

# Factors contributing to firefighters' mental health and wellbeing

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**Heather Bancroft** / University of Melbourne

**Assoc Prof Andrea Phelps** / University of Melbourne

**Prof Meaghan O'Donnell** / University of Melbourne

 @bnhcrc  @bnhcrc



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# Background



- Firefighters' exposure to PTEs increases the risk of the development of PTSD, depression, anxiety and alcohol use disorders
- Research provides evidence that other operational and organisational aspects of their role also contribute significantly to the development of these disorders
- The existing literature is inconsistent in relation to the prevalence and predictors of these disorders



## To identify

1. The **prevalence** of disorders
2. The relative contribution of the four categories of **predictors** to mental health outcomes
3. Whether 1. and 2. differ for volunteer and career firefighters

## Aims






# Method

## ➤ Longitudinal study

- Survey
- Diagnostic clinical interview

## ➤ 4 fire services participated

- **817 firefighters** completed the survey once and of these **335** provided follow-up data
  - **300 firefighters** participated in a diagnostic clinical interview
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Diagnosis	Career N = 91	Volunteer N = 206	General population		Australian firefighter studies
			Males	Tot	
	%	%	%	%	%
Any diagnosis	16.5	14.1	20		17.1
PTSD	3.3	1.9	4.6	6.4	5.8 – 32
Depression	5.5	4.4	3.1	4.1	5 – 23
Anxiety (GAD)	3.3	6.8	2.0	2.7	1.3 – 27
Alcohol (AUD)					
Alcohol abuse	3.3	2.4	3.8	2.9	1.6
Alcohol dep	5.5	3.4	2.2	1.4	1.4

*Prevalence of PTSD,  
depression, GAD & AUD*

Individual		Acute stressor	
Baseline mental health		Potentially traumatic events (PTE)	
Gender (Vol)		Recent life events (RLE)	
Age			
Education			
Personal support			
Operational		Organisational	
Rank		Organisational job satisfaction	
Length of service		Psychosocial Safety Climate (PSC-12)	
Hours worked in firefighting			
Operational job satisfaction			

## Predictor variables

<i>Individual/demographic predictors</i>		<i>Acute stressor predictors</i>	
Career	Volunteer	Career	Volunteer
Baseline PTSD	Baseline PTSD	PTE exposure	
<i>Operational predictors</i>		<i>Organisational predictors</i>	
Career	Volunteer	Career	Volunteer
Operational job satisfaction			

## Predictors of posttraumatic stress disorder

<i>Individual/demographic predictors</i>		<i>Acute stressor predictors</i>	
Career	Volunteer	Career	Volunteer
Baseline depression	Baseline depression	PTE exposure	Recent life events
<i>Operational predictors</i>		<i>Organisational predictors</i>	
Career	Volunteer	Career	Volunteer
Operational job satisfaction			

## Predictors of Depression



<i>Individual/demographic predictors</i>		<i>Acute stressor predictors</i>	
Career	Volunteer	Career	Volunteer
Baseline GAD	Baseline GAD		
<i>Operational predictors</i>		<i>Organisational predictors</i>	
Career	Volunteer	Career	Volunteer

## Predictors of Generalised Anxiety Disorder (GAD)

<i>Individual/demographic predictors</i>		<i>Acute stressor predictors</i>	
Career	Volunteer	Career	Volunteer
Baseline AUD	Baseline AUD	RLE	
<i>Operational predictors</i>		<i>Organisational predictors</i>	
Career	Volunteer	Career	Volunteer
Rank - firefighter			

## Predictors of Alcohol Use Disorder (AUD)

- Prevalence rates
- **Most common disorders**
- *Career* firefighters
  - **High operational job satisfaction** lead to fewer symptoms of PTSD and depression
  - **PTE** exposure impacted PTSD and depression
  - **RLE** & being a **firefighter** lead to more alcohol symptoms
- *Volunteer* firefighters
  - **RLE** only additional predictor
    - \* **Joint approach** to create a **culture** within fire services that encourages and supports **early identification** via regular **monitoring** of mental health and numbers of PTEs attended
    - \* **Recognition of changes in work attitudes** such as job satisfaction and experience of **RLEs**

## Overview