

[CHERRY] - *Mental ill-health in firefighters deployed to the Fort McMurray fire*

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Priority Research Area: N/A

Relevant PSP Population(s): Structural, wildland and industrial firefighters

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What is the issue? We wished to characterise mental health issues in a cohort of firefighters deployed to the Fort McMurray fire using a Standardised Clinical Interview

What was the aim of the study? To characterise the mental ill-health in this cohort and to use the results to estimate the prevalence of anxiety, depression and PTSD and identify causal factors

How was the study conducted? 1000 firefighters in the cohort of 1234 had completed screening questionnaires for anxiety, depression and PTSD some 30 months after the start of the fire in May 2016. We identified a stratified random sample of firefighters based on these screening instruments and, using funding from this catalyst grant, carried out 193 Standardised Clinical Interviews (SCI-D) to allow symptoms to be categorised on the DSM-5.

What did the study find? Among the 193 interviewed, no diagnosis was reached for 66 (34%), PTSD for 78 (40%), anxiety 59 (31%) and depression 53(28%). Some firefighters were diagnosed with more than one condition. Using these results we estimate a prevalence of 11.9% for PTSD in the whole cohort. Current analysis is identifying factors associated with the likelihood of 'caseness' for particular diagnoses 30 months after the Fort McMurray fire. We find, for example that anxiety, depression and PTSD are all related to serious life events since the start of the fire. PTSD is more likely in those who reported, in the first months after the fire, that their life felt threatened during the fire. Cases of anxiety and depression were more frequent among those whose home base (as a structural, wildland or industrial firefighter) was in Fort McMurray. Using records on physician consultations for mental health issues, we found that these were more common in those with a history of mental health consultations before the fire and for those based in Fort McMurray. Current analysis, based on interviews with fire chiefs from throughout the province, is evaluating the effectiveness of mental health and resiliency training and interventions in mitigating adverse effects of the Fort McMurray deployments.

What are the implications of this study? The full value of the study rests in the evaluation of mitigating interventions. Of those with PTSD only 36% evoked the Fort McMurray fire as a trauma, many relating events at other fires, in their role as a paramedic or events outside work. While it may be possible to demonstrate that interventions around the time of the Fort McMurray fire reduced the effects of that event, it is evident that firefighters deal with multiple traumatic events, suggesting the need for ongoing programs.

What are the key messages? Management of mental ill-health remains a key concern for firefighters

Provide a list of potential target audiences for this research:

Fire chiefs
Unions
Firefighters

Occupational and mental health professionals