

and 2017 will be utilised to determine if there was a decline in non-natural deaths over this period, and set a benchmark for future progress towards achieving the 2030 Sustainable Development Goals.

Methods We conducted a retrospective review of post-mortem reports for deaths in 2009 at a nationally representative sample of mortuaries. Logistic regression analysis tested hypotheses regarding metro/non-metro areas and manner of death. We are currently completing an enhanced repeat survey for 2017 deaths. We will estimate the weighted injury mortality profile from an unweighted sample of 31 021 records for 8 provinces and 11 350 deaths, previously captured, for the Western Cape. We will calculate age-standardized rates and Incidence Rate Ratios and model estimates comparing the 2009 and 2017 injury mortality surveys.

Results We estimated that there were a total of 52 493 (95% CI: 46 930–58 057) non-natural deaths in South Africa in 2009. We found a significantly higher likelihood for homicide in metro areas compared to non-metro areas, while transport-related deaths were significantly lower in metro areas. Firearm use significantly explained metro/non-metro differences in homicide risk.

Conclusion Targeted recommendations will be made to policy makers on interventions to reduce and prevent the very high rate of injury mortality.

5F – Future, March 24, 2021

5F.001 PROTECTING ON-ROAD COLLECTORS AND ON-ROAD ENTERTAINERS FROM INJURY

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On-road intersection activities such as windscreen washing, entertaining, collecting, selling and advertising are inherently hazardous because of the presence of a vulnerable road user in an environment where, if struck by a vehicle, the forces are likely to exceed that tolerated by the human body.

From research and case study analysis of windscreen washers in Canberra, Australia the following recommendations were provided to reduce injury risk, listed under the headings of Safe System pillars:

Safer Roads

1. Raised intersections or raised safety platforms.
2. Confining these activities to designated 'Squeegee Zones'.
3. Audible warning of imminent signal phase changes.
4. Passive warning signs.
5. Raised intersections or raised safety platforms.

Safer Speeds Same as #1 above.

Safer People

6. Educate and enforce existing restrictions on illegal movements/activities.
7. Install CCTV cameras to monitor windscreen washers' compliance with rules.
8. Run training or information sessions with known windscreen washers or others using intersections as a method of revenue generation.

9. Determine appropriate minimum age involvement and act to minimise the risk to young community members.
 10. Continue with campaigns and behavioural change initiatives targeting driving while fatigued.
 11. Investigate whether drug and alcohol support are required.
 12. Continue with drug/alcohol and driving behavioural change programs and enforcement.
 13. Promote the public's ability to call OOO when inappropriate behaviour occurs.
 14. Ensure that intersections are well lit.
 15. Provide windscreen washers with reflective vests.
- Safer Vehicles**
16. Ensure compatibility between permitted activities and deployed Autonomous Vehicle systems.

5G – Product Safety/Burns/Safety in Design, March 24, 2021

5G.001 PETROL-RELATED BURN INJURIES – THE VICTORIAN ADULT BURNS SERVICE EXPERIENCE

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Background Our experience in Victoria is that burns related to petrol fires are a major cause of injury that would be better prevented. The explosive ignition that makes petrol so valuable as a fuel can cause injuries when petrol is handled carelessly. The authors believe these injuries could be prevented with better consumer education and regulation of petrol use.

Methods We retrospectively carried out a cohort study examining the epidemiology of patients admitted to the Victorian Adult Burns Service (VABS). Data were extracted from the VABS database on patients presenting over a seven-year period.

Results We found that 378 out of 1927 burns admissions (19.6%) were related to petrol use. Males aged 20–29 years were most at risk, contributing to 25.4% of petrol-related burn injuries. Alcohol was a factor involved in 21.2% of cases. The mean total body surface area (TBSA) burnt in this cohort was 19.3%, and surgery was required in 70.4% of cases. Petrol-related burn injuries are estimated to cost AU\$5,484,834 annually and have a mortality rate of 7.4%.

Conclusion Misuse of petrol contributes to a substantial injury burden for Victoria. Approximately 20% of admissions to The Alfred burns unit are petrol related, 70% need surgery and nearly 7.5% of these patients die.

Learning Outcomes Identifying petrol burns as a major health-care crisis in Victoria, and the key demographics involved, has allowed us to engage with the Country Fire Association through the Victorian Burns Prevention Partnership, to produce public awareness campaigns.