OCCUPATIONAL HEALTH & SAFETY SURGE CAPACITY

Project Leader: Dr Brad Aisbett[1]

End-User Leader: Ms Robyn Pearce[2]

Team Members: Dr Fabienne Reisen[3], Dr David Darwent[4] & Dr Sally Ferguson[4]

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Overview

Each year, Australia is threatened by bushfire. Firefighters safeguard the nation from the ravages of bushfire. The prospect of more frequent and longer fires, impacting people, properties and the bush, places an ever-increasing demand on the capacity of fire agencies to perform this vital protective role. Preserving firefighter health and safety is a national priority.

The Occupational Health & Safety and Surge Capacity program comprises three distinct but inter-related research projects aimed at maximising the capacity of our fire agencies to respond to the bushfire threat whilst preserving the health and safety of their personnel.

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"Fire in the Interface"

Lead: Dr Fabienne Reisen

This research will quantify the likely toxic emissions from structures burning in the rural-urban interface and predict exposure levels.

"Sustained Operations"

Lead: Dr David Darwent

Research will explore whether shorter work-rest cycles can delay or limit acute physical exhaustion or acute mental fatigue, particularly in extended operations.

"Environmental Stressors"

Lead: Dr Brad Aisbett

This research will simulate long work shifts to look at the effects of heat, sleep disruption and smoke in various combinations on firefighter's physical and cognitive work performance over consecutive work shifts.

"Our firefighters are exposed to many hazards during firefighting operations. The outcomes of this research will enable agencies to develop new ways to better protect our people".
Robyn Pearce,
Director – Human Services,
Tasmania Fire Service

Outcomes

- New insight into toxic exposures firefighters face fighting fires in the interface
- Novel understanding of firefighters' physical and cognitive work capacity in different fireground conditions
- Exploration of the feasibility and benefits (or not) of shorter work-rest cycles to sustain firefighters during extended operations.