



Submission to the Parliamentary Inquiry into the
Mental Health of First Responders, Emergency Services & Volunteers

DEBRIEFING THE BODY

**Supporting the Health Related Quality of Life of
Volunteers & First Responders through TRE Resilience Training**

**Richmond Heath
Physiotherapist
TRE Australia**

October 2018

Dear Committee Members,

Thank you for the opportunity to make this submission in the hope of being able to contribute to your final public hearing in Canberra in November.

I am a Physiotherapist and the National Co-ordinator of an innovative body-based Resilience Training called TRE. This paradigm-changing approach not only provides First Responders with a *stigma-free*, body-based model of occupational stress & trauma, but a *practical self-care technique* to prevent it.

Since introducing TRE to Australia in 2010, I have trained approximately 2000 people in the self-care use of TRE via public workshops and professional trainings with outstanding clinical results. I have provided TRE recovery workshops to survivors of the Black Saturday Bushfires in Victoria, the Christchurch Earthquake in New Zealand and the Ipswich and Toowoomba Floods in Queensland, and established a national professional training program with more than 60 TRE Providers from a diverse range of backgrounds currently teaching TRE Australia-wide.

As it is generally difficult to gain an understanding of TRE without having seen or personally experienced it, I highly recommend the members of the committee view this [7-minute video overview](https://www.youtube.com/watch?v=WReAjA7Nx4M) to gain the background context to enable a full appreciation of the rest of this submission.

<https://www.youtube.com/watch?v=WReAjA7Nx4M>

Shakes & Tremors as Solutions, not symptoms

At the heart of TRE is the reframing of the role of spontaneous involuntary movements, including shaking, trembling and tremors, as an innate *down-regulatory reflex* of the nervous system that *switches off hyper-vigilance* and restores the neurobiology of the body to *resilience* after stressful or traumatic events.

Commonly experienced while public speaking or *after* acute trauma or shock such as a car accident, these involuntary movements are currently pathologised by the mental health system and treated as a '*symptom*' of disorders including anxiety, panic attacks and PTSD. This is despite no research within the sector into this universal phenomenon naturally occurring in all humans and most mammals.

In August of this year, when presenting TRE at the Australian Childhood Foundation's International Trauma Conference, I outlined how TRE and the trauma-informed theory underlying it directly relates

to key knowledge gaps in our current understanding in the neurobiology of PTSD as reported in the Australia21 'When Helping Hurts' Roundtable Reports.

As it is not my intention to provide the neuroscientific background to TRE as part of this submission, a video of the 20-minute presentation is available at <https://vimeo.com/282828088>

Suppressing Shakes & Tremors

Amongst First Responders and the people they assist, spontaneous shaking, trembling and tremors due to chronic stress or acute trauma is currently suppressed and inhibited as a sign of being weak, scared, in shock, traumatised, not coping or out of control and a step on the journey towards PTSD.

Not only does the suppression of this natural *recovery reflex* prevent its potential to assist recovery and resilience, it may also be inadvertently increasing the likelihood of a range of physical and mental health conditions including, PTSD, anxiety, substance abuse, depression and burnout by the inhibition of the specific reflex the body is seeking to initiate to prevent the development of these conditions in the first place. It would appear immediate investigation is not only warranted, but vital.

TRE – tension & trauma release exercises

TRE consists of a simple technique to deliberately invoke this natural shaking reflex in a safe and controlled way. This empowers Personnel in the management of their own health and wellbeing by training them how to *physically release* stress, tension and trauma held in the neurobiology of the body below the level of conscious control *without having to talk about it*. This makes TRE user-friendly and *stigma-free*.

TRE can be performed lying on the floor or even in bed in less than 10 minutes and accesses the body's innate organic reflex to switch off hyper-vigilance. Improvements in sleep are often reported immediately with many First Responders therefor using the technique on a regular basis in bed at night before sleep.

TRE can be used for early-intervention to '*debrief the body*' after acute stress and trauma, or on an ongoing basis as a routine recovery practice to *release* the neurobiological effects of sub-clinical stress and accumulative trauma largely not addressed by existing approaches. By addressing the *physical components* of stress and tension, TRE helps support the physical and mental health of Personnel at

the same time as enhancing their performance. As AFL footballers and Olympic athletes are already using similar trembling techniques within Australia, this also adds to their likeability.

As the movements invoked by TRE are part of a natural *relaxation response*, unlike general forms of exercise they do not require mental focus or physical effort. This means TRE is highly attractive as a 'go to' recovery process when Personnel are most stressed and least likely to use 'calming techniques' such as mindfulness and exercise that require more time, effort and mental focus.

TRE for First Responders – the roadblock

Over the last 8 years I have been relentlessly seeking to engage Military, Veteran and Emergency Services Organisations from all around Australia to investigate this technique to no avail.

Despite my qualifications as a Physiotherapist, the near constant calls for innovative approaches to PTSD prevention and the recognition that 'adjunct' therapies including 'calming techniques are helpful and should be made available to Personnel, to date, I have been unable to secure a face to face meeting with Emergency Service Organisations or Research Institutions.

While the reasons for this are complex, the answers given are all too simple - 'There's not enough 'evidence' to investigate it further.'

TRE for Military, Veterans & First Responders

All around the world, TRE has been shown to be extremely well liked by Military Personnel, Veterans and First Responders due to its ease of use, stigma-free body-based focused and immediate results.

Since 2005, TRE Founder Dr David Berceci has presented TRE to more than 31 First Responder conferences and organisations. Both he and other TRE providers have also provided organisational training for frontline personnel in the US, Brazil, Switzerland, Norway, Austria, Canada and Poland.

In 2011, the US Defence's Centre for Excellence for Psychological Health & Traumatic Brain Injury identified TRE as one of the 5 most promising techniques to regulate the nervous system. It was subsequently incorporated into a larger study investigating the effects of 'mind-body' techniques to calm the nervous system pre and post deployment. The results of the study remain classified.

In 2017, the US Veterans Affairs Department began a 3 year study into TRE for the treatment of PTSD, noting animal research has already shown 'neurogenic trembling responses discharge sympathetic fight, flight and freeze responses in animals with potential application to human use.' In 2015, research into TRE with Military Veterans in the Ukraine including Veteran case studies was also published in a Ukraine journal. (translation currently unavailable)

While research into TRE as a *treatment* for PTSD is valuable, there is an urgent and more significant need to investigate the use of TRE as a *preventative wellbeing practice* to empower Personnel in the management of their own wellbeing and the prevention of both physical and mental health conditions.

TRE for Health Related Quality of Life

In 2014, the first peer-reviewed journal article on TRE was published in 'Global Advances in Health and Medicine.' This study showed TRE had a significant impact on the Quality of Life of non-professional caregivers who reported 'more frequent positive emotions' and 'greater confidence in their ability to deal with adversity.'

In 2018, research into the use of TRE in the primary care setting in Brazil was published in the journal *Revista Adolescencia e Saude*. (rough translation Adolescent Health) This showed TRE helped to improve family relationships, reduce conflicts and domestic violence and relieve many psychosocial symptoms observed in the teenagers and their caregivers resulting in improved quality of life, reduction of mental health disorders, reduced exposure to risk and better problem solving capacity.

These results concluded 'it is possible to develop effective and low cost alternative to promote adolescent mental health' and would appear to be directly related to the health and wellbeing not only of First Responders, but to their family members as well.

Papers, PhD's & Conference Presentations on TRE

There are many additional journal articles, conference presentations and PhD's on TRE, both completed and currently underway, including the original PhD of TRE Founder Dr David Berceci that showed adding TRE or 'neurogenic tremors' to an exercise regime significantly reduced anxiety levels in comparison to the use of an exercise regime alone.

These articles, dissertations and presentations have investigated TRE in wide range of settings including as a stress reduction technique for large populations effected by natural disaster, as a

trauma prevention program for social workers, as an intervention to reduce stress and burn-out for secondary school teachers in high-risk schools, as a quality of life intervention for the general public and as an innovative approach to promoting occupational health. Links to the existing TRE evidence base are available on the Global TRE Website at www.traumaprevention.com/research

TRE in Australia

In Australia, evaluation of TRE Resilience Training has shown almost unanimously positive results. When provided to health and welfare staff in the NT including Correctional Services in 2017 & 2018, 19 out of 20 reported they were immediately 'significantly to extremely more calm' by the end of the training. More importantly, all 20 stated they were 'highly likely to continue TRE' and that TRE Resilience Training would be 'extremely effective for other staff and volunteers in their organisation.' Of the 16 who had previously received resilience training, all 16 reported that TRE Resilience Training was 'extremely more effective than the previous training they had done.'

Nearly identical results were reported by survivors of the Black Saturday Bushfires who evaluated ½ and 1-day TRE workshops sponsored by a local community recovery group. Of the 30 who completed an evaluation, 28 out of 30 reported they felt immediately more calm and 29 out of 30 reported they were 'extremely likely' to continue practicing TRE after the training. All 30 'extremely agreed that others areas affected by natural disasters would benefit from TRE' and that it was 'extremely effective use of community recovery grants.' In the Hubbard 5 year follow-up to the Victorian Government TRE was highlighted as 'playing a positive role in individual and community wellbeing.'

In 2013 I provided an extensive, referenced submission to the Parliamentary Inquiry into the Care of ADF Personnel Wounded and Injured on Operations, and in 2016 involved in research by an Honour's student in the Physiotherapy Department at Monash University into the use of TRE for the treatment of Restless Legs Syndrome, (RLS) a common co-morbid presentation of PTSD. While inconclusive due to the small number of participants involved this research was recently published in the Journal of the American Board of Family Medicine, suggesting that both TRE and facilitated group discussions had a positive effective in reducing RLS symptoms.

Traditional Shaking Knowledge

While TRE appears 'innovative' or even 'revolutionary' in our western health system, traditional cultures have used similar techniques to invoke shaking, tremors and spontaneous movements for health and wellbeing for millennia.

As a key part of their cultural identity, the Kalahari Bushmen call themselves ‘The Keepers of the Shake’ and use this reflex as a part of their regular community gatherings. Native Americans have benefited from the healing capacity of spontaneous movements for hundreds of years. In Indonesia, Bio-energetic Shaking is used for health, healing and cultural practices. Many of the Yoga poses we know today were originally based upon spontaneous movements called ‘Kriyas’ and there are both traditional and contemporary forms of Yoga that deliberately invoke shaking as part of their practice.

In the best example of the traditional use of shakes and tremors to prevent post-traumatic stress, traditional Swahili midwives deliberately keep new mothers standing up immediately after birth, sometimes for up to half an hour, to ensure their body’s *shaking discharge* has come to a full and complete stop. This is done to ensure the woman does not end up with post-natal depression.

Resilience – Training Peaceful Warriors

At its most basic level, resilience is first and foremost a *neurobiological* process, not a psychological one. It consists of the nervous system’s ability to up-regulate in order to overcome or *endure* stress and trauma, then down-regulate by quietening the hyper-vigilant mind and fully releasing any unresolved tension and muscular bracing to restore itself to *resilience*.

While spontaneous movements including shakes and tremors appear to be a key part of this organic down-regulatory reflex, they are critically different from general exercise as they create movement and release tension below the level of our conscious awareness or control.

This natural relaxation response has already been used by ‘First Responders’ of the past, with the martial arts practices of Katsugen Undo and Seiki Jutsu used to train the mind and body of ancient Samurai Warriors. Their secret practice of spontaneous movement was one of the keys to their seemingly super-human capabilities that allowed them to be lethal, hardened warriors one moment and *supple*, chilled-out Zen masters the next.

In comparison, we tend to train the *strength* of our First Responders to *endure* the stresses of their job by ‘hardening-up,’ without providing them with the *body-based resilience skills* to ‘soften-down’ afterwards. It is this inability of our First Responders to be able to fully release the hyper-vigilance and muscular tension responses required of them in their line of duty that plays a significant yet overlooked role in the *neurobiological* process of accumulative trauma and burnout.

We need Different Evidence for TRE

Despite providing all this information and more to Mental Health Professionals from Military, Veteran, Emergency Service and Research Organisations all around Australia over the last 8 years, I have been unable to secure a face-to-face meeting with any of these organisations. This is not the fault of the Health Professionals themselves, but rather a symptom of a Mental Health System that ethically obliges them to only investigate 'evidence-based treatments' that fall within the scope of their own professional expertise and practice.

While mental health professionals are acutely aware of the need to develop techniques to address the neurobiological components of acute stress and trauma, it is likely to be years if not decades before there is enough peer-reviewed, longitudinal research to over-ride the current pathologisation of shakes and tremors to an understanding of them as an innate, natural, re-organisational reflex that can be deliberately used for the prevention of stress and trauma.

Volunteers and personnel however do not require 'peer-reviewed evidence' in order to know whether a technique is helpful for them or not. They simply need an opportunity to experience it.

There is a therefor a critical role of Government and this inquiry in particular to 'oil the wheels of change' by providing the missing piece of evidence required for our Mental Health System to investigate, pilot and research this innovative and highly promising approach.

Recommendation for First Responder Evaluation of TRE

To this end, I request the committee recommend all Australian Emergency Services be funded to undertake initial 1-Day TRE Resilience Training with large enough numbers of front-line personnel to provide their Senior Management with a recommendation as to whether TRE Resilience Training should be immediately provided to the rest of their colleagues while further research is undertaken.

This recommendation for immediate TRE Resilience Training is in direct alignment with the Australia21 Roundtable 'When Helping Hurts' recommendation for organisations to develop a '*PTSD prevention and management plan*,' as even though it '*does not ensure results, it would be an important driver for change*.'

Should further training be recommended, frontline staff who had already participated in the training would then be able to be directly involved in the '*design, delivery, evaluation*' and support of further

training to ensure it is most effectively and efficiently delivered within their own specific organisational settings. This also is in alignment with another key Australia21 recommendation.

The Cost Benefits of TRE

While precise figures for Emergency Services Personnel are unavailable, the Australian Rehabilitation and Compensation Commission estimates the average health costs alone due to mental stress for an individual in the general community as approximately \$140,000. The costs for Military Veterans receiving health cover and a *pension* for war related disability are far more significant, and estimated at \$1.5 million over their duration of lifetime. These figures appear a more realistic estimate of the cost of work-related disability amongst First Responders.

In comparison, the cost of providing 1-day TRE Resilience Training to groups of up to 50 First Responders is approximately \$270 per person. Providing the initial 1-day TRE Resilience Training recommended in this submission to approximately 40 key Emergency Services Organisations around Australia would thereby cost approximately \$540,000. The potential cost benefits of funding this project would appear to be obvious, especially given the training would provide up to 2000 First Responders with a practical wellbeing technique freely available for the rest of their careers. The cost of providing this training is unlikely to be a limiting factor.

Paying for Recovery

Continually working at the extreme limits of their capacity is part and parcel of the culture of both Personnel and Organisations constantly responding to extreme events. Tasmania recently legislated PTSD as a 'presumptive work related illness for First Responders' and the Australia21's findings that 'organisations must do all in its power to ensure the operational tempo permits personnel the down time to take care of their own fitness, nutrition, sleep and spiritual wellbeing, all of which contribute to resilience.' It is no longer appropriate to expect First Responders to invest their own personal and family time to cope with the impacts of the stress and trauma experienced during their work.

This is not just a matter of compassion or valuing the unpaid time First Responders are currently expected to invest in their recovery, but identified and recommended by the Australia21 When Helping Hurts Report as 'critical to organisational capability.' As cultural change on this scale will not be easy, it is important the processes used to help achieve it are as quick and efficient as possible and Organisations are financially supported in redirecting Personnel time towards this goal.

As TRE Resilience Training provides a stand-alone technique that can be used anywhere at any time, either alone or while interacting with others, it has the potential to become a routine *recovery practice* used by Personnel for 10 – 15 minutes at the end of their shifts *during their work time*. This not only offers them the opportunity to discharge the stress and tensions of their day, but just as importantly, to prevent it being carried home in the *neurobiology* of their behaviour to negatively impact their family, friends and loved ones.

Supporting Other People & Other Approaches

While the TRE process appears to tick all the boxes First Responders are looking for in a self-care wellbeing technique, not all personnel will relate to TRE or choose to use it on an ongoing basis. In such instances however, TRE Resilience training still offers potential value by providing these personnel with a context for their body's natural shaking response should they experience it themselves or witness it occurring in the people they are responding to.

It must also be acknowledged TRE is not a one-stop shop that will prevent all forms of occupational stress and trauma, especially those related to 'moral injury.' Thankfully, with the work done by Emergency Services to de-stigmatise mental health to date, there are systems in place for personnel who require additional assistance or professional treatment.

In such cases, TRE still has the potential to play an 'adjunct role' in supporting these First Responders in their ongoing recovery by providing them with access to their nervous system's own innate capacity to reorganise the *neurobiological* components associated with moral injury that are difficult to treat using existing approaches.

TRE - A Global Movement

TRE is part of a global grass-roots movement that is providing non-therapeutic support to people all around the world. It has already spread by word of mouth to more than 63 countries with estimates of the people who have already learnt it in the millions. Its application is wide-ranging and varied regardless of occupational settings, personal belief systems or cultural practices.

The recent book 'Shake It Off Naturally' by TRE Founder Dr David Berceci showcases the pioneering work of leading TRE Providers from the USA, Germany, Switzerland, Denmark, Austria, South Africa, Italy, Lebanon, Brazil, Republic of Colombia, Spain, Argentina and Israel. Their work is wide-ranging and varied with TRE being applied in both primary health and community based settings. While

mental and physical health continue to be delineated in our western medical model, it is apparent trauma and its treatment is a bridge uniting these two seemingly opposed paradigms.

In a country that prides itself on being a world-leader in research and development, it is inappropriate to continue to allow many Emergency Service Volunteers and Personnel to flounder within the limited support of existing 'evidence-based' approaches while we wait for other countries to provide the 'evidence-base' required for our Mental Health System to investigate TRE further.

This issue is not specific to Australia, but to all countries within the western medical model, including New Zealand, with whom we often share First Responder support. The immediate evaluation of TRE Resilience Training by Australian First Responders therefor not only has the potential to provide better support for our own 'everyday heroes,' but also others in Emergency Services all around the world.

Request for Public Hearing

I have provided this submission in the hope of being able to contribute to your final public hearing in Canberra in November and am able to provide additional materials should they be required.

This could include a more detailed version of this submission, a notated power-point presentation used to introduce the neurobiology of tremors, resilience and the accumulative trauma spiral to First Responders, or videos of Military and First Responder use of TRE.

Should you wish to read more about TRE's origins as a non-therapeutic, self-care technique developed for large-scale use by populations affected by chronic stress, war, acute trauma and natural disasters, I recommend the book 'The Revolutionary Trauma Release Process' by TRE Founder Dr David Berceci.

Regards,

Richmond Heath
Physiotherapist
TRE Australia