



A Profile of Fatal Injuries in Mpumalanga

*The 2nd Annual Report of the
Provincial Injury Mortality Surveillance System
2008*

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November 2009



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Acknowledgements

We acknowledge the support of the following individuals of the participating forensic departments, namely:
Dr. C.F. Blok (Chief Medical Officer, Middelburg, Mpumalanga Province).
Dr. M. Wadee (Chief Medical Officer, Nelspruit, Mpumalanga Province).
Dr. V. Mabunda (Chief Medical Officer, Mapulaneng, Mpumalanga Province).

We acknowledge the following individuals of the participating mortuaries, namely:

Balfour: A.L.M. Mathane.
Belfast: A.L. Labuschagne and R.J. Nkosi.
Bethal: H.A. Le Roux and S.E. Masuku.
Delmas: D. Masemola.
Emalahleni (Witbank): Corrie Pieters, Z.E. Mashibini, and Michael Mlotshwa.
Embhuleni: L.R. Letuka.
Ermerlo: Lucas Meyer and N.V. Mbatha.
KwaMhlanga: G.J. Thubane and J.M. Mahlangu
Lydenburg: Pieter Scheepers.
Mapulaneng (Bushbuckridge): R.M. Monyetshwale and F. Lentswane.
Middelburg: G.J. Steyn, O.A. Sikhosana, and S.D. Nangu.
Nelspruit/Sabie: D.C. Wheeler.
Piet Retief: A.S.J. Fouche and N.F. Gama.
Evander: A.P. Pretorius.
Standerton: L.E. Steynberg.
Tonga: Z. Makamo.
Volksrust: S.J. Sibande.

We would like to acknowledge the ongoing support of the National Department of Health, the Provincial Departments of Health and Forensic Chemistry Laboratories, we wish to gratefully acknowledge Bephehile Phakathi (Mpumalanga Provincial Government) for facilitating data collection in the province of Mpumalanga.

We also acknowledge the appointed staff members at the Medical Research Council (MRC) and the University of South Africa (UNISA) who assisted in the data collection, analysis, compilation and layout of the NIMSS 2008 Annual Report.

And finally, thank you to the many users of the National Injury Mortality Surveillance System (NIMSS) data. We hope that this report plays some part in assisting you in your prevention, advocacy and policy work.

Glossary

The following terminology is used in this report and is briefly explained and contextualised below:

APPARENT MANNER of death describes the intention prior to the injury that resulted in the death. The apparent manner of death is divided into five different categories: violence, suicide, transport death, unintentional injury death and undetermined death. *Note that this is the apparent manner of death according to the forensic pathologists who perform the autopsies, and the final manner of death is only determined after court proceedings, which can take between 2 and 5 years to complete.*

The EXTERNAL CAUSE of death refers to the mechanism, circumstance or event that preceded the death. Examples of the external cause of death include firearms, stabbing, motor vehicle collisions, drowning, burns and poisonings, all of which may result in injury and eventually death.

An INJURY can be defined as damage to a person caused by an acute transfer of energy (mechanical/kinetic, thermal, chemical, electrical, radiation) or by a sudden absence of heat (hypothermia) or oxygen (asphyxiation, drowning).¹

NON-NATURAL deaths include all deaths that were not due to, or may not have been due to, natural causes and that in terms of the Inquests Act are subject to medico-legal investigation. We have grouped these non-natural deaths by external cause of death and apparent manner of death.

This report uses SEX rather than GENDER to distinguish between male and female deaths. In general, the term sex is used to describe distinctive physiological features related to being male or female. In contrast, the term gender comprises different occupational, social and psychological attributes that are variously attributed to being male or female. The latter concept depends on societal norms and is not internationally comparative.

SUICIDE refers to fatal self-inflicted *intentional* injuries.

SURVEILLANCE is a process that involves the ongoing and systematic collection, analysis and interpretation of data relating to the occurrence of a health event and the timely dissemination of this information to those who need to know and those who need to apply it. In the NIMSS the health events that are described are attributable to injuries and are described as non-natural deaths.

TRANSPORT deaths are normally also *unintentional* injury deaths, but may include deaths due to culpable homicide. Again, since the NIMSS data are geared towards prevention initiatives, all transport deaths have been grouped together to facilitate international comparison, and the development and evaluation of prevention programmes.

UNDETERMINED deaths are those where the medical examiner is unable to determine whether the manner of death was due to violence, suicide, transport or unintentional injuries, or due to natural causes.

UNINTENTIONAL INJURY deaths include all other *unintentional* non-transport injuries such as those due to burns, falls, poisoning and drowning.

The NIMSS definition of VIOLENCE refers to *intentional* injuries inflicted by another person (perpetrator). This definition excludes deaths due to culpable homicide since the NIMSS data are geared towards prevention initiatives, and intentional and unintentional injuries require different types of intervention.

¹ Berger, L.H. & Mohan, D. 1996. *Injury Control: A global view*. Delhi: Oxford University Press.

Executive Summary

This report, which constitutes an addendum to the 10th Annual Report of the National Injury Mortality Surveillance System (NIMSS), presents a profile of the fatal injuries in the province of Mpumalanga for the period from 1 January 2008 to 31 December 2008.

The analysis focuses on the 4 138 non-natural deaths (cases due to natural causes were excluded) registered at the 18 mortuaries in Mpumalanga.

Manner of death. Transport-related injuries were the leading manner of death, accounting for almost half (49%, *N*=2 010) of the 4 138 non-natural deaths recorded in Mpumalanga, followed by violence (24%, *N*=1 012), suicide (12%, *N*=494), and other unintentional injuries (7%, *N*=306). For the remaining 316 (8%) cases, the manner of death was undetermined.

External causes of death. The leading external cause of death was motor vehicle passenger injuries (18%, *N*=745), followed by motor vehicle pedestrian (13%, *N*=543), motor vehicle driver (13%, *N*=528), and firearms injuries (10%, *N*=404). For children aged 0-4 years, teenagers and young adults aged 15-24 years, adults in the age groups between 25-44 and adults 55 years and older, motor vehicle passenger injuries were the leading cause of death. For children aged 5 to 14 years, pedestrian injuries ranked first. For adults in the age groups between 45-54 motor vehicle driver injuries were the leading cause of non-natural deaths.

Violence. Just over a third (34%) of the 1012 violent deaths were inflicted by firearms, 31% (*N* =313) by sharp instruments and 23% (*N* =237) by blunt force injuries. The number of deaths due to violence rose sharply in the 15 to 19 year age group, peaked in the 20 to 25 year age group, and remained high until 44 years. There were 5.1 male violent deaths for every female violent death.

Suicide. Hangings accounted for the vast majority (67%, *N*=331) of the 494 suicides, followed by poisonings (13%, *N*=66), then firearms (11%, *N*=53). More than half (55%, *N*=273) of all suicide victims were aged between 20 and 39 years. Deaths due to suicide were high among teenagers 15-19 year (10%, *N*=50). There were 5.7 male suicides for every female suicide. The major external causes of suicide among males were hanging (74%) and firearms (13%), while among females it was hanging (48%) and poisoning (21%).

Transport-related deaths. Of the 2 010 transport-related deaths, passengers accounted for 37% (*N*=744), pedestrians 27% (*N*=541), drivers 26% (*N*=527), (motor)cyclists 2% (*N*=42) and less than 1% (*N*=18) were railway-related deaths. A further 6% (*N*=122) of transport-related deaths were due to motor vehicle collisions, however the user category was unknown. Transport-related injuries were the leading external cause of death across all age groups. More than half (56%, *N*=1 132) of all transport-related deaths were among victims aged between 15 and 39 years. There were 3.3 male transport-related deaths per female transport-related death.

Other unintentional injury deaths. Drownings (26%, *N*=80) and burns (16%, *N*=50) were the leading causes of the 306 other unintentional injury deaths. More than a quarter (26%, *N*=81) of these injury deaths occurred among children under the age of 15 years. There were 3.6 male unintentional injury deaths for every female unintentional injury death.

Manner of death undetermined. For 316 cases, the manner of death was undetermined. The external cause was unknown in 25% (*N*=79) of the undetermined deaths. Burns also accounted for 15% (*N*=49) of the undetermined deaths.

The NIMSS data can be used in the formulation of injury prevention policy and interventions. The data can assist in the identification of potential victim groups, hazardous locations, times and instruments, and selected high-risk behaviours such as alcohol consumption.

Chapter 1

Introduction: The National Injury Mortality Surveillance System (NIMSS)

Injury is one of the major causes of death in South Africa. Despite its magnitude and constant media coverage, the situation remains a cause for concern. External causes of death are vital for monitoring demographic, seasonal and socio-economically related trends in these major causes of death and disability. Since 1991 and Act No. 52 of 1992 which precluded entry of the external cause of death in the death register for injury cases, such information has been missing from the national vital statistics on causes of death. Police data systems only record information for violence, and the national transport information system records information for an uncertain subgroup of motor vehicle collision deaths. Death due to suicide and other unintentional causes, where the manner of death is undetermined, are not tracked by any agency.

The National Injury Mortality Surveillance System (NIMSS) was established in 1999 to fill this gap by providing more comprehensive information about deaths due to external causes. The information is collated from existing investigative procedures at medico legal laboratories and state forensic chemistry laboratories. All deaths due to external causes are included, allowing an overview of how the different categories of external cause (e.g. gunshots, drowning) contribute to the profile of non-natural mortality in men, women, and children.

At the time of this report, there is one provincial system (Western Cape Province) being piloted in medico legal laboratories that collects information about fatal injuries. However, there are currently no alternative sources for the information about fatal injuries that the NIMSS analyses and disseminates. The ultimate goal of the NIMSS is to establish a permanent system that will register all such deaths that occur annually in South Africa, and develop partnerships to inform initiatives for the prevention of non-natural fatality.

1.1 Goals of the NIMSS

The goals of NIMSS are:

- To provide ongoing and systematic information about the incidence, causes and consequences of all non-natural deaths at local, regional and national levels.
- To enable the early identification of new injury trends and emerging problem areas so that adequate interventions can be timeously established.
- To determine priorities for injury and violence prevention action for high-risk groups and for socio-environmental risk factors.
- To help evaluate direct and indirect violence and injury prevention and control measures.
- To monitor seasonal and longitudinal changes in the non-natural death profile.

The utility of the information collected by NIMSS lies in the pointers it provides for improving the prevention and control of injuries in South Africa, and in evaluating the impact of direct (e.g. gun law enforcement) and indirect (e.g. socio-economic development) interventions that are expected to reduce some of the major causes of fatal injury. Although limited in coverage, these reports provide a baseline profile for future monitoring and an information platform to reinforce the ongoing extension and improvement of the system. In achieving its goals, the NIMSS is intended to meet the information requirements of three main stakeholder groups, namely, the forensic medico-legal services; the National Crime Prevention Strategy; and violence and injury prevention agencies at local, provincial and national level.

For forensic medico-legal services, NIMSS is able to provide important information for the allocation of resources, auditing of costs and rationalisation of services. The current absence of information prevents proper assessment of costs, inhibits evaluation and impedes proper planning.

For the National Crime Prevention Strategy, NIMSS is able to provide crucial baseline data for all deaths due to violence and other injuries, including information on the covariance between violence and unintentional injury deaths, demographic and geographic variations in the magnitude and patterning of

violent deaths, and information on particularly sensitive indicators such as the use of firearms, alcohol and other substance involvement.

Injury prevention agencies include national and local government, the South African Police Services, non-governmental organisations, business and parastatals. For the agencies, NIMSS is able to provide descriptive information needed for the design and implementation of preventive interventions at municipal, metropolitan, provincial and national levels.

1.2 Aims of the NIMSS

NIMSS uses existing medico-forensic investigative procedures. It collates onto a single data form and into a single computer database items spread between four points in the investigative procedure, namely, postmortem reports, SAP 180 forms, chemical pathology laboratory results, and criminal justice system reports.

At its inception in 1999, NIMSS was piloted with funding from the then Department of Arts, Culture, Science and Technology's Innovation Fund on Crime Prevention. For 2000, 15 mortuaries in five provinces contributed data to the NIMSS. For 2007, 39 mortuaries in 7 provinces contributed their data, including all cases from Mpumalanga and Gauteng, giving the NIMSS a rural representivity. Extension to other mortuaries will continue as long as funding permits.

1.3 NIMSS methodology

NIMSS records 21 items of information for every deceased that enters the forensic medico-legal system in the participating facilities. In order to meet the system's goals and enable international comparisons, NIMSS classifies the primary medical cause of death using the International Classification of Disease version 9 (ICD 9) and assigns a probable manner of death code to each case. Spatial and temporal data are recorded, as is the presence of alcohol in the deceased through information from forensic laboratory reports. The final manner of death is only available after court findings, which are often only available up to 4 years after the death. The data are collected by the police and forensic pathologists at each site, and captured into a computerised database by clerks and secretarial staff at the mortuaries. The data are then sent to the Crime, Violence and Injury Lead Programme offices in Cape Town, where they are combined with other mortuaries' data and data from the forensic chemistry laboratories, cleaned, and finally analysed by researchers. Quarterly and yearly reports are produced for the South African Police and forensic pathologists at each facility.

1.4 NIMSS annual report

The NIMSS annual report summarises the data from all mortuaries that participated during the reporting year. This addendum on fatal injuries in Mpumalanga summarises all the medico-legal laboratories in that province for 2008. We assume that the main utility of the report will be in providing information for use in presentations and research projects aimed at violence and injury prevention and control. We also hope that the report will stimulate further research about the underlying causes and risk factors that drive the patterns of fatal violence and injury among the different age, sex and racial groups for which the data have been analysed. If these questions can stimulate research to answer them, then the possibilities for prevention of violence and injury will be greater than ever before.

Perhaps most importantly, it is emphasised that the annual report provides an overview of the data only, and does not fully reflect the rich amount of information in the surveillance database. This additional information includes, in particular, suburb-level indicators of where injuries occurred and, of course, many cross-tabular analyses that could not be accommodated in this summary report. Agencies wishing to access this more detailed level of information are invited to send their requests for customised reports to the CVI Lead Programme.

Chapter 2

Participating Facilities and Data Representivity

The 18 participating forensic pathology services from Mpumalanga, including the number of cases (excluding deaths due to natural causes) registered at each facility for 2008, are shown in the table below.

Table 1: Participating mortuaries (N=18)

Province	Towns	Medico Legal Laboratory	Total number of cases
Mpumalanga	Balfour	Balfour	100
Mpumalanga	Barberton	Barberton	29
Mpumalanga	Belfast	Belfast	135
Mpumalanga	Bethal (Embhuleni)	Bethal (Embhuleni)	351
Mpumalanga	Delmas	Delmas	127
Mpumalanga	Ermelo	Ermelo	225
Mpumalanga	Evander	Evander	208
Mpumalanga	Hazyview	Hazyview	78
Mpumalanga	Kwamhlanga	Kwamhlanga	332
Mpumalanga	Lydenburg	Lydenburg	98
Mpumalanga	Mapulaneng	Mapulaneng	350
Mpumalanga	Middelburg	Middelburg	283
Mpumalanga	Nelspruit	Nelspruit	641
Mpumalanga	Piet Retief	Piet Retief	227
Mpumalanga	Standerton	Standerton	123
Mpumalanga	Tonga	Tonga	256
Mpumalanga	Volkstrust	Volkstrust	101
Mpumalanga	Witbank	Witbank	474
Total			4138

Not all cases had information for every item, and therefore totals in the following graphs and tables vary. Owing to the relatively few cases where date and time of injury were available, date and time of death have been reported instead. While death would have occurred at the time of injury for a majority of cases, some victims will have died hours or days after the injury itself, and this bias must be kept in mind when reading the relevant tables and charts.

Chapter 3

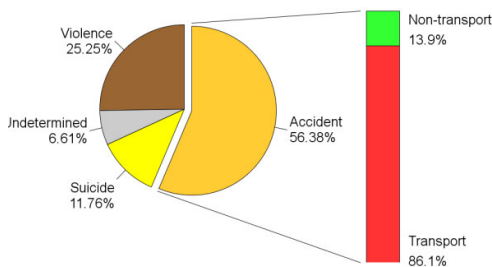
The National Injury Mortality Profile for Mpumalanga

A total of 4618 deaths were recorded in the Mpumalanga catchment area for the period January 2008 to December 2008, including 480 (10.4%) cases that were due to natural causes. The rest of the analysis is restricted to the 4138 non-natural deaths that occurred in the catchment area. However, the section that deals with the pathology service includes the natural deaths in order to provide an accurate assessment of facility caseload.

3.1. Overall manner of death

The leading cause of death in the Mpumalanga catchment area was accident (50.2%).

Figure 1. Overall manner of death (N = 4138)



3.1.1 Manner of death by victim age

The average age of the victims was 33.5 (\pm 16.6 years). The leading manner of death(s) amongst the:

- 0-14 age group was transport (44.1%);
- 15-24 age group was transport (42.1%) followed by homicide (32.7%);
- 25-34 age group was transport (48.1%);
- 35-44 age group was transport (54.6%);
- 45-54 age group was transport (55.9%);
- 55-64 age group was transport (50.4%); and
- 65+ age group was transport (48.3%).

Figure 2.1. Homicide by victim age (n = 967)

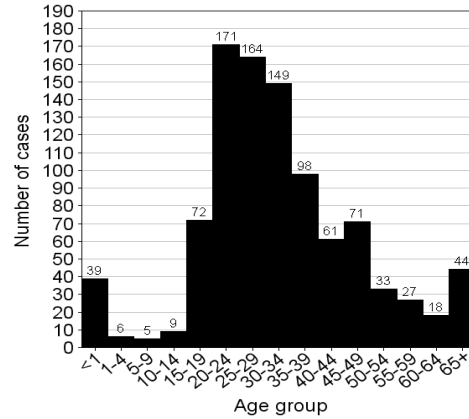


Figure 2.2. Suicide by victim age (n = 469)

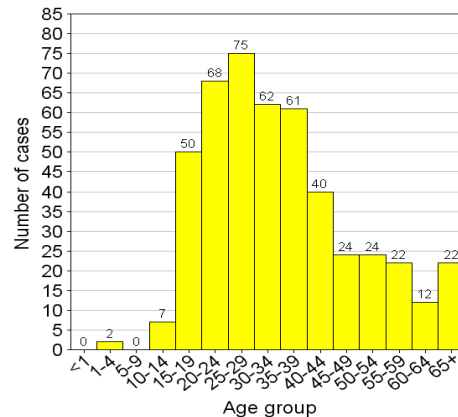


Figure 2.3. Transport deaths by victim age (n = 1874)

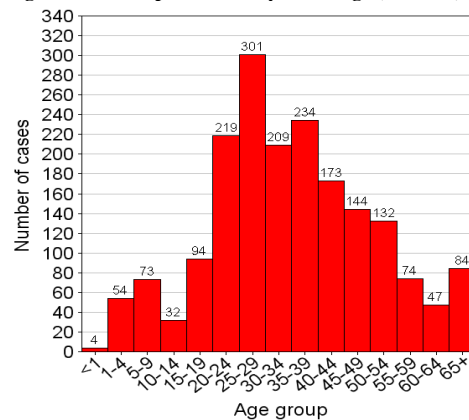


Figure 2.4. Non-transport deaths by victim age (n = 293)

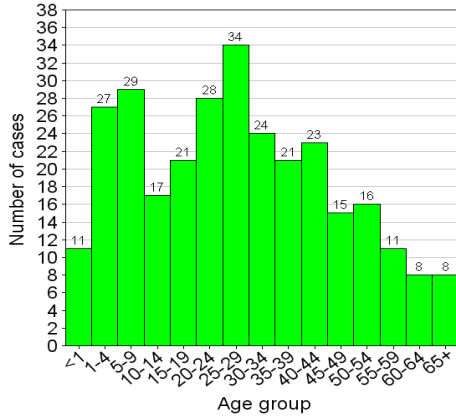
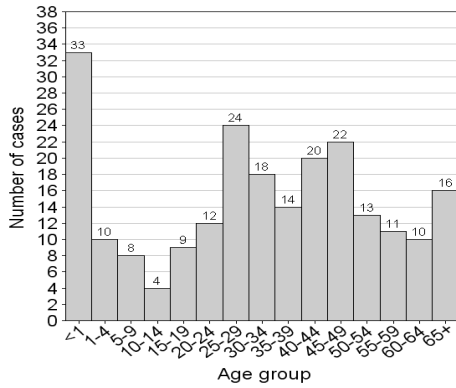


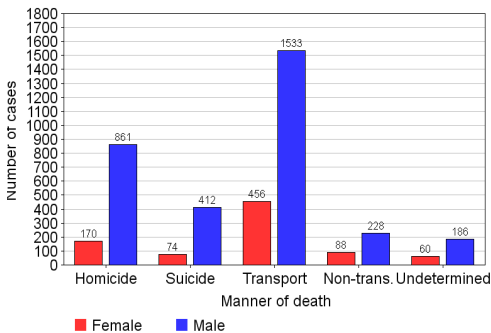
Figure 2.5. Undetermined deaths by victim age (n = 224)



3.1.2 Manner of death by victim sex

Of the cases recorded in the Mpumalanga catchment area, 3220 (79.2%) were male and 848 (20.8%) were female. The leading cause of death amongst males was transport (47.6%). The leading cause of death amongst females was transport (53.8%).

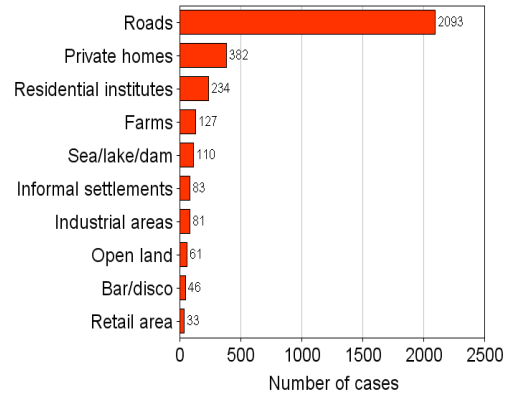
Figure 3. Manner of death by victim's sex (n = 4068)



3.2 Scene of injury

The scene of injury was known in 3390 (82.1%) cases. The scene that accounted for the majority of deaths was roads (61.7%).

Figure 4. Top 10 scenes of injury (n = 3250)

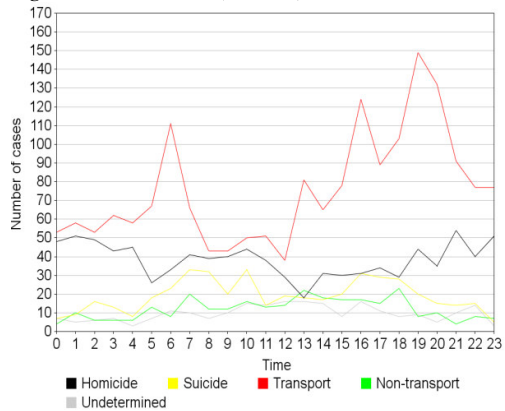


3.3 Time of death

The peak period(s) of death for:

- **homicide** was 00h00 - 03h00 (16%), followed by 21h00 - 22h00 (5.9%), followed by 23h00 - 00h00 (5.5%);
- **suicide** was 06h00 - 09h00 (19.2%), followed by 16h00 - 19h00 (19.2%), followed by 10h00 - 11h00 (7.2%);
- **transport** related deaths was 18h00 - 22h00 (26.2%), followed by 16h00 - 17h00 (6.8%), followed by 06h00 - 07h00 (6.1%); and
- **non-transport** related deaths was 13h00 - 19h00 (38.8%), followed by 07h00 - 08h00 (6.9%), followed by 10h00 - 11h00 (5.5%).

Figure 5. Time of death (n = 3721)



3.4 Day of death

The peak days of death for:

- **homicide** were Saturday (22.5%), followed by Sunday (22.4%), followed by Friday (12.9%);
- **suicide** were Sunday (18.6%), followed by Tuesday (16.7%), followed by Monday (14.7%);
- **transport** related deaths were Saturday (21.4%), followed by Sunday (19.4%), followed by Friday (14.6%); and
- **non-transport** were Sunday (17.4%), followed by Saturday (16.8%), followed by Tuesday (15.8%).

Figure 6. Day of death (n = 4092)

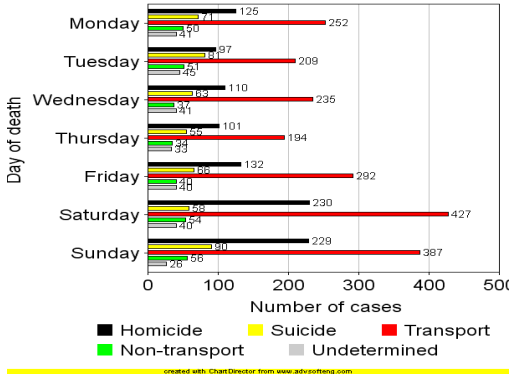


Figure 7. Day of homicide deaths by sex (n = 1014)

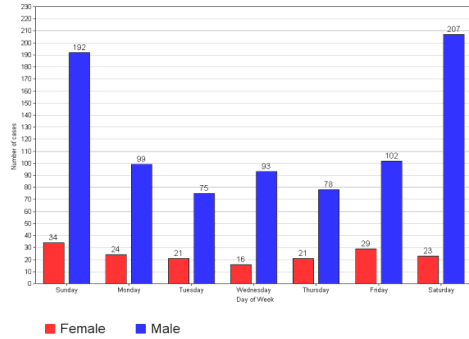


Figure 8. Day of suicide deaths by sex (n = 484)

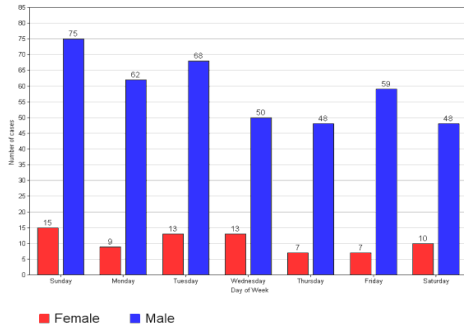
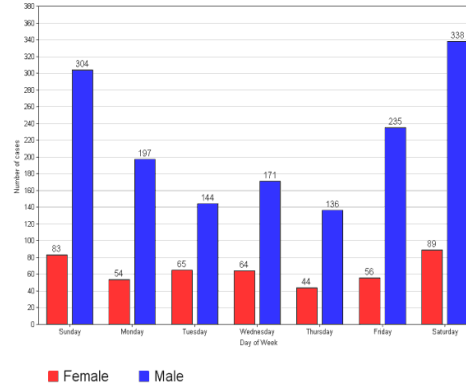


Figure 9. Day of transport deaths by sex (n = 1980)

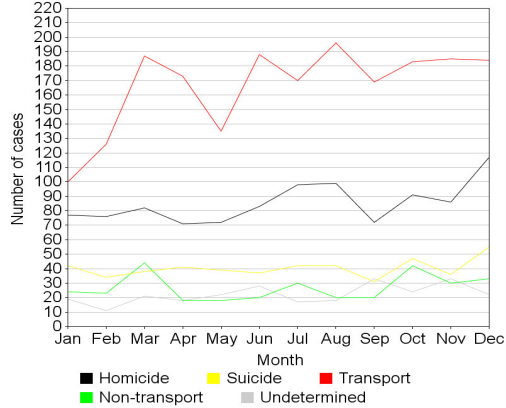


3.5 Seasonal variation

The peak month for:

- **homicide** was December (11.4%), followed by August (9.7%), followed by July (9.6%);
- **suicide** was December (11.4%), followed by October (9.7%), followed by January (8.7%);
- **transport** related deaths was August (9.8%), followed by June (9.4%), followed by March (9.4%); and
- **non-transport** related deaths was March (13.7%), followed by October (13.0%), followed by December (10.2%).

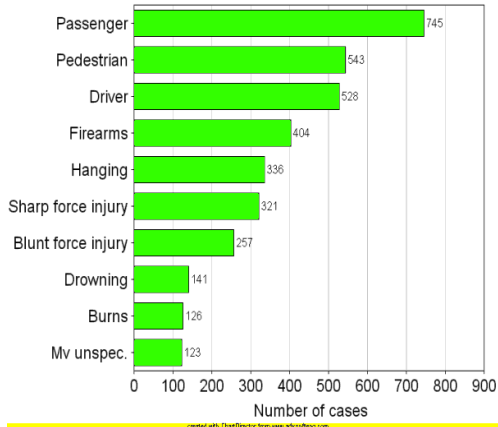
Figure 10. Seasonal variation (n = 4092)



3.6 External cause of death

The cause of death was unknown in 2.2% of the cases. The leading external cause of death was motor vehicle passenger (18.4%), followed by motor vehicle pedestrian (13.4%), followed by motor vehicle driver (13.1%).

Figure 11. Top 10 external causes of death (n = 3524)



3.6.1 External cause of homicide by age

Age was unknown in 74 of the 1 012 cases. Of the remaining cases, the average age of the victims was 32 (± 15.9 yrs). The leading external cause of death for homicide in the:

- 0-14 age group was firearms (20.1%) and burn injuries (20.1%);
- 15-24 age group was sharp force injury (37.4%) followed by firearms (34.2%);
- 25-34 age group was sharp force injury (37.4%) followed by firearms (35.8%);
- 35-44 age group was firearms (40.3%);
- 45-54 age group was firearms (36.5%);
- 55-64 age group was blunt force injury (37.8%) followed by firearms (31.1%); and
- 65+ age group was blunt force injury (34.1%).

Figure 12.1. Firearm homicide by victim age (n = 326)

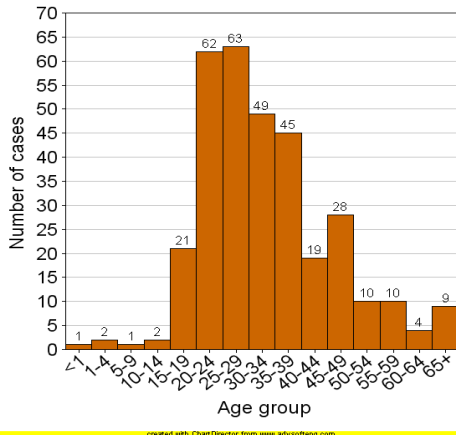


Figure 12.2. Sharp force injury homicide by victim age (n = 296)

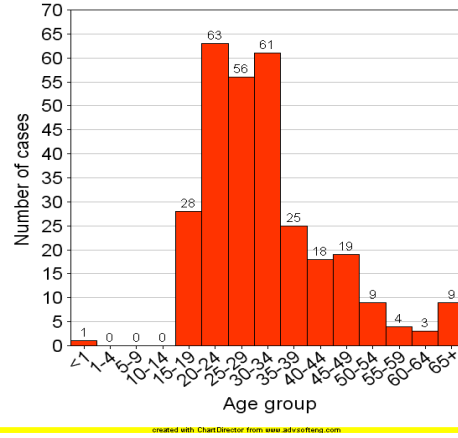


Figure 12.3. Blunt force injury homicide by victim age (n = 217)

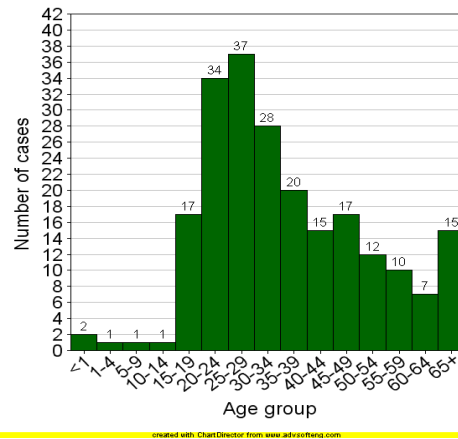
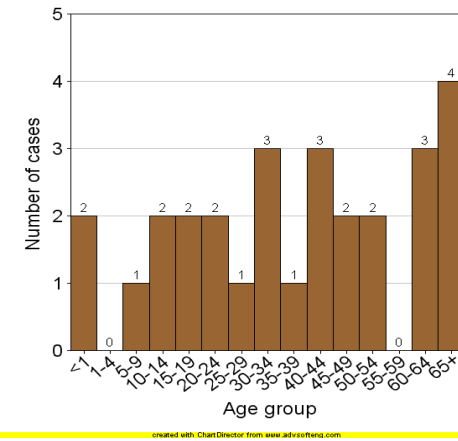


Figure 12.4. Strangulation, suffocation or asphyxia homicide by victim age (n = 28)



3.6.2 External cause of suicide by age

Age was unknown in 17 of the 494 cases. Of the remaining cases, the average age of the victims was 35 (± 15 yrs). The leading external cause of death for suicide in the:

- 0-14 age group was hanging (77.8%);
- 15-24 age group was hanging (77.1%);
- 25-34 age group was hanging (71.5%);
- 35-44 age group was hanging (61.4%);
- 45-54 age group was hanging (45.8%);
- 55-64 age group was hanging (61.8%); and
- 65+ age group was hanging (77.3%).

Figure 13.1. Hanging suicide by victim age (n = 318)

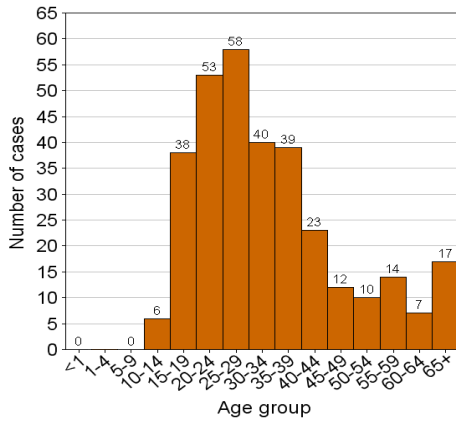


Figure 13.2. Poisoning suicide by victim age (n = 64)

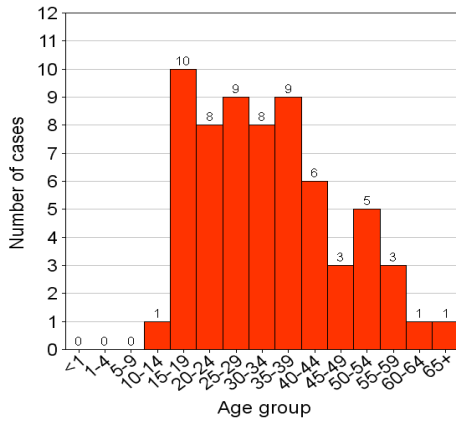


Figure 13.3. Firearm suicide by victim age (n = 52)

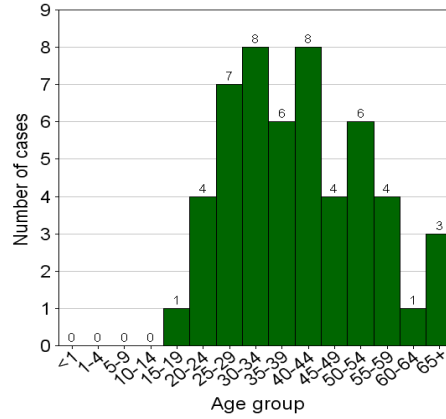
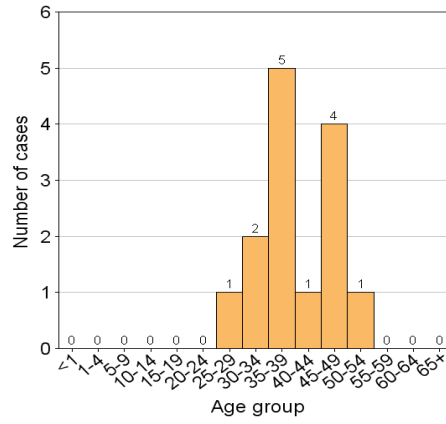


Figure 13.4. Gassing suicide by victim age (n = 14)



3.6.3 External cause of transport deaths by age

Age was unknown in 141 of the 2 010 cases. Of the remaining cases, the average age of the victims was 34 (± 16.1 yrs). The leading external cause of death for transport in the:

- **0-14** age group was motor vehicle pedestrian (51.5%) followed by motor vehicle passenger (42.9%);
- **15-24** age group was motor vehicle passenger (42.2%);
- **25-34** age group was motor vehicle passenger (37.8%) followed by motor vehicle driver (30.2%);
- **35-44** age group was motor vehicle passenger (34.2%) followed by motor vehicle driver (31.7%);
- **45-54** age group was motor vehicle driver (39.1%) followed by motor vehicle passenger (30.8%);
- **55-64** age group was motor vehicle passenger (33.9%); and
- **65+** age group was motor vehicle passenger (38.1%) followed by motor vehicle pedestrian (36.9%).

Figure 14.1. Motor vehicle passenger deaths by victim age (n = 692)

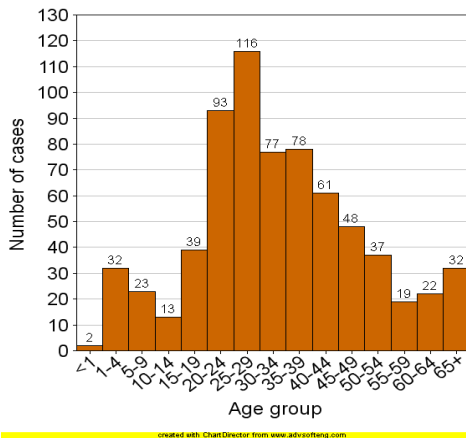


Figure 14.2. Motor vehicle driver deaths by victim age (n = 508)

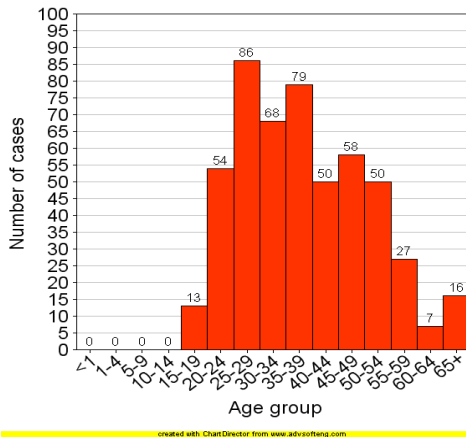


Figure 14.3. Motor vehicle pedestrian deaths by victim age (n = 494)

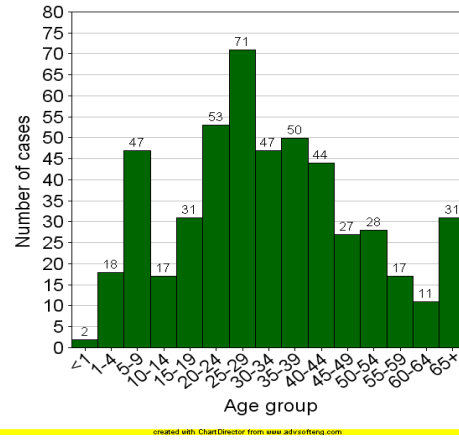


Figure 14.4. Motor vehicle unspecified deaths by victim age (n = 117)

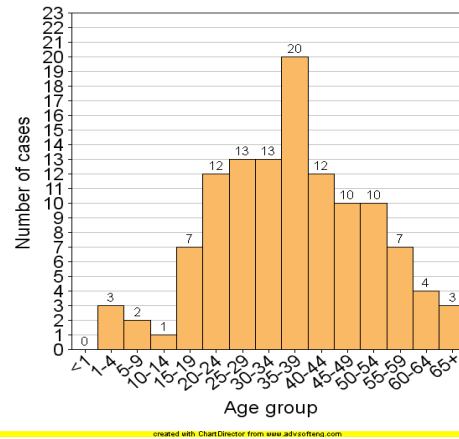
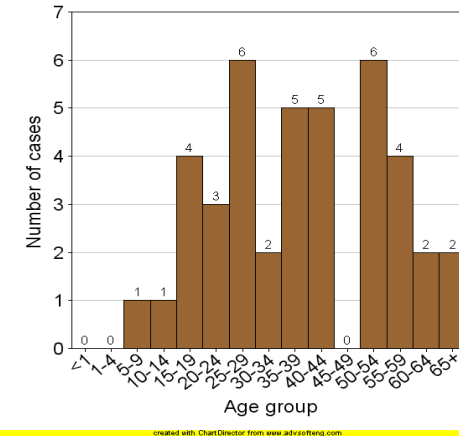


Figure 14.5. Cyclist deaths by victim age (n = 41)



3.6.4 External cause of non-transport deaths by age

Age was unknown in 20 of the 306 cases. Of the remaining cases, the average age of the victims was 27 (± 18.9 yrs). The leading cause for non-transported related deaths in the:

- 0-14 age group was drowning (48.8%)
- 15-24 age group was drowning (36.7%)
- 25-34 age group was burns (23.4%);
- 35-44 age group was burns (34.26%);
- 45-54 age group was blunt objects (18.5%);
- 55-64 age group was lightning (22.2%); and
- 65+ age group was burns (50%).

Figure 15.1. Drowning deaths by victim age (n = 78)

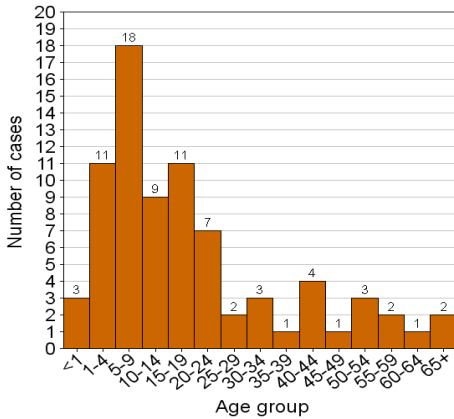


Figure 15.2. Burn deaths by victim age (n = 47)

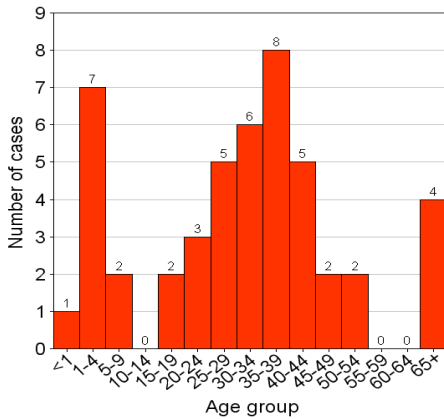


Figure 15.3. Medical procedure deaths by victim age (n = 27)

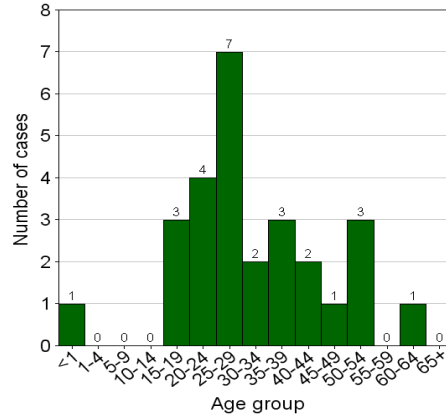


Figure 15.4. Lightning deaths by victim age (n = 20)

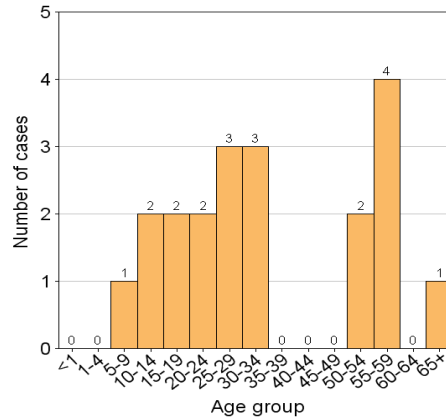
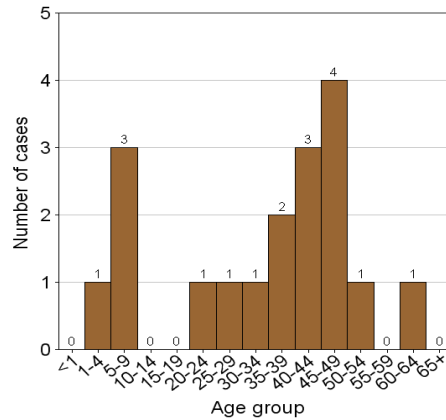
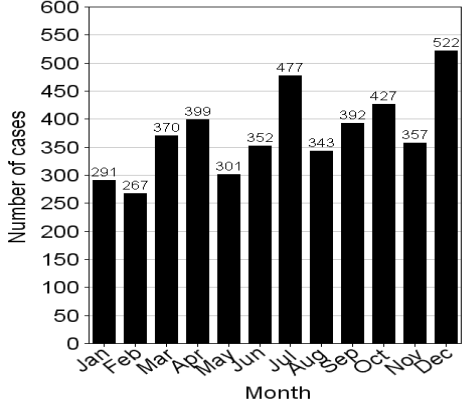


Figure 15.5. Blunt force injury deaths by victim age (n = 18)



3.7 Monthly caseload

The monthly caseload was highest in December (11.6%), followed by July (10.6%), followed by October (9.5%). The monthly caseload was lowest in February (5.9%).



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Chapter 4

Conclusion

This 2nd Annual Report of the Provincial Mortality Surveillance System: A Profile of Fatal Injuries in Mpumalanga has identified fatal injuries as a consequence of motor vehicle collisions as a major concern in Mpumalanga. Transport-related injuries are the leading manner of death for both males and females as well as across all age groups. Specifically motor vehicle passenger injuries were the leading cause of death for children aged 0-4 years, teenagers aged 15-19 years, young adults in the age groups between 20-34 and older adults in the 60 to 69 year age groups. Pedestrian injuries ranked first as the cause of non-natural death for children aged 5 to 14 years and for the 70+ age groups. Motor vehicle driver injuries were the leading external cause of death for adults in the age groups between 35 to 59 years. In general, the majority of the injury deaths occurred among males in the economically active age range of 15-44 years.

The NIMSS data can be used in the formulation of injury prevention policy and interventions. The data can assist in the identification of potential victim groups, hazardous locations, times and instruments, and selected high-risk behaviours such as alcohol consumption.

We trust that the report will serve to stimulate answers about the underlying causes and risk factors that drive the patterns of fatal injuries among the different age, sex and racial groups by which the data have been analysed.

The Crime, Violence and Injury Lead Programme, which is co-directed by the MRC and UNISA, is committed to facilitating the use of NIMSS data by a wide range of stakeholder groups, but especially the forensic medico-legal services; the National Crime Prevention Strategy; and violence and injury prevention agencies at local, provincial and national level.

The NIMSS could provide additional information, including for example suburb-level indicators of where injuries occurred and, of course, many cross-tabular analyses that could not be accommodated in this report.

Agencies wishing to access this more detailed level of information are invited to send their requests for customised reports to the CVI programme.

Appendix I: NIMSS Data Collection Questionnaire

NIMSS DATA COLLECTION FORM

Mortuary _____ **Police No.** _____ **Officer collecting body (Surname)** _____

PM no. _____ **PM Date** **Pathologist (Surname)** _____

Date & Time of Injury **Race** **Sex**

Years Months

Date & Time of Death **Age**

Medical treatment of injury prior to death (check only ONE) 1 None 2 Emergency care at scene 3 Hospital care

Province of injury (may differ to province of death) **Scene of injury (may differ to scene of death)**

1 Gauteng	7 Mpumalanga	1 Private house & yard (inc. pool)	9 Medical service area
2 W. Cape	8 Northern Province	2 Residential institute	10 Industrial & construction area, mine
3 K.Z. Natal	9 North West	18 Informal settlement/squatter camp	11 Farm, primary production area
4 E. Cape	10 Unknown	3 Bar, shebeen, N'Club, disco	12 Sea, lake, river, dam
5 N. Cape	11 Other (specify) _____	4 Amusement park, sports area	13 Open land, beach
6 Free State		5 Road/street/highway	14 Countryside
		6 Railway track, station	15 In custody, prison
		7 Shop, bank, retail area	16 Place unknown
		8 School, educational area	17 Other (specify) _____

Town of injury _____
Suburb or district _____
Closest police station to injury scene _____

External Cause or Circumstance of Injury

1 Firearm Discharge	9 Fall/push/jump from height	17 Motor vehicle Driver	24 Abandoned baby
2 Sharp Object	10 Other fall/push/jump	18 Motor vehicle Unspecified	25 Electrocution
3 Blunt Object	11 Crushing	19 Railway casualty	26 Explosive blast
4 Strangulation, suffocation, asphyxia	12 Choking, aspiration	20 Bicycle, motor cycle	27 Natural cause
5 Hanging	13 Drowning, immersion	30 Aviation casualty	28 Unknown
6 Poisoning, ingestion	14 Lightning	21 Medical Procedure	29 Other Specific Cause _____
7 Poisoning, gassing	15 Motor vehicle Pedestrian	22 Sudden Infant Death	
8 Burn	16 Motor vehicle Passenger	23 Abortion, still birth	

Apparent Manner of Death

1 Homicide 2 Suicide 3 Accident 4 Natural 5 Undetermined

Samples Taken (check all)

1 None 2 Blood 3 Tissue 4 Other fluid

Alcohol and Other Substances (for completion by surveillance consortium staff)

Blood Alcohol Level Eye Fluid Alcohol Other Substances (Specify) _____



For completion following court investigation: homicides and suicides only

Type of Intentional Violence	Perpetrator – Victim Relationship		
1 Interpersonal	1 Spouse, Partner	5 Friend	9 Unknown
2 Self Directed	2 Parent	6 Official/Legal Authority	10 Other Specified Person(s)
3 Legal Intervention	3 Other relative	7 Stranger	
4 Gang, Syndicate	4 Unrelated Caregiver	8 Acquaintance	
5 War/civil Insurrection			
6 Rape, Sexual			
7 Child Abuse			
9 Unknown			
8 Other (specify) _____			

Context of Violent Attack (Code from court record) _____

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Appendix II: Data Request Form

	The MRC-UNISA Crime, Violence & Injury Lead Programme (S.A)				
Request Form					
1. Title	2. First Name/s		3. Surname		
4. Organisation		5. E-mail			
6. Telephone (day)		7. Cell		8. Fax	
8. Specify your request e.g. data (raw, customised), report (customised, published, unpublished), data collection form, consultancy etc.					
9. Provide relevant information that will assist in processing your request (use separate page if necessary)					
10. Describe your use/purpose for this request (use separate page if necessary)					
11. Is your request related to (please tick)					
Individual research	<input type="checkbox"/>	Contract research	<input type="checkbox"/>	Institutional research	<input type="checkbox"/>
Masters project	<input type="checkbox"/>	PhD project	<input type="checkbox"/>	Other (specify)	<input type="checkbox"/>
12. Name of research project and affiliation (if applicable) – submit copy of research proposal.					
13. Has ethical approval been obtained for this study?			<input type="checkbox"/>	If yes, please provide details (reference, place etc.)	
15. What are the anticipated outputs/outcomes of your project?					
16. How and to what extent does this request relate to the scope and objectives of the CVI Lead Programme - if relevant, see http://www.mrc.ac.za/crime/crime.htm or http://www.unisa.ac.za/dept/ishs/programme.html)					
17. Additional comments:					
20. Please note the following conditions: <ul style="list-style-type: none"> - The MRC-UNISA Crime, Violence & Injury Lead Programme (CVILP) should be acknowledged in all instances. - A copy of the final research output should be submitted to the CVILP. - All customised reports will remain the intellectual property of the CVILP. - The Lead Programme will as far as possible assist the applicant, however, requests may be declined or certain costs may be payable. 					
18. Signature		19. Date			
For office use:					
Received:		Date	Signature		
Authorised:		Date	Signature		
Researcher assigned:					
Comments:					