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Good Morning s47E(c)

Here is Diggerworks input into your brief - thanks to s47E(c) for the initial draft.

During 2011 Project Cerebro collected data on blast overpressure exposures to Australian Soldiers on operations in the middle east using Black Box Biometrics Blast Gauges. While the intent was to capture data on IED and IDF strikes, the overwhelming majority of exposure were low level exposure to friendly weapon systems.

During Exercise Chon Ju in 2016, Diggerworks used the same Blast Gauges to collect data on high frequency/low level exposure to friendly weapons systems, particularly s47E(d). The data indicated that friendly weapon systems could be exceeding safety requirements for blast exposure. These safety requirement have been developed based off the likelihood of physical damage to the tympanic membrane (eardrum).

Diggerworks has concerns, specifically with regard to the dangers of repetitive blast exposure by our soldiers. Moreover, much of the work in this space appears to be heavily siloed and our first step has been to map the network of individuals and companies who contribute to this vital area of study. Recently, we've also been tracking an Australian Trial of Blast Gauges by Dr Mark Jaffrey and a NZDF study into Blast Injury Biomarkers and Behavioural Characterization of Brain Injury Biomarkers and Behavioural Characterization of mTBI in Soldiers Following Repeated, Low-Level Blast Exposure by Dr Charmaine Tate.

Diggerworks was requested by HQJTF633 to commence a trial program to collect data on blast overpressure exposure to soldiers operating and instructing on s47E(d). This sample group has also been selected due to the high frequency of exposures that they are likely to encounter in that environment. Diggerworks assess the data we collect being a trigger to explore collection of repetitive exposure to all ADF weapons systems s47E(d) and how it can inform mTBI. Diggerworks is however unable to conduct any medical analysis of the data and has no ability to conduct cognitive testing on the individuals. As such DW is seeking a suitable champion or organisation to conduct this work.

It is unknown what short term or long term effects that this could have on cognitive function or any relation that this may have to mTBI. What is clear is that there are quite significant bodies of work into Blast exposure, but not weapon exposure. s47C, s47E(d)

We assess a subsequent literary review of all of the studies in this field may then be able to more comprehensively identify the 'so what'. There may be an opportunity s47C, 47E(d) support this trial, but I would stress we are yet to scope the problem in detail.

Bottom line is that we have a similar report in regards to overpressure, like MIL-STD-1474E attempts to do, providing guidelines to help keep our soldiers safe.

We've just received an email in response to a s47E(d) - I'll send this SEPCOR.

Please let us know if you require anything further.

Regards

s22

Lieutenant Colonel
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