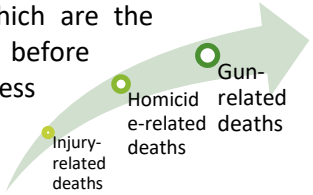
Firearms Control Briefing
A snapshot of injury-related death in SA in 2017

Introduction

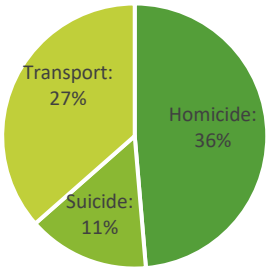
This Briefing summarises South Africa's 2nd injury mortality survey which analyses 2017 mortuary data.[1] Recently published, the survey gives a snapshot of how people died (e.g. murder, suicide, road traffic), who died (age and sex), where they died (province), when they died (month and day) as well as detailed information on what caused the death e.g. the weapon used in murder or suicide. In addition, the study compares how SA's injury-related death rate changed between 2009 (the focus of the first mortality survey[2]) and 2017.

This Briefing starts by looking at injury-related deaths in South Africa, it then focuses on homicides, which are the leading manner of injury-related death, before further focusing on gun-related deaths. Unless indicated, all information is drawn from the 2009 and 2017 national injury mortality surveillance studies.

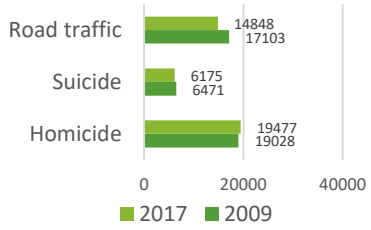


Injury-related deaths in SA

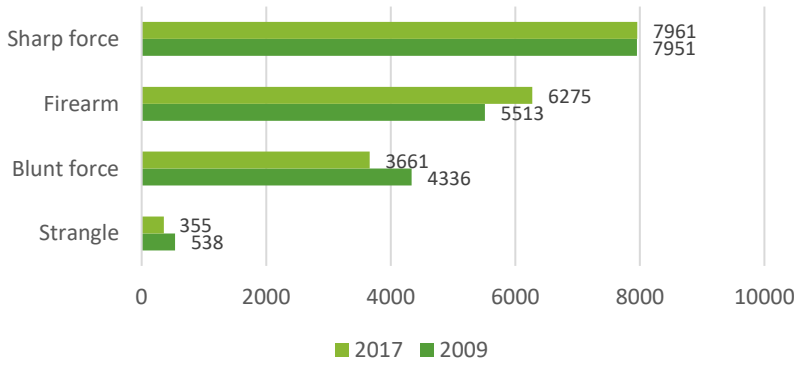
Graph 1: Manner of injury-related death in SA in 2017



Graph 2: Non-natural deaths in SA in 2009 and 2017 (n)



Graph 3: Mechanism of homicides in SA in 2009 and 2017 (n)



Main findings of the 2017 injury mortality survey

- **More people were murdered than died on SA's roads:** Homicides were the leading manner of injury-related death in SA (Graph 1), with rates seven times the global average.
- **SA's murder rate remained high, while traffic deaths declined:** Traffic deaths decreased significantly between 2009 and 2017 (from 36.1 per 100,000 to 25.6). In contrast, while there was a slight decrease in SA's overall murder rate (from 38,4 per 100,000 to 34.5) the number of homicides increased (Graph 2).
- **Firearm-related murders increased:** The number of people shot and killed increased by 14% between 2009 and 2017, while the number of sharp-force murders did not change (Graph 3). Overall gun-related deaths remained at 11.2 per 100,000 while sharp-force deaths dropped from 15.4 to 14.2 (Graph 4).
- **Men are most at risk:** Nearly 80% of non-natural deaths were male and 21% were female.
- **Alcohol increased risk:** The findings highlight the role of alcohol in homicide and road traffic mortality.

[1] Prinsloo, Megan. et al. 2021. The 2nd injury mortality survey: A national study of injury mortality levels and causes in South Africa in 2017. Cape Town: South African Medical Research Council.
[2] Matzopoulos, Richard. et al. 2015. Injury-related mortality in South Africa: a retrospective descriptive study of postmortem investigations. Bulletin of the World Health Organisation, Vol. 93, pp. 303-313.

Homicide-related deaths in SA

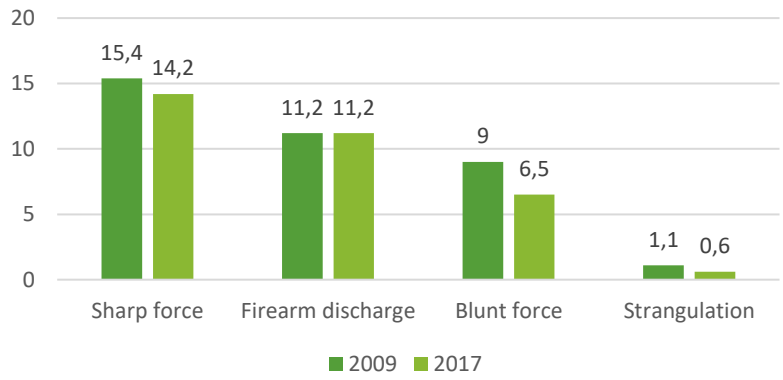
Who was murdered and where?

- **Men:** 86.4% of murder victims in 2017 were male and 13.3% were female. Of all injury-related deaths, the M:F ratio was highest for homicide, with 6.5 male deaths for every female death.
- **Aged 25-29 years:** Most murder victims were aged between 25 and 29 years (3,897/20%), followed by victims aged between 20-24 and 30-34 (3,334/17% and 3,291/17% respectively).
- **In the Eastern and Western Cape:** The provinces with the highest murder rates were the Eastern Cape and Western Cape (55.8 and 55 per 100,000 respectively).

What weapon was was used

- Sharp force remained the leading cause of murder in 2017, followed by firearms.
- As shown in Graph 3, while the number of sharp force, blunt force and strangle-related murders declined or stayed stable between 2009 and 2017, the number of firearm-related murders increased.
- Despite this increase, the rate of people shot and killed did not increase but remained at 11,2 per 100,000. In contrast, the rate of sharp force, blunt force and strangle-related murders all declined as shown in Graph 4.
- As a result, while SA's overall homicide rate declined between 2009 and 2017 (from 38,4 to 34,5 per 100,000) this rate could have dropped significantly more if gun-related death rates had declined. As proof, the researchers point to the almost halving of SA's homicide rate between 1997 and 2012 which has been "substantially attributed to the decrease in firearm deaths…. as a result of stricter enforcement of firearm legislation…introduced in 2002."[3]

Graph 4: Mechanism of homicides in SA in 2009 and 2017 (rate per 100,000)



Blood alcohol content

Blood alcohol concentration (BAC) was recorded in the post-mortem folder for 3,363 homicides (17.3% of all homicides) in 2017.

Of these, more than half tested positive for alcohol and most (46% of the total) were in excess of the driving limit (≥0.05 g/100ml).

Sharp force homicide had the highest proportion of high alcohol levels (61%), followed by blunt force (37%), firearm (31%) and strangle (30%) deaths.

Excessive BACs were recorded for more than 60% of homicides that occurred on a Saturday and Sunday, and more than 50% of homicides during July and December.

When were people murdered?

- Most murders occurred in the month of December, followed by April.
- Most murders (58%) took place on the weekend, particularly on Sunday.

[3] Prinsloo, Megan. et al. 2021. The 2nd injury mortality survey: A national study of injury mortality levels and causes in South Africa in 2017. Cape Town: South African Medical Research Council, p. 9.

Gun-related deaths in SA

In 2017, 32.2% of homicides were from gunshot. In total 6,275 people were shot and killed that year, an average of 17 people a day.

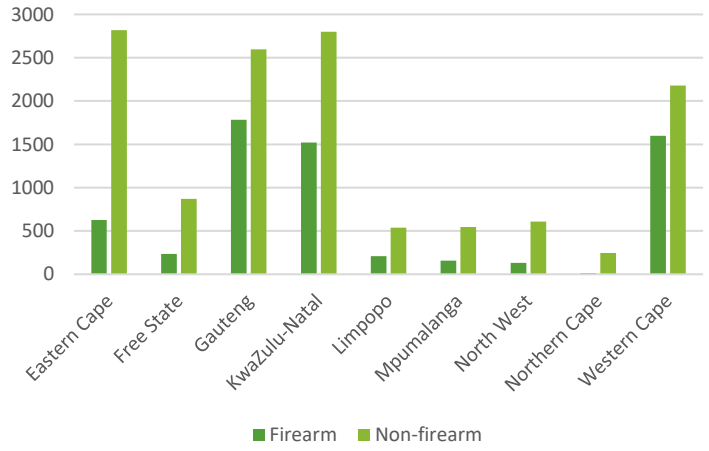
Who was shot and where?

- **Men:** Of the 6,275 people shot and murdered in 2017, 89% (5,616) were male and 11% (659) were female.

> One-third of male and one-quarter of female homicides were firearm-related

- **Aged 30-44:** Men aged between 30-44 years were the most vulnerable to being murdered with a gun (35.4 per 100,000), followed by teenage boys and young men between 15 and 29 years (29.3 per 100,000).
- **In the Western Cape:** The Western Cape had the highest proportion of firearm homicides (42%), followed by Gauteng (41%) and KwaZulu-Natal (35%). Of interest, almost two thirds of licensed gun owners in SA live in these three provinces (37% live in Gauteng, 14% in KwaZulu-Natal and 12% in Western Cape).[4] While the Eastern Cape had the highest overall homicide rate, it had the third lowest firearm homicide rate (18%). The Eastern Cape has the fourth lowest licensed civilian gun ownership rate in SA (8%).[5]

Graph 5: Firearm and non-firearm homicides by province in 2017 (n)



Why focus on gun-related murders?

- Firearms are more lethal than any other weapon used to commit violence.[6]
- Police crime statistics show that in 2018/19 firearms replaced sharp-force weapons as the leading weapon of murder in SA.[7] To note, that while the 2009 injury mortality survey recorded significantly more homicides (13% higher) than recorded by SAPS that year, the 2017 survey confirmed the accuracy of SAPS murder data, so we can assume that SAPS data from 2017 remain reliable.
- Unlike sharp force weapons (knives, bottles, pangas), blunt force weapons (bricks, sjamboks, stones), or strangle force weapons (belts and cables) – all of which are identified by SAPS as weapons used in murders – firearms are controlled by laws that regulate who owns what weapon for which purpose. The state has a particular responsibility for enforcing firearm legislation to ensure that only "fit and proper" individuals are granted the privilege of a firearm certificate, licence, permit or authorisation.

The 2017 injury mortality study notes that the Western Cape's homicide rate substantially increased since 2009. This is "largely attributable to the increase in fatal firearm violence…ascribed…to the illegal supply of guns by an ex-police officer and firearm dealer, to gangs in the Western Cape."[8]

[4] Civilian Secretariat for Police Service Policy Development & Research Unit. 2015. Analysis of the effect of the Firearms Control Act on crime 2000-2014. Pretoria: Civilian Secretariat for Police Service.
[5] Ibid.
[6] Zimring, Franklin. 2004. Firearms, violence and the potential impact of firearms control. Journal of Law, Medicine and Ethics, Vol 32, pp. 34-37.
[7] South African Police Service. 2018. Crime situation in RSA: Twelve months 01 April 2017 to 31 March 2018. Presentation to Portfolio Committee on Police, 11 September.
[8] Prinsloo, Megan. et al. 2021. The 2nd injury mortality survey: A national study of injury mortality levels and causes in South Africa in 2017. Cape Town: South African Medical Research Council, p. 52.

Suicide in SA

In 2017, 6,175 people completed suicide in SA. The table below summarises the key data on who, how and when people completed suicide that year:

	Male	Female
M:F ratio 4.5:1	81%	19%
At risk age	25-29 years (18.1%), followed by 30-34 years (16.6%)	15-19 years (14.1%), followed by 30-34 years (12.5%)
Mechanism of suicide	Hanging (77.2%), poison – ingestion, overdose (8.7%) and firearm discharge (7.4%)	Hanging (45%), poison – ingestion, overdose (36%) and firearm discharge (7.1%)
At risk month	December	July and September
At risk day	Sunday	Monday

Conclusion

The 2017 injury mortality survey gives us a snapshot of the how, who, where, when and what of injury-related deaths in SA that year. This information, particularly when compared with the 2009 survey, gives valuable insights into injury prevention policies and interventions that have already and which can save lives e.g. it highlights that:

- **South Africa has very high levels of violence:** That homicide is the leading cause of non-natural death underscores the urgency of action to decrease the risk of murder, particularly the murder of young men. While interventions to reduce the availability of firearms and alcohol (see points below) will save lives, longer term interventions to build resilience and reduce risk at an individual, family and community level are integral to reducing the burden of violence in SA in the longer term.

> "As firearm prevalence increased, homicide, rape, robbery, and assault each increased. Therefore, it can be concluded that as firearms become more plentiful in an area, violent crime will increase in that area."[9]

- **Gun availability increases murder rates:** On average 17 people were shot and killed every day in SA in 2017, yet the possession and use of firearms (unlike everyday items such as knives) is regulated. Urgent action is needed to reduce the availability of firearms by recovering and destroying illegal guns and strengthening and implementing controls over legal firearms to lower leakage from the legal to illegal pool. Reducing the availability of firearms would immediately reduce injury mortality rates, with research in SA[10] and globally[11] showing that weapon substitution/compensation does not occur, and that a decline in firearm-related homicide and/or suicide leads to an overall decline in both.
- **Alcohol availability increases murder and road traffic deaths:** Recent reductions in hospital trauma admissions as a result of alcohol sale restrictions during the Covid-19 pandemic confirm the positive impact of reducing access to alcohol. Amending SA's Liquor Act based on the World Health Organisation's SAFER model must be prioritised to normalise these gains.[12]

The second phase of the 2017 injury mortality study (which is not yet published) will look more closely at homicides e.g. exploring the victim-perpetrator relationship and motive. This will further enrich our understanding of homicides in SA and help guide policies and interventions to reduce this significant burden.

[9] Moore, Matthew, and CariAnn Bergner. 2016. Firearm ownership and violent crime. Justice Policy Journal, Vol. 13, no. 1, pp. 1-20, p. 16.
[10] Abrahams, Naeemah, Shanaaz Mathews, Lorna Martin, Carl Lombard, and Rachel Jewkes. 2013. Intimate Partner Femicide in South Africa in 1999 and 2009. PLOS Medicine, Vol. 10, No. 4, pp. 1-8.
[11] Killias, Martin. 1993. International correlations between gun ownership and rates of homicide and suicide. Canadian Medical Association Journal, Vol. 148, No. 10, pp. 1721-1725; Zimring, Franklin. 2004. Firearms, violence and the potential impact of firearms control. Journal of Law, Medicine and Ethics, Vol 32, pp. 34-37.
[12] World Health Organisation. n.d. SAFER: A safer world free from alcohol related harms. (Online). Available at www.who.int/initiatives/SAFER (accessed 7 December 2021).