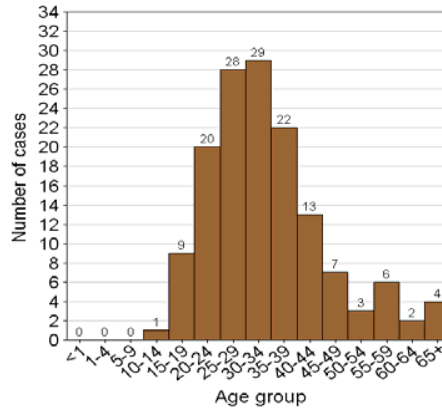


Figure 12.2. Sharp force violence by age (n = 69)

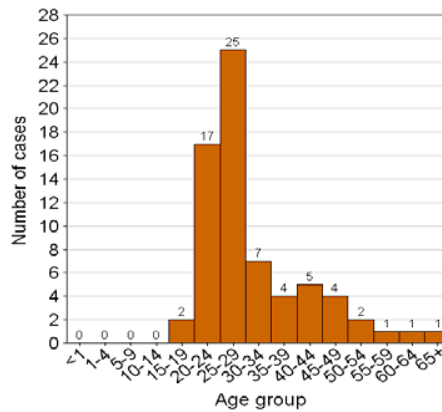


Figure 12.3. Blunt force violence by age (n = 60)

