

**That was close: 'Near misses', 'dangerous occurrences' and 'hazardous exposures' in the Australian Army**

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# THAT WAS CLOSE:

## 'Near misses', 'dangerous occurrences' & 'hazardous exposures' in the Australian Army

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### INTRODUCTION

OH&S incidents, such as 'hazardous exposures', 'near misses' and 'dangerous occurrences', place the safety of military personnel at serious risk.

These incidents, which can differ between service type (e.g. full-time and reserve personnel) can serve as a warning to the military forces as to where future potential injuries and fatalities may occur if risk management strategies are not implemented.

AIM: The aim of this study was to investigate reported incidents in Australian Army personnel and examine differences between full-time (Australian Regular Army [ARA]) and part-time (Army Reserves [ARES]) personnel.



### METHODS

- A retrospective cohort study was conducted using data sourced from the Workplace Health, Safety, Compensation & Reporting (WHSCAR) database.
- Non-identifiable data spanning the period 1st July 2012 to 30th June 2014 were provided.
- **Data were included** in the study if the incident: (a) involved ARA or ARES personnel; (b) occurred when the soldiers were on duty or in training, and (c) occurred during service between 01 July 2012 and 30 June 2014.
- **Data were excluded** if the incident: a) was an injury or fatality, or b) was to a service animals.
- The Australian Defence Human Research Ethics Committee (Protocol LERP 14-024) and the Bond University Human Research Ethics Committee (Protocol RO1927) granted ethics approval for this study.

### RESULTS

- Of the reported 3,791 incidents, 96% involved ARA personnel and 4% ARES personnel.
- The ARA reported **6.18 incidents per 100 soldier-years of active service** and the ARES **3.29 incidents per 100 soldier-years of active service**.
- Across both populations, the leading activity for which an incident was reported was operations (n=2,096, 99.4%) followed by weapon firing (n=304, 8.0%) and unknown (n=206, 5.4%).
- The leading activities by type are shown in Figures 1 (ARA) and Figure 2 (ARES).

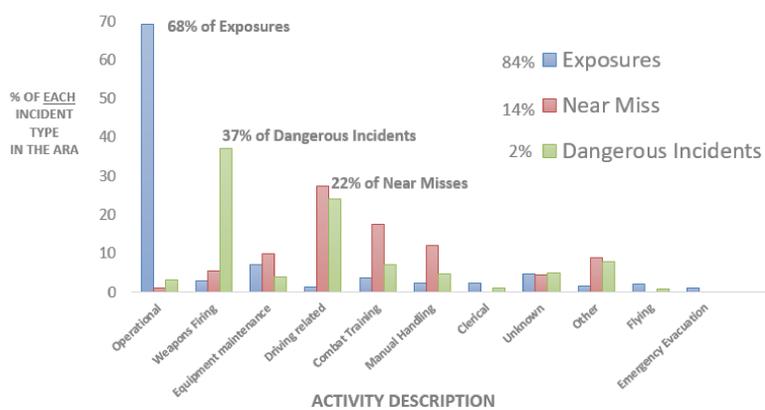


Figure 1: ARA Incidents and leading activities

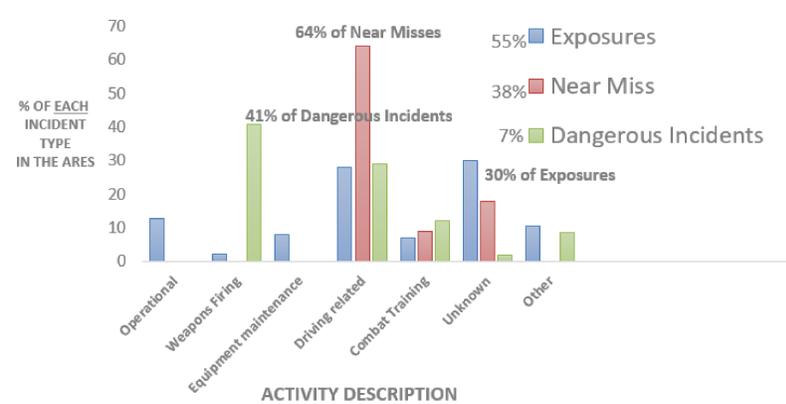


Figure 2: ARES Incidents and leading activities

### DISCUSSION & CONCLUSIONS

Apart from *exposures* reported by ARA personnel as being due mostly to **operations**, **weapon firing** and **driving** presented as the leading cause of incidents.

The risk of dangerous *exposures* and driving related incidents amongst army personnel when in military vehicles is supported by the literature.<sup>1,2</sup>

Likewise, weapons firing prevalence is a major threat to military personnel safety, with the U.S military finding 33% of battle fatalities and 10% of all injuries were due to weapons firing during the operation Iraqi freedom.<sup>3,4</sup>

A potential reason for the difference between ARA and ARES in *operations* and *combat training* may be due to ARES personnel being exposed to less chronic military duties and combat training.<sup>5</sup>

Previous studies have also shown **service ranks to greatly influence** the everyday risk faced by army personnel.<sup>6</sup>

Risk mitigation strategies, focussing on operational *exposures*, *weapons firing* and *driving* are recommended to reduce the level of risk and possibly injury, mortality and illness suffered by Australian Army personnel should be targeted towards the **Private (equivalent) / Corporal (equivalent)** ranks.

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