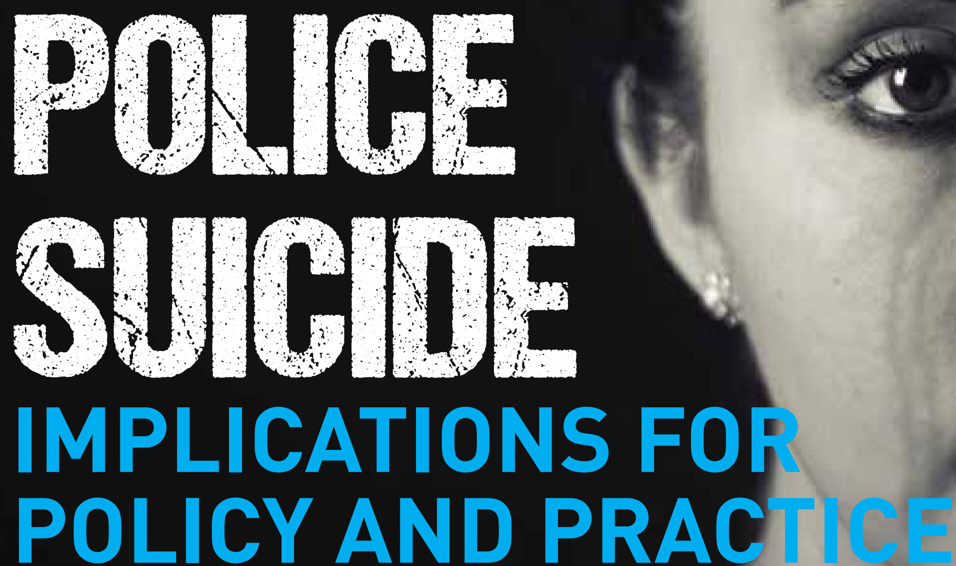

# POLICE SUICIDE

## IMPLICATIONS FOR POLICY AND PRACTICE

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**Researchers in Victoria have analysed national rates of suicide among police and emergency responders against the rest of the working population, with surprising findings and implications for police mental health.**

## INTRODUCTION

Early international studies of police suicide rates suggested that rates were elevated among police relative to the general population.[1,2] More recent studies, however, which have accounted for police demographics and made appropriate comparisons, have been less likely to show elevated rates.

With respect to demographics, police populations are predominantly middle-aged and male, and middle-aged males have the highest suicide rates in the general population. Further, because we know that mental illness and suicide rates are higher in non-employed populations, comparisons of police member suicide rates should be made to the rest of the working population, rather than the general population (which includes employed and non-employed persons). This brief update on police and other emergency responder suicide in Australia summarises a study recently published in a peer-reviewed scientific journal.[3]

# ABOUT THE AUTHORS

The research team included representatives from Deakin, Melbourne and Monash Universities and Victoria Police.

**Tony LaMontagne** is Professor of Work, Health and Wellbeing in the Centre for Population Health Research, School of Health & Social Development, at Deakin University in Melbourne, Australia. Tony's broad research interest is in developing the scientific and public understanding of work as a social determinant of health, and translating this research into policy and practice to improve workplace and worker health. He has a specific interest in occupational health and safety intervention research, with expertise in workplace mental health, improving job quality and psychosocial working conditions, and evaluating workplace health policy and practice interventions.

**Dr Alex West** is the senior police psychologist at Victoria Police. Her role involves overseeing the provision of psychological and wellbeing services to Victoria Police employees through a range of support services. She has been involved with the development and implementation of the organisational health and wellbeing strategy, with a focus on prevention and early intervention.

**Dr Katrina Witt** is a post-doctoral research fellow based at Turning Point, Monash University. Her research interests revolve around the early prevention of self-harm and suicide in both clinical and non-clinical settings such as schools, universities, and workplaces. Together with Dr Alison Milner, Dr Witt is a co-chair of the Workplace and Suicide Special Interest Group with the International Association for Suicide Prevention.

**Dr Allison Milner** is a Deputy Director of the Disability and Health Unit, Melbourne School Population and Global Health, the University of Melbourne. Her current areas of research interests include the influence of gender, employment characteristics, quality of work, and occupation as determinants of mental health and suicide.

**Dr Alicia Papas** is a clinical psychologist who has worked in clinical, organisational, and academic contexts. She has a research and consulting background in the area of workplace mental health and wellbeing, including the design and delivery of projects and programs aimed at improving worker mental health and organisational effectiveness.

**Dr Humaira Maheen** is a Research Fellow at the University of Melbourne in the Centre of Health Equity. Dr Maheen has co-authored a number of papers on suicide and work and the occupations which are at high risk of suicide in Australia. Her key areas of interests are work and suicide, gender, migration and women's health.

# POLICE AND EMERGENCY RESPONDER SUICIDE RATES IN AUSTRALIA

A 2003 meta-analysis of 101 international samples on police suicide found an average suicide rate of 19.3 suicides per 100,000 police personnel, which was lower than the population rate of 25.2 per 100,000.[1] It is important to note that this study, while the most comprehensive internationally, was based on data that is now in the range of two decades old. Nevertheless, it is worth noting that rates varied widely between the studies included in the review, with higher rates associated with studies conducted over shorter time periods (i.e., <10 years), studies from Europe or North America, and those of regional rather than federal or metropolitan police forces. In addition, estimates varied due to the methodological differences described above.

An internal Victoria Police review on suicide between the years of 1990-2013 showed an average of 1.7 deaths per year for both sworn and unsworn employees. When compared with the number of Victoria Police employees (15,761 as of June 2013), this equates to roughly 10.8 per 100,000 which is consistent with the general population rate of suicide for 2012. This suggested that Victoria Police are not at a high-risk of suicide in comparison to the rest of the general Australian population.

We recently conducted a study on suicide rates in police and emergency responders in Australia using National Coroners' Information System (NCIS) data from 2001-2012. This analysis showed that while rates for police and emergency responders as a group were elevated relative to the rest of the working population, police as a specific group did not have an elevated rate at the national level.[2]

## 'Police as a specific group did not have an elevated rate of suicide at the national level'

Statistics collected of persons who committed suicide in occupational groups (comparing specific emergency responder groups to all other occupations, i.e., the rest of the working population) are detailed in Figures 1 & 2. Suicide deaths in the working population as well as in each of the police and emergency responder groups were predominantly among middle aged (30-49 years, Figure 2) males (Figure 1).

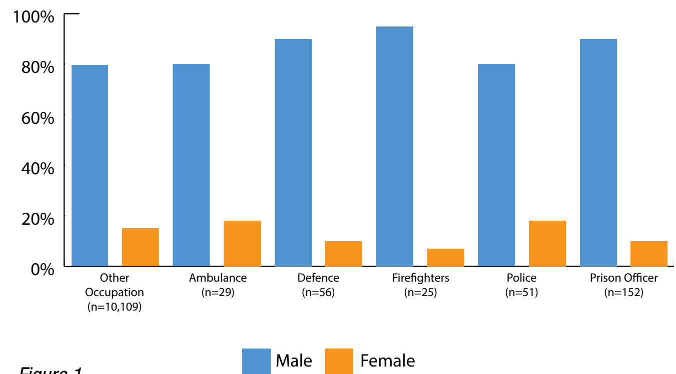


*Figure 1*

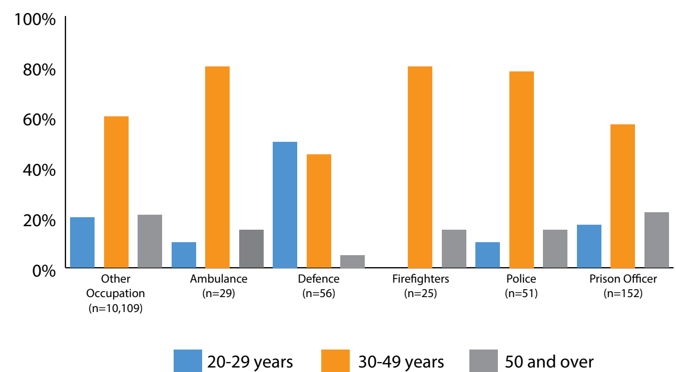


*Figure 2*

Our analysis went on to compare the suicide rates of police and other emergency responder groups to the rest of the Australian working population, as detailed in Figure 3. The rate in all occupations other than police and emergency services serves as the benchmark or reference point for comparison, so it is assigned a Rate Ratio of 1.0, or 100%. Results for the five police and emergency responder groups are presented as Rate Ratios (rate in police and emergency responder groups divided by the rate in the rest of the working population). 'Adjusted' means that these Rate Ratios have also accounted for any differences among the groups in terms of age, sex, and calendar year of death.

The Rate Ratio for Ambulance Personnel of 2.02 shows that these workers have double the suicide rate of the rest of the working population, prison and security officers have almost double (RR = 1.81), and defence personnel have over triple (RR = 3.27) the rate in the rest of the working population. These elevated rates are also statistically significant (unlikely to be due to chance). Firefighters, in contrast, show a slightly elevated rate (RR = 1.20), but the numbers are too small to be confident that this isn't due to chance (i.e., not statistically significant).

In contrast, the next row shows a Relative Risk for Police of 0.70 which means that the overall national rate for police is 30% lower than the rest of the working population. This lower rate for police is also statistically significant.

## The overall national rate for police suicide is 30% lower than the rest of the working population

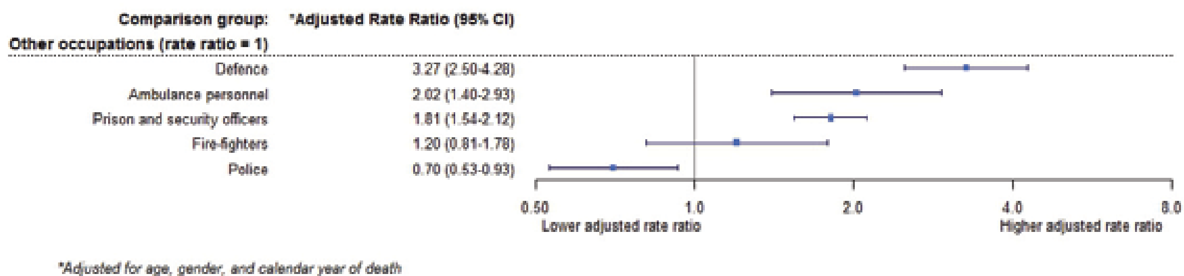


*Figure 3: Suicide rates in police and emergency responder occupational groups, compared to rate in all other occupations (reference rate ratio = 1), adjusted for age, gender, and year of death (2001-2012). This adjustment accounts (statistically) for differences in age, gender and calendar year of death between the groups*

Another recent study published by NCIS itself,[4] based on the same data source but a slightly different range of years (2000-2012), offers some complementary information. This report enumerated counts of persons dying by suicide among police, fire service, and ambulance service workers. While it did not calculate rates in different emergency responder groups compared to the rest of the working population, the numbers observed are comparable with our study and we would expect similar results in terms of rates. One important additional piece of information provided in this report was ascertainment of a previous formal diagnosis of depression. Notably, a formal diagnosis of depression was identified in 32% and 35% of cases involving fire and ambulance personnel, respectively, but only 13% of police cases; this may be attributable to more stringent psychological selection criteria for police.

## INTERPRETATION

Lower suicide rates in police officers compared to the rest of the working population might seem to be inconsistent with other concerning trends in police mental health, such as high rates of stress-related workers compensation claims, clearly elevated PTSD rates, and a work culture that emphasises strength and disdains signs of weakness – hence potentially discouraging help-seeking behaviour.

Police suicides are higher in numbers than many other occupations, but once demographics are taken into account (to correct for the fact that there are higher rates in middle-aged males independent of police occupation) and appropriate comparisons are made (to the rest of the working population), the rates are lower.

The lower rate is also partly explained by selection processes: police are typically subject to more stringent psychological selection criteria than other emergency responders (required to be mentally as well as physically fit). Given the latter consideration, it could be argued that police suicide rates should be lower than the rest of the working population, or – put differently – that a lower rate should be the benchmark rather than the lack of an elevated rate. We would suggest that policing jurisdictions consider this in goal-setting and strategy development in the future.

## RISK FACTORS FOR SELF HARM AND SUICIDE

It is important to note that observation of a lower rate does not diminish the importance or value of suicide prevention initiatives for police members. Previous research has shown that there are several risk factors associated with police officers self-harm and suicide that can and should be addressed.

These include involvement in disciplinary or investigative proceedings (e.g., disciplinary charges, suspensions, reprimands) diagnosed mental disorders, alcohol or other substance abuse, and domestic/relationship issues. Further, both operational

(e.g. exposure to trauma) and organisational (e.g. excessive job demands, poor supervisory support) have been linked to poor mental health outcomes as well as suicidal thoughts and behaviours in police; and mental health problems, particularly depression, can – in turn – increase suicide risk.

To illustrate this, one study found an increase in the risk of suicidal ideation in police officers was predicted by increases in the amount of night shift hours worked[5]. Another study identified that performance and work-related adjustment issues were present in 43% of suicide cases, with almost one-third having problematic work relationships, and one-third being under internal investigation or subject to a workplace review around the time of death[6].

This study also found that while 55 per cent of officers had previously been referred to internal help-seeking systems, the level of actual service uptake was low.

Finally, researchers have also pointed to the need to consider wider organisational factors such as organisational changes and other organisational job stressors in policing, given the potentially negative impacts of working within a rank-based hierarchical structure.[7]

Despite common preoccupations with operational stressors in policing, existing research overwhelmingly indicates that the largest source of job stress and workplace mental illness among police officers stems from the organisational environment and organisational stressors (e.g., administrative policies, lack of support), rather than the operational environment (e.g., exposure to critical incidents and violence, interactions with victims).[8,9,10]

These specific findings in policing align with more general findings in the job-stress literature, which show a consistent relationship between job stressors such as job control, job demands, and social support predicting common mental disorders such as anxiety and depression. This is reflected in relatively high workers' compensation claims rates for chronic work-related stress (as distinct to those for post-traumatic stress disorder). Recent research has also shown that exposure to organisational stressors is associated with suicidal thoughts and behaviours, as well as death by suicide. [12, 13, 14, 15, 16]

## IMPLICATIONS FOR POLICY AND PRACTICE

So, what are the implications for workplace mental health policy and practice in policing? The lower suicide rates in police compared to other occupations is good news, but a lower rate is probably what it should be. We would suggest setting a qualitative benchmark as expecting suicide rates to be significantly below the rate in non-emergency responder occupations. Specifying how much lower would require further research – such as deciding on other occupations that might be desirable comparators, and setting their rate as a benchmark. Alternately, police organisations could aim to continually reduce the suicide rate from its present (national) level.

Further good news is that current mental health strategic directions, such as those recommended in the 2016 Victoria Police Mental Health Review,[17] and taken up in the 2017 Victoria Police Mental Health Action Plan,[18] will contribute to the prevention of suicidal thoughts and behaviours as well as other mental health problems. For example, the focus on promoting mental health literacy and supportive leadership, should – in theory – lead to greater mental health knowledge; reduced personal and organisational stigma against job stress, mental health problems, and suicidality; and greater help-offering and help-seeking by members.

Specific suicide prevention policy and practice should complement more general workplace mental health programs, and could include considerations around access to means (firearms) for police experiencing significant distress and ready access to support in times of acute need.

Our research group recently published a systematic review and meta-analysis of 13 suicide prevention

programs for emergency and protective services employees reported in the international peer-reviewed medical literature.[19]

Most were secondary (symptom-directed) and tertiary-level (illness-directed) interventions. Only six studies had enough information to include in quantitative meta-analysis. On average, these six programs were associated with an approximate halving of suicide rates over five years of follow-up (two studies of police, two military, and two of firefighters). Few studies included primary prevention (strategies aimed at reducing organisational and operational stressors). This review, showing promising findings, suggests that a greater emphasis on primary prevention, as recommended best practice by the WHO[20] and others, could further improve suicide prevention effectiveness.

We would conclude by recommending that suicide prevention is integrated with other workplace mental health strategies in the police context. In addition to state and territory based efforts, beyondblue's Police & Emergency Services program is currently working on national benchmarking in the sector and developing resources to support the improvement of mental health and wellbeing for police and emergency responders across the country.[21] APJ

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