

Submission to the Senate Education and
Employment Committees

**The role of Commonwealth, state and
territory Governments in addressing
the high rates of mental health
conditions experienced by first
responders, emergency service
workers and volunteers**

Committee Secretary
Senate Education and Employment Committees
PO Box 6100
Parliament House
Canberra ACT 2600

20/06/2018

Dear Committee Secretary

Thank you for the opportunity to contribute a submission to *The role of Commonwealth, state and territory Governments in addressing the high rates of mental health conditions experienced by first responders, emergency service workers and volunteers*. I write to you as an Accredited Exercise Physiologist (AEP) who has delivered exercise interventions to many first responders, emergency service workers and volunteers as an adjunct therapy for mental illness and/ or chronic disease. I have seen firsthand how physical activity, exercise, and positive behaviour change can be effective in improving symptoms of mental illness and chronic disease.

In my submission, I have addressed Terms of Reference a, b, and c (ii,iv,vi,vi, vii). I aim to highlight the importance of establishing an integrated, comprehensive approach to addressing the high rates of mental health conditions in first responders, emergency service workers, and volunteers. Too often physical health and lifestyle behaviours are overlooked in the prevention, treatment, and recovery of mental illness. Physical health and mental health are often reflections of each other, with poor physical health being a risk factor for poor mental health, and vice versa.

Within emergency services and first responder agencies, where there is often an occupational requirement to maintain a specified level of physical fitness and health, encouraging improvements in physical health to ascertain improvements in mental health is even more pertinent.

Regards,

Ms Caoimhe Scales AEP AES ESSAM
BClinExPhys. (QUT) & MHPol Student (USYD)

a. The nature and underlying causes of mental health conditions experienced by first responders, emergency service workers and volunteers.

In Australia, first responders, emergency service workers and volunteers primarily include the Police Forces, Paramedics, Fire & Rescue Services, State Emergency Services, and Marine Rescue and Volunteer Rescue Associations. Across these agencies, there are over 80,000 fulltime emergency workers employed across Australia (Black Dog Institute, 2015). These employees, in addition to valued volunteers, often respond to life and death situations, and are exposed to repeated traumatic events. First responders attend to many different situations including fatalities, casualties, natural disasters, and consequently may be exposed to violence, bereavement, and life threat to themselves, members of the public, or to their colleagues (beyondblue, 2017).

Exposure to these repeated situations of crisis can have a cumulative effect on a person, and in some situations can negatively impact one's mental health (beyondblue, 2017). First responders and emergency service workers are also exposed to a variety of occupational stressors. The role often involves long-hours, shift-work, high stress, heavy workloads, and increasing demands. Like many workplaces, they may also be exposed to inadequate support, and bullying (beyondblue, 2017). These factors can impact both mental health and physical health.

It is important to note that mental health and physical health go hand in hand. There is an expectation that emergency service workers are physical healthy and have high levels of fitness in comparison to that of other occupations, however this is often not the case (beyondblue, 2017). First responders and emergency service workers experience extended periods of sedentary time (sitting, driving, lying down, low-activity), with intermittent bouts of vigorous physical tasks. They can also have difficulty 'winding down' or 'switching off' and may experience inconsistent sleep patterns or sleep disorders (beyondblue, 2017).

Due to their variety of working hours, inability to predict the duties of the day ahead, and inability to have planned meal times, first responders may also have poor eating habits. In isolation and combination, poor eating habits, poor sleep quality, and sedentary behaviour can contribute to poor physical health. Poor physical health is strongly associated with poor mental health. Equally, those with poor mental health, or mental illness, are likely to experience poor physical health (Lawrence & Hobson-Powell, 2018).

Addressing physical health and mental health concerns concurrently, can improve overall health outcomes for emergency service workers, in the prevention, treatment, and management of mental health conditions.

b. Research identifying linkages between first responder and emergency service occupations, and the incidence of mental health conditions

There is mounting research that identifies the linkages between first responder and emergency service occupations, and the incidence of mental health conditions. A minority of first responders and emergency services workers will experience mild, moderate, or severe symptoms of mental illness (beyondblue, 2017). Symptoms may be short term, or on an ongoing or recurrent basis (beyondblue, 2017). First responders and emergency services workers have an increased risk of burnout, stress-related anxiety, depression, and Posttraumatic Stress (beyondblue, 2017). Comorbid mental health conditions are also common. PTSD, for example, often presents with Major Depressive Disorder (MDD), Anxiety, and/or Substance Use Disorders (SUD) (Hall et al. 2016).

Emergency services workers generally have a higher incidence of PTSD than the wider population due to sensitisation (Phoenix Australia, 2013). Sensitisation is where repeated exposure to trauma, or traumatic incidents, result in progressively more severe reactions over time (Phoenix Australia, 2013). Approximately 1 in 10 first responder and emergency workers are currently suffering from PTSD (Phoenix Australia, 2013). A systematic review and meta-regression analysis of the worldwide prevalence of PTSD reported approximately 15% of Ambulance personnel, 7% of fire fighters, and 5% of police suffer from PTSD (Berger et al. 2012 in Phoenix Australia, 2013).

If an individual's mental health condition goes unreported, and/or appropriate intervention is not delivered, an increase in risky and self-destructive behaviours such as substance abuse, self-harm, and suicidal ideation is likely. Emergency services workers are more at risk of suicide than the general population, largely due to their access to means of suicide, such as firearms (Milner et al. 2017). The National Coronial Information System reported that 110 fatalities of emergency services workers resulted from intentional self-harm in the period of July 2000 – December 2012 (NCIS, 2015). These fatalities included 62 police service members, 22 fire service members and 26 ambulance service members (NCIS, 2015).

First responder and emergency service occupations have a higher incidence of mental health conditions than the general population.

c. Management of mental health conditions in first responder and emergency services organisations, factors that may impede adequate management of mental health within the workplace and opportunities for improvement

ii. Specialised occupational mental health support and treatment services

For first responders and emergency services workers with symptoms, or diagnosis of mental illness, a holistic approach to specialised occupational mental health support and treatment services is crucial. Multidisciplinary care, such as the delivery of dietary and exercise support programs, in conjunction with medical and psychological services, can provide a range of benefits for those with mental illness (ESSA, 2018; Lederman et al. 2016). This integrated care approach can lead to benefits in physical, social, and mental health (Lawrence & Hobson-Powell, 2018).

Implementing lifestyle intervention or support programs, such as exercise programs facilitated by an Accredited Exercise Physiologist (AEP), can play a significant role in the holistic treatment of individuals experiencing mental illness (Lederman et al. 2016). As reported by Exercise and Sports Science Australia (ESSA), in their submission to the *Senate inquiry into the accessibility and quality of mental health services in rural and remote Australia*, a substantial body of clinical research has established that effective exercise interventions, led by an AEP:

- Improve symptoms of PTSD beyond usual care alone
- Decrease symptoms of depression, anxiety, stress and schizophrenia
- Decrease social isolation
- Improve sleep quality
- Increase self esteem
- Improve quality of life
- Increase engagement with treatment and service utilisation
- Reduce withdrawal, and cravings in SUD, alcohol addiction, and smoking cessation (Lawrence & Hobson-Powell, 2018)

Lifestyle support programs, such as AEP led exercise interventions, can also have numerous physical and occupational health benefits, including:

- Improved occupational functioning
- Improved psychosocial function, including Activities of Daily Living (ADLs)
- Reduce risk of chronic disease, particularly mental illness, cardiovascular disease, metabolic syndrome, and Type 2 Diabetes Mellitus (T2DM)
- Weight management
- Longer life expectancy (Lawrence & Hobson-Powell, 2018)

Physical fitness also aids in the prevention of mental health conditions, such as posttraumatic stress disorder. A number of research studies have identified the link between exercise and resilience, as well as improved mood, self-esteem, and adaptive neurobiological changes such as increases in neural plasticity (Horn, Charney & Feder, 2016). There may also be associations between exercise and posttraumatic growth, however there is need for further research in this space.

Exercise and lifestyle support programs, currently available to first responder and emergency services agencies include:

- Employee Assistance Program (EAP)

- Subsidy of fees relating to access of fitness and gym facilities (e.g. Fitness Passport Program)
- Access to gym equipment and facilities (most Fire Stations, Police Headquarters)

Ensuring that all first responders, emergency services workers and volunteers have access to lifestyle support programs, such as Accredited Exercise Physiologist (AEP) led exercise programs, will enable adequate prevention, intervention, management, and rehabilitation of both physical and mental health conditions experienced within the workplace.

iv. Workplace culture and management practices

As identified by the *Good practice framework for mental health and wellbeing in first responder organisations*, work place culture is a critical point of consideration when implementing strategies to address the high rates of mental health conditions in first responders (beyondblue, 2017). Elements of workplace culture can have both protective and negative implications on mental health. Protectively, workplace culture in emergency services is often one of teamwork, mateship, and camaraderie (beyondblue, 2017). Productivity at work, and belief that a positive contribution is being made in the workplace is also beneficial to mental health, and aids in recovery from mental illness (beyondblue, 2017). Conversely, negative implications arising from workplace culture in emergency services can include stigmatising of mental illness, and discrimination of employees with reported mental health conditions (beyondblue, 2017). There is also a common perception that reporting a mental health condition, or symptoms of mental illness, may lead to medical discharge or inability to return to normal duties (Crawford, 2016)

Most, if not all, emergency services and first responder agencies emphasise the importance of preventative programs within policies relating to health, fitness, wellbeing, and mental health. At the recruitment stage, most agencies implement thorough health and fitness testing to screen potential recruits prior to employment. However, ongoing health and fitness assessments after recruitment are not common practice (Hehir, 2014). Most notably, a report conducted by Audit Office of NSW identified that no Australian Fire and Rescue Agency has ongoing fitness assessments for its firefighters post recruitment (Hehir, 2014). Ongoing fitness assessments are important, as most emergency agencies have a duty of care to ensure that their employees can safely carry out their work specific duties and occupational tasks.

The Audit Office of NSW has recognised the importance of these assessments in its *Preventing and Managing Worker Injuries* Report recommendations (Crawford, 2016). Specifically, the Auditor-General has recommended that “by July 2017, Fire & Rescue NSW should introduce an ongoing health and fitness assessment for firefighters”, which should be mandatory, and the frequency of assessment defined (Crawford, 2016). These recommendations were previously made in 2014, and have been accepted by Fire & Rescue NSW who is working toward implementation strategies (Crawford, 2016).

On top of work place health and safety assurances, and occupational benefits, regular health and fitness assessments are likely to aid as policy ‘sticks’ and may incentivise emergency service workers to maintain positive lifestyle behaviours, including regular physical activity and healthy eating. Maintenance of these behaviours will have positive benefits on employees’ physical health and mental health. Ongoing assessments may also provide an opportunity to conduct psychological screening or evaluation.

Ongoing, mandatory fitness and health assessments should be implemented across first responder and emergency services agencies where appropriate.

v. Occupational function and return-to-work arrangements

The Commonwealth, State and Territory Governments play a critical role in providing adequate support services for their employees aiming to successfully return to work after trauma, injury and illness. For emergency services employees with symptoms or diagnosis of mental illness, returning to work is an important element of rehabilitation, and should be seen as a treatment goal (Black Dog Institute, 2015). As previously eluded to, the importance of addressing physical health to achieve improvements in mental health, should not be overlooked in the framework of these arrangements. Return to work rehabilitation programs should include an exercise intervention component, delivered by an Accredited Exercise Physiologist (AEP), in order to achieve best outcomes for the employee and the agency.

AEPs are university qualified allied health professionals who prescribe clinical exercise to manage acute, sub-acute, or chronic injuries, and medical conditions, such as mental health conditions (ESSA, 2018). Interventions delivered by an AEP include health and fitness assessments, exercise prescription, exercise programming, health and physical activity education, as well as advice and support with a key focus on behaviour change and improving consumer outcomes (Lawrence & Hobson-Powell, 2018).

An example of a successful return-to-work exercise rehabilitation program, led by Accredited Exercise Physiologists, is the ‘Return to Work Durability Program’ provided by Fire & Rescue NSW. The program is offered to firefighters who are completing, or have completed, a return to work program (Hehir, 2014). Its aim is to improve the functional capability of injured firefighters and reduce the risk of re-injury (Hehir, 2014).

The ‘Return to Work Durability Program’ includes a number of components, such as:

- Establishing patient-centred treatment goals with the firefighter, and with input from their treating team
- Initial assessment and screening
- Prescription of an individualised exercise program
- Exercise delivery, modification, and education over four sessions (face-to-face or over the phone)
- Final assessment and screening
- Prescription of a self-managed exercise program, and offer of ongoing support (Hehir, 2014)

Although the program was initially designed to address injuries, its framework is suitable to deliver exercise interventions to emergency service workers recovering from mental health conditions, or symptoms of mental illness. Broader expansion of the program nationally, across emergency services and first responder agencies, where an equivalent program does not currently exist, is likely to be efficacious. Exercise programs for individuals with mental illness are considered to be feasible, acceptable, and an efficacious adjunct therapy (Rosenbaum et al. 2015). Exercise interventions may also be more acceptable treatment options for emergency service workers who are initially adverse to traditional medical and psychotherapy interventions (Hall et al. 2016).

Return to work mental health rehabilitation programs, available to employees and volunteers, should include an exercise intervention component, delivered by an Accredited Exercise Physiologist (AEP), in order to achieve best outcomes for the employee and the agency. Aforementioned rehabilitation programs should also be available to employees and volunteers post-retirement, and should be independently evaluated following implementation.

vi. Collaboration between first responder and emergency services organisations

Collaboration between first responders and emergency organisations can contribute to a range of protective factors relating to mental health. Establishing a collaborative mental health strategy can ensure that protective factors of mental health, such as camaraderie and destigmatising mental illness, can be enhanced and maintained. In regards to mental health and physical activity, the emergency services and first responder agencies have a history of facilitating positive competition through sport and fitness challenges. Consultations with emergency services workers and volunteers have also identified that healthy, positive competition between stations and/or agencies could encourage the uptake of healthy lifestyle behaviours, such as increasing physical activity and establishing healthy eating habits (Hehir, 2014).

Currently, across Australia, there are a number of sporting competitions held within, and between, emergency services agencies. The Australasian Police and Emergency Services Games, is the standout example. The Games, run biennially, “build camaraderie and promote a healthy lifestyle through the participation in sport, while heightening the public’s awareness of Police and Emergency Services” (ANZPGF, 2018). Approximately 3000 athletes participate in the Games, across more than 50 individual and team sports (ANZPGF, 2018). Other sporting competitions include the Australasian Fire Fighter Championships, Australian Police Games, the Australian Police Winter Games, Sate Fire Fighter Championships, and State Rural Fire Fighter Championships.

Participation in any of the above competitions is likely to encourage healthy lifestyle behaviors, and uptake of support programs such as exercise interventions. Participation in sport also reduces risk factors for mental illness including social isolation, stress, sedentary behaviours and poor health. Continued support and advocacy for first responder and emergency services competitions may act as a policy ‘carrot’ to incentivise participation in regular exercise, which in turn is likely to improve employees’ physical health and mental health.

Advocacy, and financial support for intra-agency and inter-agency fitness/sporting challenges and competitions, may encourage first responders, emergency services workers and volunteers to participate in regular exercise and sport, which is likely to benefit both the physical health and mental health of participants.

vii. Post-retirement mental health support services

Post-retirement mental health support services for emergency services personnel are vital. The prevalence of PTSD in this population is particularly high in comparison to the general population. As suggested for the active workforce, addressing the somatic symptoms of mental illness, in addition to psychiatric symptoms is of particular importance (Hall et al. 2016). Retired emergency services personnel are likely to have greater risk factors for mental illness including social isolation, low self-esteem, poor nutrition, lack of exercise, lack of compliance to medication and other treatments, and a high prevalence of substance use/dependence (Hall et al. 2016). They also have increased barriers to treatment utilisation including lack of transport, financial constraints, and engrained stigma relating to mental illness and psychotherapies.

Currently, post-retirement emergency services personnel are invited to attend most rehabilitation and support services offered by the emergency services agencies, and this should continue. Tailored programs, targeted at this sub-group of emergency services workers and volunteers – possibly similar to those offered to veterans- may also be beneficial, and may enable the needs and goals of the group to be better meet.

Mental health support services available to active first responders, emergency services workers and volunteers should also be available to personnel who are post-retirement. Specific, tailored programs targeted at post-retirement personnel may also be a feasible and effective solution.

References

- Australia New Zealand Police Games Federation. (2018). *Games History*. Retrieved from Australasian Police and Emergency Services Games: <http://www.apandesgames.com.au/page/Games-History-x-7284-2319-15249.html>
- Berger, W., ES, C., Marques-Portella, C., Luz, M., Neylan, T., Marmar, C., & Mendlowicz, M. (2012). Rescuers at risk: a systematic review and meta-regression analysis of the worldwide current prevalence and correlates of PTSD in rescue workers. *Social Psychiatry and Psychiatric Epidemiology*, 1001-11.
- beyondblue. (2017). *Good practice framework for mental health and wellbeing in first responder organisations*. Retrieved from Heads Up: https://www.headsup.org.au/docs/default-source/resources/good-practice-guide-first-responders_bl1675_acc_std.pdf?sfvrsn=e4b02c4d_8
- Crawford, M. (2016). *Preventing and managing worker injuries- NSW Police Force and Fire & Rescue NSW*. Sydney: Audit Office of NSW.
- Exercise and Sports Science Australia (ESSA). (2018). *How can an Accredited Exercise Physiologist help?* Retrieved from Exercise and Sports Science Australia (ESSA): <https://www.essa.org.au/essa-me/about-us/ourmembers/how-can-an-accredited-exercise-physiologist-help/>
- Hall, K., Gregg, J., Bosworth, H., Beckham, J., Hoerster, K., Sloane, R., & Morey, M. (2016). Physical activity counselling promotes physical and psychological resilience in older veterans with posttraumatic stress disorder. *Mental Health and Physical Activity*, 11, 53-59.
- Hehir, G. (2014, April 1). *Fitness of Firefighters*. Retrieved from Audit Office of New South Wales: https://www.audit.nsw.gov.au/ArticleDocuments/325/01_Fitness_of_Firefighters_2014_Full_Report.pdf.aspx?Embed=Y
- Horn, S., Charney, D., & Feder, A. (2016). Understanding resilience: New approaches for preventing and treating PTSD. *Experimental Neurology*, 284(B), 119-132.
- Lawrence, A., & Hobson-Powell, A. (2018, May 11). *Exercise & Sports Science Australia submission to the Senate Standing Committees on Community Affairs: Accessibility and quality of mental health services in rural and remote Australia*. Retrieved from Exercise and Sports Science Australia (ESSA): https://www.essa.org.au/wp-content/uploads/2018/01/ESSA-submission_Accessibility-and-quality-of-mental-health-services-in-rural-and-remote-Australia_May-2018.pdf
- Lederman, O., Grainger, K., Stanton, R., Gould, K., Perram, A., Baldeo, R., . . . Rosenbum, S. (2016). Consensus statement on the role of Accredited Exercise Physiologists within the treatment of mental disorders: a guide for mental health professionals. *Australas Psychiatry*, 24(4), 347-51.
- Milner, A., Witt, K., Maheen, H., & LaMontagne, A. (2017). Access to means of suicide, occupation and the risk of suicide: a national study over 12 years of coronial data. *BMC Psychiatry*, 17(125).
- National Coronial Information System (NCIS). (2015). *Intentional Self-Harm Fact Sheet: Emergency Services Personnel*. Melbourne: National Coronial Information System (NCIS).

- Phoenix Australia- Centre for Posttraumatic Mental Health. (2013). *Australian Guidelines for the Treatment of Acute Stress & Posttraumatic Stress Disorder*. Melbourne: Phoenix Australia.
- Rosenbaum, S., Tiedemann, A., Stanton, R., Parker, A., Watterus, A., Curtis, J., & Ward, P. (2015). Implementing evidence-based physical activity interventions for people with mental illness: an Australian perspective. *Australasian Psychiatry*, 24(1).
- WorkCover NSW. (2010, September). *Guidelines for workplace return to work programs*. Retrieved from icare NSW.