s 22

From:
To:
Cc:
Subject: RE: FYI: Defence explosion-related brain injuries - WHS Concern NOT00035452 [SEC=OFFICIAL]
Date: Tuesday, 23 July 2024 5:53:01 PM

OFFICIAL

s 22

s 22 has developed a sound regulatory approach to this matter.

s 47C

We will keep you appraised of the outcome.

Please advise if you require anything further.

Regards,

s 22

Director Regional Operations - ACT
Regulatory Operations Group
Comcare
s 22

GPO Box 1993, Canberra, ACT 2601 | www.comcare.gov.au

From: s 22
Sent: Friday, July 19, 2024 2:30 PM
To: s 22
Cc: s 22
Subject: FYI: Defence explosion-related brain injuries - WHS Concern NOT00035452 [SEC=OFFICIAL]

OFFICIAL

Good afternoon s 22 and s 22

Please be advised that a WHS Concern (NOT00035452) has been created and is in the RO-ACT queue for decision relating to the 2 attached media articles.

Regards
s 22

s 22

From:
To:
Subject: FW: FYI: Defence explosion-related brain injuries - WHS Concern NOT00035452 [SEC=OFFICIAL]
Date: Thursday, 25 July 2024 8:47:33 AM
Attachments: image001.png
image003.png
image002.png
image004.png

OFFICIAL

FYI

s 22

or

Regional Operations ACT
Regulatory Operations Group | Comcare
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

From: s 22
Sent: Tuesday, July 23, 2024 5:53 PM
To: s 22
Cc: s 22

Subject: RE: FYI: Defence explosion-related brain injuries - WHS Concern NOT00035452 [SEC=OFFICIAL]

OFFICIAL

s 22

s 22 has developed a sound regulatory approach to this matter.

s 47C

s 47C

We will keep you appraised of the outcome.

Please advise if you require anything further.

Regards,

s 22

Director Regional Operations - ACT
Regulatory Operations Group
Comcare
s 22

GPO Box 1993, Canberra, ACT 2601 | www.comcare.gov.au

From: s 22
Sent: Friday, July 19, 2024 2:30 PM
To: s 22
Cc:
Subject: FYI: Defence explosion-related brain injuries - WHS Concern NOT00035452 [SEC=OFFICIAL]

OFFICIAL

Good afternoon s 22 and s 22

Please be advised that a WHS Concern (NOT00035452) has been created and is in the RO-ACT queue for decision relating to the 2 attached media articles.

Regards
s 22

From:	R&A.Intelligence
To:	ROG - All Staff
Cc:	R&A.Intelligence
Subject:	FOR INFORMATION: Proactive intelligence Report - Department of Defence - Explosion and weapon discharge incidents [SEC=OFFICIAL]
Date:	Friday, 2 August 2024 4:48:34 PM
Attachments:	image001.png image002.jpg Intelligence Report - Department of Defence - Explosion and weapon discharge incidents - August 2024.pdf Media Article - Defence 'ignored toll of exposure to explosions' - The Australian - 18 July 2024.PDF

OFFICIAL

Good afternoon all,

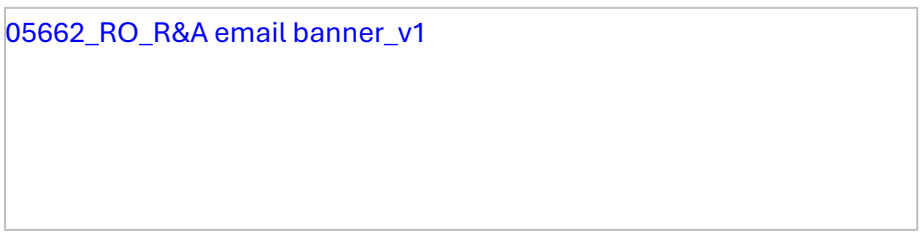
In response to some recent media articles published by The Australian regarding the long-term risks to Defence members associated with explosions, the Intelligence and Data team have produced a proactive intelligence report looking at Comcare data and open-source information.

While the information available is limited, it is clear that there are both short and long-term health impacts on Defence members as a result of exposure to explosions. Engagement with Defence is recommended to learn more about the practical steps being taken by Defence in this area. RO ACT have commenced an Information and Advice activity on this topic, providing an opportunity to obtain further insight directly from Defence. Should additional information come to light, we will endeavour to provide an update to ROG.

Please reach out if you have any questions,

s 22

Assistant Director Intelligence and Data
Risk & Analysis
Regulatory Operations Group |Comcare
P: s 22



Comcare acknowledges the Traditional Owners and Custodians of country throughout Australia and acknowledges
their continuing connection to land, sea and community. We pay our respects to the people, the cultures and the elders past, present and emerging.

R&A Intelligence & Data - Intelligence Report

DEPARTMENT OF DEFENCE
EXPLOSION AND WEAPON DISCHARGE INCIDENTS

AUGUST 2024

Data as at 23 July 2024 - for the period 1 January 2012 to 23 July 2024

Purpose

1. This proactive intelligence report has been produced in response to media articles published in July 2024 by The Australian regarding the long-term risks to Defence members associated with explosions. The article alleges that:

   - *Soldiers have an increased risk of chronic brain injuries caused by repeated exposure to blast pressure waves. The condition known as mild traumatic brain injury (mTBI), is the result of the cumulative effects of brain injuries from explosions in training and combat. It is prevalent among special forces personnel, while being a major health risk for tank and artillery crews, infantry soldiers, engineers, and navy clearance divers. While the primary risk is the brain injury itself, there is research to suggest it is linked to depression, [post-traumatic stress disorder] PTSD and suicide.*[1]

2. This report will provide insight into Comcare work health and safety (WHS) data in relation to explosion and weapon discharge incidents resulting in a blast injury reported by Defence. This report includes data for all Defence entities, including Department of Defence – Military (Defence – Military), Department of Defence – Civilian (Defence – Civilian) and Australian Defence Force Cadets (Defence Cadets).

3. This intelligence report will provide Comcare data holdings between 1 January 2012 and 23 July 2024 for Incident Notifications, WHS Concerns and Monitoring Compliance (MC) activities.

4. All incidents, notifiable and not notifiable, are included to identify a holistic picture of the incidence rate of explosions and weapons incidents related to Defence in the Comcare jurisdiction.

What is a blast injury?

5. A blast injury is a complex type of physical trauma resulting from direct or indirect exposure to an explosion. Blast injuries are characterized by the absence of external injuries, thus internal injuries are frequently unrecognised, and their severity underestimated. Blast injuries range from internal organ injuries, including lung and traumatic brain injury, to extremity injuries, burns, hearing, and vision injuries.[2]

---

1 DOC6706503 – The Australian – *Injured solider Paul Dunbavin 'shines light' on brain injuries* – 19 July 2024 and DOC6706499 – The Australian - *Defence 'ignored toll of exposure to explosions'* – 18 July 2024.

2 Blast Injury Research Coordinating Office - What is Blast Injury? – US Department of Defense – accessed 24 July 2024.

Open-Source Information

Department of Veterans Affairs Annual Report 2022-23

23. The DVA 2022-23 Annual Report provides a breakdown of claims processed under the *Veterans' Entitlements Act 1986* (VEA), *Safety Rehabilitation and Compensation* (Defence related claims) *Act 1988* (DRCA), and *Military Rehabilitation and Compensation Act 2004* (MRCA, Military related claims). A review of the Annual Report provided the following:

    - As at 30 June 2023, for the 2022-23 financial year (FY):
        - QLD accounted for the most DVA clients with 31%, followed by NSW (29%) and VIC (16%).
        - The most common age group for DVA clients was 75-79 years old (13%), followed by 70-74 (12%) and 90 years or over (8%).
    - Under the VEA Act, the most claimed conditions were osteoarthritis, tinnitus and sensorineural hearing loss.
    - Under the DCRA Act, the most claimed conditions were osteoarthritis, sensorineural hearing loss and tinnitus.
    - Under the MCRA Act, the most claimed conditions were tinnitus, strain and sprain, and osteoarthritis.[7]

24. For all compensable claims processed by the DVA, tinnitus and sensorineural hearing loss were among the most prevalent.

Australian Bureau of Statistics – Census Data

25. A review of the ABS Census results from 2021 identified the following:

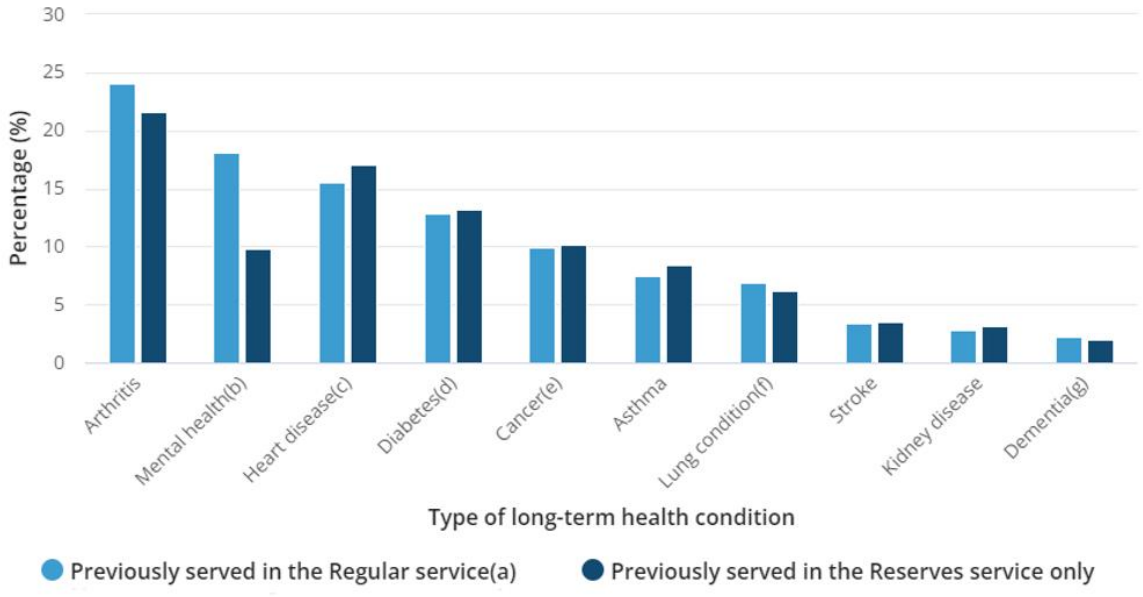
    - There are 581,000 people who have served or are currently serving in the Australian Defence Force, which is 2.8% of the Australian population aged over 15.
    - Townsville, QLD had the highest number of current service and previous service members than any other region.
    - Three in 5 (60%) previous service members had reported a long-term health condition. Of these, a mental health condition accounted for 15% of the total, and other long term health conditions that related to head or brain injuries included stroke with 3% and dementia with 2% of the total.[8]

s 47E(d)

[7] Department of Veterans Affairs Annual Report 2022-23, Appendix A - Veteran and claim statistics (transparency.gov.au) – accessed 25 July 2024.

[8] Australian Bureau of Statistics – Census Data - Australian Defence Force service | Australian Bureau of Statistics (abs.gov.au) - accessed 25 July 2024.

Figure 2: Long-term health condition by type of previous ADF service, ABS Census 2021



a. Includes all people who had served in the Regular service only and those who served in both the Regular and Reserve service.
b. Includes depression or anxiety
c. Includes heart attack or angina
d. Excludes gestational diabetes
e. Includes remission
f. Includes COPD or emphysema
g. Includes Alzheimer's

Source: Type of long-term health condition (LTHP), Australian Defence Force Service – Australian Bureau of Statistics, August 2024.

Mild traumatic brain injury in the Australian Defence Force: Results from the 2010 ADF Mental Health Prevalence and Wellbeing Dataset (2012)

26. As identified on the Defence website, the Military Health Outcomes Program (MilHOP) was a significant body of research commissioned by Defence to determine the impact of operational deployment on health and wellbeing.[9] One of the study topics was mild traumatic brain injury in the ADF. The report found that:

- 28.3% of ADF personnel have experienced at least one mTBI in their lifetime.
- ADF members with a lifetime mTBI were more likely to be male, in the army, older in age, junior in rank and less likely to have been on operational deployment.
- As a result of mTBI is associated with a significantly increased risk of all domains of psychological disorder.[10]

27. This program was an important step for Defence in recognising and addressing the risks of brain injury in members, however the program has not continued. There is no current reference to this program or similar subsequent programs looking at the impacts of brain injury on the Defence website.

---

9 Australian Department of Defence - 2010 ADF Mental Health Prevalence and Wellbeing Study – accessed 25 July 2024.
10 Centre for traumatic stress studies - Mild Traumatic Brain Injury (MTBI) in the Australian Defence Force: Results from the 2010 ADF Mental Health Prevalence and Wellbeing Dataset – accessed 25 July 2024.

The Australian - "Defence 'ignored toll of exposure to explosions'" – 18 July 2024

28. The media article published by The Australian called out Australia and the Department of Defence for not addressing the problems associated with Defence members who are exposed to a significant risk of brain injury while undertaking their usual work activities. The article acknowledged the limited efforts of the Australian Institute of Health and Welfare (AIHW) in this area, as well as the lack of inclusion of the dangers by mTBI in the interim report from the Royal Commission into Defence and Veteran Suicide.

29. Funding for the 2010 ADF Mental Health Prevalence and Wellbeing Study project was cut before the research and any findings could be developed further. This has prevented full analysis of the results of a study on mild traumatic brain injury in the ADF and further testing that could have allowed for progress in this area. This is in stark contrast to the United States where more than $1bn has been invested in research and legislating new measures to monitor exposure and test for signs of injury.

30. The Minister for Veterans' Affairs and Defence Personnel has acknowledged the necessity of treating this issue as a priority. The Minister was quoted saying: "I have engaged with Defence officials…[about] the research and monitoring that they are now undertaking to better understand repeated blast brain injury. Defence is also undertaking preventative action to support the ongoing health of ADF personnel". However, there are individuals who dispute the Australian government's commitment to addressing the condition, alleging that international experts on this topic have no contact with Defence bureaucracy.

s 47E(d)

The information and data which is presented in this report may include data which is obtained by Comcare under a condition of license. The report must be used for holistic risk profiling purposes only and cannot be shared externally, nor can individual data sets be referenced externally. Where the report indicates a potential risk area, and front-line staff are in a position where an explanation to the PCBU is required, then reference may be made to the risk profile of the PCBU. For example, the risk profile of a PCBU in the transport industry indicates a high risk of body stressing injuries. Under no circumstances should any content within this report, either in writing or verbally, be used as the basis of an enforcement notice. Any questions in relation to this should be referred to the Director Risk & Analysis.

THE INFORMATION PROVIDED IN THIS REPORT IS FOR INTERNAL USE ONLY. IT IS RECOMMENDED THAT LEGAL ADVICE IS OBTAINED IF THE REPORT IS TO BE USED FOR ANY OTHER PURPOSE.

Data is current as of 24 July 2024. The content of this report is accurate at the time it was created.

Document Control

Version	Date	Author/QA/Clearance	Comments
1.0	2-Jul-24	s 22 , Assistant Director Intelligence & Data, R&A	Cleared for release
0.4	2-Jul-24	s 22 , Senior Intelligence & Data Analyst, R&A	Quality assurance
0.3	2-Jul-24	s 22 , Assistant Director Intelligence & Data, R&A	Amendments
0.2	31-Jul-24	s 22 , Assistant Director Intelligence & Data, R&A	Quality assurance
0.1	30-Jul-24	s 22 , Intelligence & Data Analyst, R&A	Initial draft
Data Sources		Report Name	Date extracted
IRIS		Advanced Finds - Incident Notifications, WHS Concerns	24-Jul-24
IRIS		Advanced Finds – Monitoring Compliance	30-Jul-24

Dissemination List

Date Disseminated	Recipient
2-Jul-24	Regulatory Operations Group

THE AUSTRALIAN

EXCLUSIVE

Defence 'ignored toll of exposure to explosions'

By BEN PACKHAM

12 hours ago. Updated 11 hours ago

Defence and Veterans' Affairs ignored mounting evidence of chronic brain injuries in soldiers caused by repeated exposure to blast pressure waves, abandoning testing and de-funding research that could have eased a suicide epidemic.

The condition, similar to concussion-related diseases in footballers, has been attributed by researchers to the cumulative effects of mild traumatic brain injuries, or mTBI, from explosions in training and combat.

Researchers warn it is prevalent among special forces personnel, and is also considered a major health risk for tank and artillery crews, infantry soldiers, engineers and navy clearance divers. It is linked to depression, PTSD and suicide, but is difficult to conclusively test for until after a person's death.

The US is moving to protect soldiers from mTBI, or so-called blast overpressure injuries, investing more than $1bn in research and legislating new measures to monitor troops' exposure and test for signs of injury.

But the Australian government only last month resumed monitoring soldiers' blast exposure in a small pilot project, after a 2012 study on soldiers in Afghanistan codenamed Project Cerebro was axed amid alarming early results.

Funding was also slashed for a major research project that was examining brain injury and PTSD in 500 Afghanistan veterans, which would have provided the

departments of Defence and Veterans' Affairs with vital evidence that could have been used to protect soldiers from harm.

One of Australia's foremost experts on military brain injuries, Adelaide University professor Alexander McFarlane, said the "invisible wounds" suffered by soldiers were not unique to modern combat, with the term "shell shock" coined in World War I to describe psychological injuries from explosive blasts.

He said mTBI-related harm to soldiers had gained more attention in recent times amid growing awareness over the degenerative brain disease CTE among players of contact sports.

Professor McFarlane was the lead researcher on the 2010 ADF Mental Health Prevalence and Wellbeing Study, which found 9.3 per cent of soldiers who were deployed to Afghanistan reported mTBI symptoms. But he said funding for the project was cut, preventing full analysis of the results and further testing.

"There was little interest in the findings from this study of Afghanistan veterans by the ADF or DVA," he said.

"The planned follow-up and retesting of these veterans was never fully undertaken due to lack of adequate funding.

"There was no consideration of how these findings could be used to assess the impact of blast exposure or other head injuries using available methods of measuring brain function."

Professor McFarlane said the US's Blast Overpressure Safety Act currently before Congress should be a wake-up call for Australia. The act would require troops to wear blast-pressure monitors, undergo regular neurocognitive testing, and ensure medical personnel were trained to recognise blast-exposure injuries.

"There needs to be a co-ordinated research and clinical program investigating mTBI as part of a broader program optimising the health of ADF veterans," Professor

McFarlane said.

The ADF sought to measure the effects of blast exposure on troops using helmet-mounted sensors as part of Project Cerebro, but there is no evidence the data was used to inform any changes in training or operational procedures. One soldier involved in the 2012 study said all those who participated had their blast gauges "red line" when using shoulder-fired anti-tank weapons, hand grenades and explosive entry charges.

"There was nothing you could do about it," he said.

In June, Defence embarked on another monitoring project to assess blast overpressure exposure for an unknown number of personnel, who will also undergo cognitive testing. The results of the 18-month project will inform further research.

The Minister for Veterans' Affairs and Defence Personnel, Matt Keogh, said the health of serving and former personnel was a top priority. " Since this issue was first raised with me last year, I have engaged with senior Defence officials, including the surgeon-general, about what the ADF's experience to date has been, and the research and monitoring that they are now undertaking to better understand repeated blast brain injury," Mr Keogh said. "Defence is also undertaking preventative action to support the ongoing health of ADF personnel."

Veterans group Vigil Australia, which is running a community campaign on blast-overpressure injuries, disputed the government's commitment to addressing the condition.

The group's convener, Paul Scanlan, who attended a Blast and Conflict Injury Conference in London, said he was astounded to find he was the only Australian representative there.

"There was no one from the Department of Defence, the Australian Defence Force, Defence Science and Technology group, DVA or the Department of Health and Ageing," the retired special forces officer said. "When I speak with international

experts, they have had no contacts with our Defence bureaucracy. We are 10 to 20 years behind the US in dealing with this problem."

The Royal Commission into Defence and Veteran Suicide made no mention of the dangers posed by mTBI in its interim report, reflecting the failure of Australian authorities to take the condition seriously. But it's understood its final report will recommend further research be undertaken to inform the government of the risks.

Part of the problem, advocates say, is the failure of the Australian Institute of Health and Welfare, which analyses ADF and veterans' suicide data, to examine the links between specific military occupations and suicide risk.

As research from the US has shown, some military specialties are more at risk from mTBI. A recent Harvard study on 30 career special forces soldiers, for example, found a clear association between blast exposure, altered brain structure and impaired cognitive performance.

Labor MP Luke Gosling, a former 1st Commando Regiment officer, has thrown his support behind the Vigil Australia campaign, calling for the royal commission to provide "meaningful recommendations" on the condition.

"There will be benefits from screening and collaboration for mTBI and blast overpressure, not only for our ADF personnel but for veteran wellbeing too, improving the health and safety of our people," Mr Gosling said.

Noting that the US was "well advanced" in screening for mTBI in its armed forces, Mr Gosling said there could be a role for AUKUS's so-called Pillar II technology partnership in fostering joint research.

Opposition defence spokesman Andrew Hastie called for greater investment to protect soldiers from risking life-altering brain damage as a result of their work.

"Not surprisingly, we are seeing this in allied special operations communities, who carried the heaviest burden of fighting in Afghanistan," Mr Hastie said.

"We need to look closely at blast-overpressure injury, and make sure our troops have preventative measures in place so we can have them serving longer, and have them retiring in a good state of health."

MORE ON THIS STORY

Injured soldier 'shines light' on brain injuries

By BEN PACKHAM

TRENDING

'Time to go': Obama says Biden needs to reconsider his election bid

Joe Biden's future teeters on a knife edge after reports that the most influential figure in the Democratic party now believes the President's path to victory has diminished and the 81-year-old should 'seriously consider' his candidacy.

By CAMERON STEWART, ADAM CREIGHTON

Leak returns fire over Faruqi defamation threat

Johannes Leak was shocked – but not entirely surprised – to discover himself, for the first time, on the end of a legal threat to sue for defamation and a demand to withdraw a cartoon.

By STEPHEN RICE

Taxpayer cost of returning Assange with Rudd revealed

Taxpayers forked out more than $100,000 to return Julian Assange home, with the bill blowing out by nearly 30 per cent because Kevin Rudd accompanied the convicted criminal on his flight into Canberra.

By GREG BROWN

s 22

From:
To:
Subject: 2024-08-12 IA DoD - blast related brain injuries [SEC=OFFICIAL]
Date: Monday, 12 August 2024 2:01:00 PM
Attachments: image001.png
image004.png
image002.png
image005.png

OFFICIAL

Afternoon s 22

For awareness, the following summation from my discussion with the Occupational Hygienist, s 47F , in WHS branch at the Department of Defence (DoD) regarding blast-related brain injury. Mr s 47F has an 'Enterprise Level' awareness and receives weekly updates of the work being conducted by the DoD into this and was able to provide a high-level snapshot of where the DoD is at in relation.

- The DoD are aware of the risks associated with blast related activities and weapon systems/platforms etc. Currently a high-priority for DoD internally. Australian Minister for Defence is maintaining awareness.
- The DoD have updated medical procedures for serving members. These were updated in 2023 with latest available information. Members monitored for symptoms of blast related brain injury, medical process initiated if symptoms detected.
- The DoD is assisting by providing research data via Defence Science Technology Group (DSTG) to the USA who are conducting significant research in this area, currently an area of interest with several nations also contributing to the research.
- The research conducted by USA is considering the impacts of "one-off" and "cumulative" blast effects to soldiers. Due to provide findings to in form of exposure standard to blast pressure by end of 2025.
- Those findings will be correlated with testing being undertaken by DoD to record blast pressures of all systems/platforms, to determine training and ceremonial safe levels.
- Instructors considered separately to trainees as part of exposure, with additional controls based on need to participate/oversee larger number of events.
- End-of-life systems not on update list for recording blast pressures. Continue to utilise manufacturers recommendations and current training standards until replacement.
- Given current military operations, there is additional focus on "breaching/forced entry".

Based on this, I believe DoD have sufficient awareness of the risk and the interim controls appear reasonable. Participating in a larger study conducted by USA while recording data for implementation when exposure standard becomes available appears to be the long term control, and consideration for differences in roles and activities such as ceremonial displays further awareness. Medical processes have been updated to reflect this topic showing the internal prioritisation.

Combined with a review of R&A data analysis, no anomalies appear evident. I would consider DoD to be doing what appears reasonably practicable in the circumstance. Happy to hear your thoughts.

Regards,

s 22

Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C'th)
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

s 22

From:
To:
Subject: RE: 2024-08-12 IA DoD - blast related brain injuries [SEC=OFFICIAL]
Date: Monday, 12 August 2024 2:24:11 PM
Attachments: image001.png
image002.png
image003.png
image004.png

OFFICIAL

s 22

s 47C

I endorse the proposed IA later in 2025 to follow up.
Regards,

s 22

Director Regional Operations - ACT
Regulatory Operations Group
Comcare
s 22

GPO Box 1993, Canberra, ACT 2601 | www.comcare.gov.au

From: s 22
Sent: Monday, August 12, 2024 2:01 PM
To: s 22
Subject: 2024-08-12 IA DoD - blast related brain injuries [SEC=OFFICIAL]

OFFICIAL

Afternoon s 22
For awareness, the following summation from my discussion with the Occupational Hygienist, s 47F , in WHS branch at the Department of Defence (DoD) regarding blast-related brain injury. Mr s 47F has an 'Enterprise Level' awareness and receives weekly updates of the work being conducted by the DoD into this and was able to provide a high-level snapshot of where the DoD is at in relation.

- The DoD are aware of the risks associated with blast related activities and weapon systems/platforms etc. Currently a high-priority for DoD internally. Australian Minister for Defence is maintaining awareness.
- The DoD have updated medical procedures for serving members. These were updated in 2023 with latest available information. Members monitored for symptoms of blast related brain injury, medical process initiated if symptoms detected.
- The DoD is assisting by providing research data via Defence Science Technology Group (DSTG) to the USA who are conducting significant research in this area, currently an area of interest with several nations also contributing to the research.
- The research conducted by USA is considering the impacts of "one-off" and

"cumulative" blast effects to soldiers. Due to provide findings to in form of exposure standard to blast pressure by end of 2025.

- Those findings will be correlated with testing being undertaken by DoD to record blast pressures of all systems/platforms, to determine training and ceremonial safe levels.
- Instructors considered separately to trainees as part of exposure, with additional controls based on need to participate/oversee larger number of events.
- End-of-life systems not on update list for recording blast pressures. Continue to utilise manufacturers recommendations and current training standards until replacement.
- Given current military operations, there is additional focus on "breaching/forced entry".

Based on this, I believe DoD have sufficient awareness of the risk and the interim controls appear reasonable. Participating in a larger study conducted by USA while recording data for implementation when exposure standard becomes available appears to be the long term control, and consideration for differences in roles and activities such as ceremonial displays further awareness. Medical processes have been updated to reflect this topic showing the internal prioritisation.

Combined with a review of R&A data analysis, no anomalies appear evident. I would consider DoD to be doing what appears reasonably practicable in the circumstance.

Happy to hear your thoughts.

Regards,

s 22

Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C'th)
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

s 22

From:
To:
Subject: FW: ADF blast brain injuries [SEC=OFFICIAL]
Date: Tuesday, 20 August 2024 11:56:16 AM
Attachments: Diggers" support for shell-shock cut.pdf
Defence 'ignored toll of exposure to explosions'.pdf

OFFICIAL

s 22

Please consider – discuss your recommended approach with s 22 Effectively, the question is whether we need to make additional inquiries/consider anything new.

I would like to brief the GM, via email, regards what we have done (IA) and what our position is. Preferably by CoB today.

Regards,

s 22

Director Regional Operations - ACT
Regulatory Operations Group
Comcare
s 22

GPO Box 1993, Canberra, ACT 2601 | www.comcare.gov.au

From: s 22
Sent: Tuesday, August 20, 2024 8:39 AM
To: s 22
Cc: s 47E(d) s 22 Media <Media@comcare.gov.au>
Subject: Re: ADF blast brain injuries [SEC=OFFICIAL]

Thanks s 22

s 22 - can you please work with R&A on a regulatory response to this matter.

s 22

Get Outlook for iOS

From: s 22
Sent: Tuesday, August 20, 2024 7:40:45 AM
To: s 22
Cc: s 47E(d) s 22 Media

<Media@comcare.gov.au>
Subject: ADF blast brain injuries [SEC=OFFICIAL]

OFFICIAL

Hi s 22

This ran on 7.30 last night – ADF personnel exposed to blast injuries and links to CTE/PTSD/suicide. Similar to last month's coverage in The Australian (attached) but more extensive:

The enemy within: Blasts from Australian soldiers' own weapons may be causing brain injury - ABC News

s 22

s 22 **| Media Manager**
Marketing & Communications
s 22

media@comcare.gov.au

Diggers' support for shell-shock cut
By BEN PACKHAM

The Weekend Australian
Saturday 20th July 2024
667 words
Page 6 | Section: THE NATION
261cm on the page

Diggers' support for shell-shock cut

BEN PACKHAM

EXCLUSIVE

FOREIGN AFFAIRS AND DEFENCE CORRESPONDENT

The Defence Department has axed support for a project to monitor soldiers' exposure to blast pressure waves that have been linked to brain damage and suicide, as the bureaucracy turned a blind eye to the problem.

Two companies were funded under the now-defunct Defence Innovation Hub to develop an early warning system to protect soldiers from similar brain injuries to those suffered by elite NRL and AFL players.

The companies, GLIA Diagnostics and Invicta Prospect Group, received a combined $1.5m between 2019 and 2022 to develop wearable blast sensors and software to help soldiers and commanders manage an individual's risk of harm.

But the project was dumped when the innovation hub was folded into the Albanese government's new Advanced Strategic Capabilities Accelerator.

The failure to progress the system followed the defunding of a longitudinal study on brain injury and PTSD in veterans, and the axing of a 2012 trial of blast-pressure gauges by special forces troops in Afghanistan.

Defence embarked on a fresh pilot project last month to assess blast exposure for an unknown number of personnel, amid lobbying by soldiers and veterans' groups.

Invicta Prospect Group co-founder Daniel Pace, a former navy clearance diver, said his company received $300,000 from Defence to develop its system, which uses a blast pressure gauge, rapid blood testing and artificial intelligence to monitor troops' exposure.

"We had about four years of delays. And then the (innovation) hub got shut down," Mr Pace said.

The company was told by a senior commander in 2022 that the Australian Defence Force would acquire the system only "if you can sell it to the US first".

Mr Pace said the company had been trying to get Defence to reconsider the technology, receiving "overwhelming support from Special Operations Command and the navy's Mine Warfare and Clearance Diving Group".

At a meeting last week, Defence's science and health branches also backed the need for a blast monitoring solution.

"They are supportive of the direction we are heading, and the need to move forward. But the ADF's leadership is yet to make a commitment," Mr Pace said.

Researchers warn the cumulative effects of mild traumatic brain injuries, or mTBI, from explosions in training and combat can lead to potentially fatal brain conditions like those suffered by professional footballers.

Special forces personnel are among those most at risk, along with tank and artillery crews, infantry soldiers, engineers and navy clearance divers.

The lack of interest from Defence came as the US congress ordered the Pentagon in 2019 to document troops' blast exposure in their medical records.

A bill currently before congress would impose even tougher measures, requiring military personnel to wear blast pressure monitors and undergo regular neurocognitive tests.

Retired major general Fergus McLachlan, a former armoured brigade commander who sits on Invicta Prospect Group's board of advisers, pointed to findings in the US that army tank crew members were three times more likely to die by suicide than other soldiers.

"I can only think that may well be related to exposure to blast overpressure," he said.

He said commanders needed the right tools to keep their people safe from harm.

"There is absolutely no reason why you couldn't use evidence of previous exposure and decision support tools to help prompt a senior leader to say, 'This person should not be eligible for this type of training for another three months because of repeated exposure'," Mr McLachlan said.

The Royal Commission into Defence and Veteran Suicide made no mention of the dangers posed by mTBI in its interim report, reflecting the failure of Australian authorities to take the condition seriously.

If you or a family member need help, contact: Suicide Call Back Service 1300 659 467; Lifeline Australia 13 11 14; Open Arms 1800 011 046; Defence All-hours Support Line 1800 628 036

'We had about four years of delays. And then the (innovation) hub got shut down'

DANIEL PACE
INVICTA PROSPECT GROUP

THE AUSTRALIAN

EXCLUSIVE

Defence ‘ignored toll of exposure to explosions’

By BEN PACKHAM

12 hours ago. Updated 11 hours ago

Defence and Veterans’ Affairs ignored mounting evidence of chronic brain injuries in soldiers caused by repeated exposure to blast pressure waves, abandoning testing and de-funding research that could have eased a suicide epidemic.

The condition, similar to concussion-related diseases in footballers, has been attributed by researchers to the cumulative effects of mild traumatic brain injuries, or mTBI, from explosions in training and combat.

Researchers warn it is prevalent among special forces personnel, and is also considered a major health risk for tank and artillery crews, infantry soldiers, engineers and navy clearance divers. It is linked to depression, PTSD and suicide, but is difficult to conclusively test for until after a person’s death.

The US is moving to protect soldiers from mTBI, or so-called blast overpressure injuries, investing more than $1bn in research and legislating new measures to monitor troops’ exposure and test for signs of injury.

But the Australian government only last month resumed monitoring soldiers’ blast exposure in a small pilot project, after a 2012 study on soldiers in Afghanistan codenamed Project Cerebro was axed amid alarming early results.

Funding was also slashed for a major research project that was examining brain injury and PTSD in 500 Afghanistan veterans, which would have provided the

departments of Defence and Veterans' Affairs with vital evidence that could have been used to protect soldiers from harm.

One of Australia's foremost experts on military brain injuries, Adelaide University professor Alexander McFarlane, said the "invisible wounds" suffered by soldiers were not unique to modern combat, with the term "shell shock" coined in World War I to describe psychological injuries from explosive blasts.

He said mTBI-related harm to soldiers had gained more attention in recent times amid growing awareness over the degenerative brain disease CTE among players of contact sports.

Professor McFarlane was the lead researcher on the 2010 ADF Mental Health Prevalence and Wellbeing Study, which found 9.3 per cent of soldiers who were deployed to Afghanistan reported mTBI symptoms. But he said funding for the project was cut, preventing full analysis of the results and further testing.

"There was little interest in the findings from this study of Afghanistan veterans by the ADF or DVA," he said.

"The planned follow-up and retesting of these veterans was never fully undertaken due to lack of adequate funding.

"There was no consideration of how these findings could be used to assess the impact of blast exposure or other head injuries using available methods of measuring brain function."

Professor McFarlane said the US's Blast Overpressure Safety Act currently before Congress should be a wake-up call for Australia. The act would require troops to wear blast-pressure monitors, undergo regular neurocognitive testing, and ensure medical personnel were trained to recognise blast-exposure injuries.

"There needs to be a co-ordinated research and clinical program investigating mTBI as part of a broader program optimising the health of ADF veterans," Professor

McFarlane said.

The ADF sought to measure the effects of blast exposure on troops using helmet-mounted sensors as part of Project Cerebro, but there is no evidence the data was used to inform any changes in training or operational procedures. One soldier involved in the 2012 study said all those who participated had their blast gauges "red line" when using shoulder-fired anti-tank weapons, hand grenades and explosive entry charges.

"There was nothing you could do about it," he said.

In June, Defence embarked on another monitoring project to assess blast overpressure exposure for an unknown number of personnel, who will also undergo cognitive testing. The results of the 18-month project will inform further research.

The Minister for Veterans' Affairs and Defence Personnel, Matt Keogh, said the health of serving and former personnel was a top priority. " Since this issue was first raised with me last year, I have engaged with senior Defence officials, including the surgeon-general, about what the ADF's experience to date has been, and the research and monitoring that they are now undertaking to better understand repeated blast brain injury," Mr Keogh said. "Defence is also undertaking preventative action to support the ongoing health of ADF personnel."

Veterans group Vigil Australia, which is running a community campaign on blast-overpressure injuries, disputed the government's commitment to addressing the condition.

The group's convener, Paul Scanlan, who attended a Blast and Conflict Injury Conference in London, said he was astounded to find he was the only Australian representative there.

"There was no one from the Department of Defence, the Australian Defence Force, Defence Science and Technology group, DVA or the Department of Health and Ageing," the retired special forces officer said. "When I speak with international

experts, they have had no contacts with our Defence bureaucracy. We are 10 to 20 years behind the US in dealing with this problem."

The Royal Commission into Defence and Veteran Suicide made no mention of the dangers posed by mTBI in its interim report, reflecting the failure of Australian authorities to take the condition seriously. But it's understood its final report will recommend further research be undertaken to inform the government of the risks.

Part of the problem, advocates say, is the failure of the Australian Institute of Health and Welfare, which analyses ADF and veterans' suicide data, to examine the links between specific military occupations and suicide risk.

As research from the US has shown, some military specialties are more at risk from mTBI. A recent Harvard study on 30 career special forces soldiers, for example, found a clear association between blast exposure, altered brain structure and impaired cognitive performance.

Labor MP Luke Gosling, a former Ist Commando Regiment officer, has thrown his support behind the Vigil Australia campaign, calling for the royal commission to provide "meaningful recommendations" on the condition.

"There will be benefits from screening and collaboration for mTBI and blast overpressure, not only for our ADF personnel but for veteran wellbeing too, improving the health and safety of our people," Mr Gosling said.

Noting that the US was "well advanced" in screening for mTBI in its armed forces, Mr Gosling said there could be a role for AUKUS's so-called Pillar II technology partnership in fostering joint research.

Opposition defence spokesman Andrew Hastie called for greater investment to protect soldiers from risking life-altering brain damage as a result of their work.

"Not surprisingly, we are seeing this in allied special operations communities, who carried the heaviest burden of fighting in Afghanistan," Mr Hastie said.

"We need to look closely at blast-overpressure injury, and make sure our troops have preventative measures in place so we can have them serving longer, and have them retiring in a good state of health."

MORE ON THIS STORY

Injured soldier 'shines light' on brain injuries

By BEN PACKHAM

TRENDING

'Time to go': Obama says Biden needs to reconsider his election bid

Joe Biden's future teeters on a knife edge after reports that the most influential figure in the Democratic party now believes the President's path to victory has diminished and the 81-year-old should 'seriously consider' his candidacy.

By CAMERON STEWART, ADAM CREIGHTON

Leak returns fire over Faruqi defamation threat

Johannes Leak was shocked – but not entirely surprised – to discover himself, for the first time, on the end of a legal threat to sue for defamation and a demand to withdraw a cartoon.

By STEPHEN RICE

Taxpayer cost of returning Assange with Rudd revealed

Taxpayers forked out more than $100,000 to return Julian Assange home, with the bill blowing out by nearly 30 per cent because Kevin Rudd accompanied the convicted criminal on his flight into Canberra.

By GREG BROWN

s 22

From:
To:
Cc:
Subject: RE: ADF blast brain injuries [SEC=OFFICIAL]
Date: Tuesday, 20 August 2024 12:40:00 PM
Attachments: image001.png
image004.png
image005.png
image006.png

OFFICIAL

Afternoon s 22

I have read the articles attached and find no new information that would warrant further enquiries. Moreover, when viewed with information provided by s 47F – Occupational Hygienist for Defence at enterprise level, the concerns raised in the article(s) confirm the information supplied, i.e., s 47E(d)

. See below.

From my email
"For awareness, the following summation from my discussion with the Occupational Hygienist, s 47F , in WHS branch at the Department of Defence (DoD) regarding blast-related brain injury. Mr s 47F has an 'Enterprise Level' awareness and receives weekly updates of the work being conducted by the DoD into this and was able to provide a high-level snapshot of where the DoD is at in relation.

- The DoD are aware of the risks associated with blast related activities and weapon systems/platforms etc. Currently a high-priority for DoD internally. Australian Minister for Defence is maintaining awareness.
- The DoD have updated medical procedures for serving members. These were updated in 2023 with latest available information. Members monitored for symptoms of blast related brain injury, medical process initiated if symptoms detected.
- The DoD is assisting by providing research data via Defence Science Technology Group (DSTG) to the USA who are conducting significant research in this area, currently an area of interest with several nations also contributing to the research.
- The research conducted by USA is considering the impacts of "one-off" and "cumulative" blast effects to soldiers. Due to provide findings in form of exposure standard to blast pressure by end of 2025.
- Those findings will be correlated with testing being undertaken by DoD to record blast pressures of all systems/platforms, to determine training and ceremonial safe levels.
- Instructors considered separately to trainees as part of exposure, with additional controls based on need to participate/oversee larger number of events.
- End-of-life systems not on update list for recording blast pressures. Continue to

utilise manufacturers recommendations and current training standards until replacement.

- Given current military operations, there is additional focus on “breaching/forced entry”.”

Based on this, I believe DoD have sufficient awareness of the risk and the interim controls appear reasonable. Participating in a larger study conducted by USA while recording data for implementation when exposure standard becomes available appears to be the long-term control, and consideration for differences in roles and activities such as ceremonial, displays further awareness. Medical processes have been updated to reflect this topic showing the internal prioritisation.

My feedback for the DoD was the sharing of information once results of research are determined, to the wider jurisdiction, both medically, and operationally (other PCBU’s conducting blast work) SFARP.

Regards,

s 22

Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C’th)
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

From: s 22
Sent: Tuesday, August 20, 2024 11:56 AM
To: s 22
Subject: FW: ADF blast brain injuries [SEC=OFFICIAL]

OFFICIAL

s 22

Please consider – discuss your recommended approach with s 22 . Effectively, the question is whether we need to make additional inquiries/consider anything new.

I would like to brief the GM, via email, regards what we have done (IA) and what our

position is. Preferably by CoB today.

Regards,

s 22

Director Regional Operations - ACT
Regulatory Operations Group
Comcare
s 22

GPO Box 1993, Canberra, ACT 2601 | www.comcare.gov.au

From: s 22
Sent: Tuesday, August 20, 2024 8:39 AM
To: Rob Pash <Pash.Rob@comcare.gov.au>; s 22
Cc: s 47E(d) s 22
Media <Media@comcare.gov.au>
Subject: Re: ADF blast brain injuries [SEC=OFFICIAL]

Thanks s 22

s 22 - can you please work with R&A on a regulatory response to this matter.

s 22

Get Outlook for iOS

From: s 22
Sent: Tuesday, August 20, 2024 7:40:45 AM
To: s 22
Cc: s 47E(d) ; s 22
Media <Media@comcare.gov.au>
Subject: ADF blast brain injuries [SEC=OFFICIAL]

OFFICIAL

Hi s 22 ,

This ran on 7.30 last night – ADF personnel exposed to blast injuries and links to CTE/PTSD/suicide. Similar to last month's coverage in The Australian (attached) but more extensive:

The enemy within: Blasts from Australian soldiers' own weapons may be causing brain injury - ABC News

s 22

s 22 | Media Manager
Marketing & Communications
s 22

media@comcare.gov.au

From: s 22
To:
Cc:
Subject: FW: ADF blast brain injuries [SEC=OFFICIAL:Sensitive]
Date: Thursday, 22 August 2024 2:29:45 PM

OFFICIAL: Sensitive

s 22

Please note – GM supports your assessment.

Regards,

s 22

Acting Senior Director National Operations
Regulatory Operations Group
Comcare
s 22

GPO Box 1993, Canberra, ACT 2601 I www.comcare.gov.au

From: s 22
Sent: Thursday, August 22, 2024 1:44 PM
To: s 22
Subject: RE: ADF blast brain injuries [SEC=OFFICIAL:Sensitive]

OFFICIAL: Sensitive

Thanks s 22

Appreciate the update and the recommendation is agreed.

s 22

General Manager
Regulatory Operations Group
Comcare
s 22
A: GPO Box 9905, Canberra, ACT 2601
1300 366 979 | www.comcare.gov.au

From: s 22
Sent: Tuesday, August 20, 2024 3:31 PM
To: s 22
Subject: RE: ADF blast brain injuries [SEC=OFFICIAL:Sensitive]

OFFICIAL: Sensitive

s 22

BLUF: The Department of Defence (Defence) is aware of the risk posed by blast-related brain injury. Defence is contributing to a US Department of Defense study (US study). This approach appears to be reasonably practicable in the circumstances. I recommend no further action at this stage, with follow up in 2025.

Background

RO-ACT initiated an IA in response to the initial media articles. The intent was to ensure Defence was aware of the risk and had initiated an appropriate response in the circumstances. Any subsequent regulatory response to be informed by the IA. The inspector engaged directly with the Defence Occupational Hygienist and considered the internally produced R&A report.

The IA identified that Defence is aware of the risk and is contributing to a US study. Defence intends to use the outcome of the US study to inform its own actions.

A follow-up IA will occur in 2025, once the US study report is released. The inspector asked, and will reiterate next year, that it would be preferable for Defence to share the findings of the US study with other PCBUs, to the extent this is possible.

In summary:

- Defence is aware of the risks associated with blast related activities, inclusive of that produced during the operation of weapon systems. The Minister for Defence is monitoring the issue.
- Defence updated medical procedures for serving members in 2023. A specific medical process is initiated if symptoms of blast related brain injury are detected.
- Defence, through Defence Science Technology Group (DSTG), is contributing to the US study by providing research data. Several nations are also contributing to the research. Note: Given the size of the US study, and the relatively small numbers that any Australian study could consider, this approach appears sound.
- The US study is considering the impacts of “one-off” and “cumulative” blast effects to soldiers. the US study is due to provide findings in the form of an exposure standard to blast pressure by the end of 2025.
- Defence will use the findings of the US study to define ‘safe’ operating parameters for all systems/platforms (i.e. operational, training, and ceremonial ‘safe’ levels). This will include consideration of trainers , who are generally exposed to more events than trainees.
- Defence does not intend to update the arrangements for systems nearing their end-of-life. Defence will continue to use manufacturer’s recommendations and current training standards until these systems are replaced. Note: Given the number of systems, this appears a practicable approach. Comcare could reasonably expect

Defence to ensure none of these systems exceed the exposure standard (i.e. regardless of how long these systems remain in service, Defence should not exceed the defined exposure standard).

- Defence is also considering general operational procedures such as "breaching/forced entry".

I recommend no further action at this stage.

Please advise if you wish to discuss or require further information.

Regards,

s 22

Director Regional Operations - ACT
Regulatory Operations Group
Comcare
s 22

GPO Box 1993, Canberra, ACT 2601 | www.comcare.gov.au

From: s 22
Sent: Tuesday, August 20, 2024 8:39 AM
To: s 22
Cc: s 47E(d) s 22 Media <Media@comcare.gov.au>
Subject: Re: ADF blast brain injuries [SEC=OFFICIAL]

Thanks s 22

s 22 - can you please work with R&A on a regulatory response to this matter.

s 22

Get Outlook for iOS

From: s 22
Sent: Tuesday, August 20, 2024 7:40:45 AM
To: s 22
Cc: s 47E(d) s 22 Media <Media@comcare.gov.au>
Subject: ADF blast brain injuries [SEC=OFFICIAL]

OFFICIAL

Hi s 22

This ran on 7.30 last night – ADF personnel exposed to blast injuries and links to CTE/PTSD/suicide. Similar to last month's coverage in The Australian (attached) but more extensive:

The enemy within: Blasts from Australian soldiers' own weapons may be causing brain injury - ABC News

s 22

s 22 | Media Manager
Marketing & Communications
s 22

media@comcare.gov.au

Sensitive: This document may contain sensitive information as defined under Section 6 of the Privacy Act.
Sensitive: This document may contain sensitive information as defined under Section 6 of the Privacy Act.

From: s 22
To:
Cc:
Subject: FW: ABC 7.30 - Navy divers blast exposure [SEC=OFFICIAL]
Date: Friday, 13 September 2024 10:22:53 AM

OFFICIAL

s 22

Please consider in light of your previous inquiries on this hazard, and recommend what, if any, action is warranted.

Regards,

s 22

Acting Senior Director National Operations
Regulatory Operations Group
Comcare
s 22

GPO Box 1993, Canberra, ACT 2601 I www.comcare.gov.au

From: s 22
Sent: Friday, September 13, 2024 8:07 AM
To: s 22

Cc: s 22

s 47E(d) Media <Media@comcare.gov.au>
Subject: ABC 7.30 - Navy divers blast exposure [SEC=OFFICIAL]

OFFICIAL

Morning all,

From 7.30 last night – Navy clearance divers' exposure to blasts and links to brain injury/PTSD/suicide (link to TV story within this version):

Former navy clearance divers suffering mysterious brain injuries years after service - ABC News

This is a follow-up to a story last month: The enemy within: Blasts from Australian soldiers' own weapons may be causing brain injury - ABC News

s 22

s 22 **| Media Manager**

Marketing & Communications
s 22

media@comcare.gov.au

From: s 22
To:
Cc:
Subject: RE: ABC 7.30 - Navy divers blast exposure [SEC=OFFICIAL]
Date: Monday, 16 September 2024 3:23:00 PM
Attachments: image001.png
image004.png
image003.png
image006.png

OFFICIAL

Thanks s 22

As already indicated, DoD are working in with the US DoD on this topic. Article confirms "US Deputy Defense Secretary has ordered immediate action to protect troops in training" – again Aus Minister for Defence is reportedly across the issue here in Australia. Article also notes the Royal Commission recommendations which the ADF are quoted as aware of. Support from DVA and Joint Health Command were mentioned previously as well.

I can reach out to the point of contact to ask whether our DoD is doing anything else specifically related to diving? Would we need an exhaustive list to compare against articles?

My advice to DoD remains the same, communicate their plan to stakeholders to allay concerns.

Thoughts?

s 22
Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C'th)
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

From: s 22
Sent: Friday, September 13, 2024 10:23 AM
To: s 22
Cc: s 22
Subject: FW: ABC 7.30 - Navy divers blast exposure [SEC=OFFICIAL]

OFFICIAL

s 22

Please consider in light of your previous inquiries on this hazard, and recommend what, if any, action is warranted.

Regards,

s 22

Acting Senior Director National Operations
Regulatory Operations Group
Comcare
s 22

GPO Box 1993, Canberra, ACT 2601 I www.comcare.gov.au

From: s 22
Sent: Friday, September 13, 2024 8:07 AM
To: s 22

Cc: s 22

s 47E(d) Media <Media@comcare.gov.au>
Subject: ABC 7.30 - Navy divers blast exposure [SEC=OFFICIAL]

OFFICIAL

Morning all,

From 7.30 last night – Navy clearance divers' exposure to blasts and links to brain injury/PTSD/suicide (link to TV story within this version):

Former navy clearance divers suffering mysterious brain injuries years after service - ABC News

This is a follow-up to a story last month: The enemy within: Blasts from Australian soldiers' own weapons may be causing brain injury - ABC News

s 22

s 22 **| Media Manager**
Marketing & Communications
s 22

media@comcare.gov.au

From: s 22
To:
Cc:
Subject: FW: ADF blast exposure [SEC=OFFICIAL]
Date: Monday, 16 September 2024 5:15:37 PM
Attachments: Veteran battles to help blast victims.pdf

OFFICIAL

s 22

s 47C

Regards,

s 22

Acting Senior Director National Operations
Regulatory Operations Group
Comcare
s 22

GPO Box 1993, Canberra, ACT 2601 I www.comcare.gov.au

From: s 22
Sent: Monday, September 16, 2024 3:36 PM
To: s 22
Subject: RE: ADF blast exposure [SEC=OFFICIAL]

OFFICIAL

Dang it. Give the attached version a go – if you can't open it, it's likely an issue with your Adobe software – IT can reinstall it.

Cheers,
s 22

s 22 **| Media Manager**
Marketing & Communications
s 22

media@comcare.gov.au

From: s 22
Sent: Monday, September 16, 2024 3:32 PM
To: s 22
Subject: RE: ADF blast exposure [SEC=OFFICIAL]

OFFICIAL

s 22

The file comes up as damaged?

Regards,

s 22

Acting Senior Director National Operations
Regulatory Operations Group
Comcare
s 22

GPO Box 1993, Canberra, ACT 2601 I www.comcare.gov.au

From: s 22
Sent: Monday, September 16, 2024 11:06 AM
To: s 22
Cc: s 47E(d) Media <Media@comcare.gov.au>;
s 22
Subject: ADF blast exposure [SEC=OFFICIAL]

OFFICIAL

Hi s 22 and s 22

Further to previous reports on the effects of blast exposure, the attached story ran in the SMH/Age today (and on 60 Minutes last night).

Cheers,
s 22

s 22 **| Media Manager**
Marketing & Communications
s 22

media@comcare.gov.au

Veteran battles to help blast victims

By Nick McKenzie

The Age
Monday 16th September 2024
2007 words
Page 1,12,13 | Section: NEWS
1750cm on the page

Veteran battles to help blast victims

Nick McKenzie

EXCLUSIVE

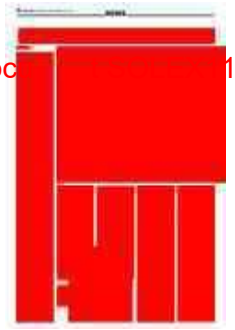
As the Australian army's highest-ranking officer was scrambling to workshop his response to accusations that Diggers' brains have been exposed to avoidable trauma, the ex-special forces operator who has been the issue's biggest agitator was meeting US defence officials in Washington.

Former lieutenant colonel Paul Scanlan wasn't in the American capital on official Five Eyes intelligence-sharing alliance business. Nor was he a formal envoy of the Australian military he served for 27 years, including on multiple overseas deployments to Iraq, Afghanistan and East Timor.

His military background helped get him through the back door of Pentagon bodies such as the US Defence Health Agency, but Scanlan's mission was decidedly personal.

A tall, striking veteran with a booming laugh and boundless energy, he believes the Australian Defence Force and the Department of Veterans' Affairs have badly mismanaged the brain trauma caused by exposure to repeated blasts in training and battle, including in soldiers he served with. These blasts cause pressure waves that compress and, experts claim, damage brain tissue in soldiers, including those who have never seen action.

Continued Page 12



The blasts, the battle, an apology – and now action

From Page 1

"The US interim guidance, as of 2022, is 4 PSI [pounds per square inch] per single exposure. Australia doesn't have any guidance," Scanlan says. "We're also missing the cumulative blast exposure. You could be doing say 10 to 20 of these at three PSI, 20, 30, 60 PSI a day. And we don't know what that long-term cumulative exposure is."

Rather than lobby for change from afar — as many veterans and their families have done to drive the landmark devastating royal commission findings into veterans' suicide last week — Scanlan has worked on getting inside the tent.

Because he believes the Australian military had been too resistant to change and unwilling to concede its failings, he has spent the past 18 months using his special forces networks and draining his personal finances to attend overseas military health and brain trauma conferences and workshops.

"I thought leaving the army I'd spend more time with my daughter. I've almost spent more time overseas, going to these conferences, often as the only Australian there, speaking to the researchers, finding out the information and coming back and then saying [to Australian officials], 'hey, you need to speak to this person'," Scanlan says, eyes welling with tears at the mention of his daughter.

"And if I was to make an observation of DVA [Australia's Department of Veterans' Affairs] and Defence, apart from a few key people, they've been completely disengaged."

As he was meeting in Washington with the inner sanctum of the US military's health division, the fruits of Scanlan's relentless activism were materialising.

Not only did the royal commission last week recommend a dedicated blast impact research program — a finding made in no small part because of Scanlan's lobbying of royal commissioner Nick Kaldas, with whom Scanlan previously worked on counter-terrorism— but Australia's Chief of Army, Lieutenant General Simon Stuart, conceded the military had previously failed to adequately deal with the issue and vowed to overhaul its approach.

In an exclusive interview with this masthead and *60 Minutes*, Stuart also apologised to veterans suffering from the potentially avoidable impacts of blast trauma caused by repeated exposure to heavy weapons or explosives.

"I say to anyone that we have failed ... either individually or collectively ... I'm sorry," he said, while also conceding the military never properly weaved together a series of reports and studies that, if they had been viewed as a patchwork, would have highlighted that blast impact was a problem that may be seriously harming its members.

"There have been research and trials and other work going on since 2010 so far as I can ascertain. I think what's been missing is sort of the golden thread of logic. We are where we are now, and I'm very focused on making sure that we fill in the gaps."

The concessions are unlikely to resonate strongly with former Special Air Service Regiment sergeant Andrew Cave.

The Afghanistan veteran was once the epitome of an elite soldier: a tall and chiselled warrior and champion footballer who wanted nothing more than to put his fighting skills to the test on overseas deployments.

Having done so repeatedly, Cave became a case study in something else: the fight that veterans often face after their duty leaves them with physical or mental injuries.

Cave sustained both. Blast pressure was to blame.

He recounts in vivid detail the raging battle with the Taliban in 2006 when a rocket-propelled grenade exploded above his head, briefly knocking him out before he tried to get back to his feet to return fire.

"I remember just blood pouring like a tap. But I managed to drag myself into the vehicle and I tried to get hold of my machine-gun. But then I just collapsed. And then the side of my face had completely opened up.

"One of the patrol members said they could have put a fist in the side of my head."

Cave returned home a deeply changed man. His physical injuries required intensive surgery, but patching his head back together was only the beginning. The blast impact caused significant brain trauma that affected Cave in ways that some in the medical and defence community struggled to comprehend.

Doctors ultimately diagnosed Cave as having both a

traumatic brain injury and dementia. But after medically discharging from the army he had served for 25 years in 2011, he says the Department of Veterans' Affairs challenged his diagnosis, seemingly intent on minimising the complex and debilitating mental health and processing problems that Cave was experiencing due to the blast pressure that had forever altered his brain.

He describes resistance by Defence and Veterans' Affairs to recognising the impact of blast trauma — be it from one significant battlefield event or repetitive exposure during heavy weapons or explosives training — as "absolutely soul-destroying".

"Not one commander has ever really approached me and talked about this," says Cave.

Scanlan, though, was in touch. Cave was soon part of an international network of veterans and researchers lobbying military leaders and politicians to embrace a growing body of research linking the repeated exposure to blast pressure in training or combat to profound changes in the brain.

These changes may cause symptoms similar to those experienced by sufferers of PTSD or chronic traumatic encephalopathy caused by high-impact sport, albeit with unique characteristics scientists are still working to understand.

Unsurprisingly, given the often-criticised pace with which large military institutions respond to what might be seen as non-urgent problems, change has come from the outside.

In the US, parents and spouses of veterans who have killed themselves after suffering the suspected effects of blast trauma have pressed Congress and the military to support legislative change to improve blast monitoring and ways to reduce the potential effects on the brain caused by training or combat involving exposure to blasts.

The New York Times published a series of landmark reports on the issue, revealing the findings of internal US military research highlighting the impact on the brain of repeated blast wave exposure.

Scanlan believes Australia is years behind the US in dealing with the problem, a claim partly backed up by his previous stint working within a division of the ADF devoted to science and technology.

Before leaving the military in 2021, Scanlan discovered internal research and reports warning of the effects of blast trauma on soldiers.

He said it was his discovery that the ADF had failed to commit to vital further research and reform that informed his decision to spend the past 18 months travelling Australia and the world to uncover the latest military health research and connect with key decision makers and advocates in America and Europe.

"If they [the ADF and the Australian government] want to do something about this, they could do it tomorrow. Are they doing enough? No. I go to all of these conferences. There's no one from the ADF there. There's no one from [Veterans' Affairs] there. There's no one from Defence Science Technology there. I'm the only Australian."

Behind the scenes, Scanlan has spent months connecting US military health officials and researchers with their Australian counterparts.

In recent trips to the US, he met with leading blast brain-trauma campaigner Frank Larkin, a former Navy SEAL who served as the 40th US Senate sergeant at arms and whose son, also a Navy SEAL, died by suicide.

Scanlan also met advisers to Senator Elizabeth Warren, the chair of the Senate armed services personnel subcommittee and sponsor of the US Blast Overpressure Safety Act – bipartisan legislation that would direct the US Defence Department to better protect service members from blast pressure.

Among those Scanlan is championing back home is Dan Pace, a former Australian clearance diver who, urged on by senior defence officials, discharged from the navy to launch a technology and AI company focused on measuring blast impact, including by tracking changes in the brain.

Pace said promised funding support from the ADF never materialised, forcing him to remortgage his house to keep his company afloat. The navy veteran insists his motivation isn't financial but lies in ensuring service personnel are better protected from the blast waves that a growing body of data suggests may be contributing to veterans' suicides.

Urged on by Scanlan, ex-brigadier Ian Langford, the former head of Special Operations Command in Afghanistan, emerged as the most senior former ADF member publicly raising the alarm about blast trauma.

"I can see the impact that it is causing, and I, as a veteran and as a former commander of these men and women ... we owe them the obligation to look after them in their post-service life," Langford said. "Now that we have the evidence, I think there's a moral and compelling reason to act in haste."

Army chief Stuart says that while the federal government will have the final say on the royal commission recommendations, he and his fellow service chiefs are embracing the call for change.

"I think we're all in, in terms of what the royal commissioners have identified for us," Stuart said, describing how he had already ordered all previous research to be gathered and is ensuring Australia is drawing on advances in the US and elsewhere.

"Look, we're already working, I think in the spirit, if not the letter of that recommendation [on a blast impact program]. Personally, I think it's a sensible thing."

For Scanlan, whether the ADF and the government are truly committed to change must be answered with new laws that fund and mandate reform.

Scanlan says Australia must follow the US and introduce a Blast Overpressure Safety Act that forces "the ADF to do something about it".

Rather than limited trials or patchy data collection programs, Scanlan is also urging the ADF to commit to sweeping research as well as baseline cognitive testing of all personnel.

Scanlan warned that a failure to act fully on blast trauma would cost more lives and that until he saw real change, he would keep fighting.

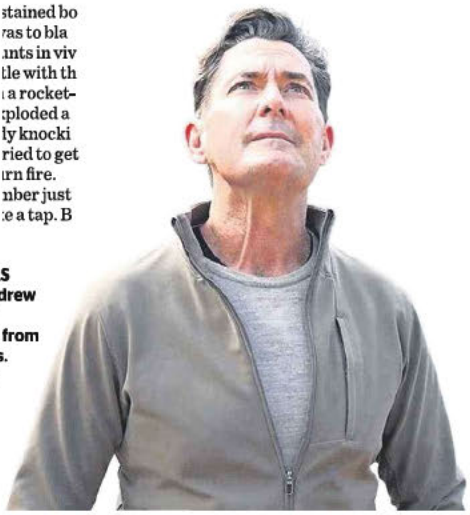
"From Afghanistan, there are guys now from that who have committed suicide. And not just suicides. Families are being destroyed because of the effect it's having. I think they deserve a lot better," he said.

"The military ranks never scared me, or bureaucracy. There's a problem here; let's solve it. And if you're not going to work with me to solve it, then I'll solve it without you."

Current or former ADF members or relatives who need counselling or support can contact the Defence All-Hours Support Line on 1800 628 036 or Open Arms on 1800 011 046.

Lieutenant General Simon Stuart; (right) Former lieutenant colonel Paul Scanlan. Photos: Jason South, supplied

stained bo
was to bla
unts in viv
tle with th
a rocket-
xploded a
ly knocki
ried to get
urn fire.
nber just
e a tap. B



Former SAS soldier Andrew Cave met resistance from authorities. Photo: 60 Minutes

'Not one commander has ever really approached me and talked about this.'

Former SAS soldier Andrew Cave, of his brain trauma and injury

s 22

From:
To:
Cc:
Subject: RE: ABC 7.30 - Navy divers blast exposure [SEC=OFFICIAL:Sensitive]
Date: Monday, 16 September 2024 5:21:32 PM
Attachments: image001.png
image002.png
image003.png
image004.png

OFFICIAL: Sensitive

s 22

Many thanks. Nil additional actions required.

s 47C

Regards,

s 22

Acting Senior Director National Operations
Regulatory Operations Group
Comcare
s 22

GPO Box 1993, Canberra, ACT 2601 I www.comcare.gov.au

From: s 22
Sent: Monday, September 16, 2024 3:23 PM
To: s 22
Cc:
Subject: RE: ABC 7.30 - Navy divers blast exposure [SEC=OFFICIAL]

OFFICIAL

Thanks s 22 ,

As already indicated, DoD are working in with the US DoD on this topic. Article confirms "US Deputy Defense Secretary has ordered immediate action to protect troops in training" – again Aus Minister for Defence is reportedly across the issue here in Australia. Article also notes the Royal Commission recommendations which the ADF are quoted as aware of. Support from DVA and Joint Health Command were mentioned previously as well.

I can reach out to the point of contact to ask whether our DoD is doing anything else specifically related to diving? Would we need an exhaustive list to compare against articles?

My advice to DoD remains the same, communicate their plan to stakeholders to allay concerns.

Thoughts?

s 22

Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C'th)
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

From: s 22
Sent: Friday, September 13, 2024 10:23 AM
To: s 22
Cc:
Subject: FW: ABC 7.30 - Navy divers blast exposure [SEC=OFFICIAL]

OFFICIAL

s 22

Please consider in light of your previous inquiries on this hazard, and recommend what, if any, action is warranted.

Regards,

s 22

Acting Senior Director National Operations
Regulatory Operations Group
Comcare
s 22

GPO Box 1993, Canberra, ACT 2601 I www.comcare.gov.au

From: s 22
Sent: Friday, September 13, 2024 8:07 AM
To: s 22

Cc: s 22

s 47E(d) Media <Media@comcare.gov.au>
Subject: ABC 7.30 - Navy divers blast exposure [SEC=OFFICIAL]

OFFICIAL

Morning all,

From 7.30 last night – Navy clearance divers' exposure to blasts and links to brain injury/PTSD/suicide (link to TV story within this version):

Former navy clearance divers suffering mysterious brain injuries years after service - ABC News

This is a follow-up to a story last month: The enemy within: Blasts from Australian soldiers' own weapons may be causing brain injury - ABC News

s 22

s 22 **| Media Manager**
Marketing & Communications
s 22

media@comcare.gov.au

s 22

From:
To:
Cc:
Subject: 2024-09-17 Comcare Information and Advice [SEC=OFFICIAL:Sensitive]
Date: Tuesday, 17 September 2024 2:03:00 PM
Attachments: image001.png
image007.png
image010.png
image011.png
image004.png
image005.png

OFFICIAL: Sensitive

Thanks s 22

Given the information around 4 PSI interim standard by the US, I will get back in touch with the Occ. Hygienist s 47F and get further clarity.

Regards,

s 22

Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C'th)
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

From: s 22
Sent: Monday, September 16, 2024 5:21 PM
To: s 22
Cc: s 22
Subject: RE: ABC 7.30 - Navy divers blast exposure [SEC=OFFICIAL:Sensitive]

OFFICIAL: Sensitive

s 22

Many thanks. Nil additional actions required.

s 47C

Regards,

s 22

Acting Senior Director National Operations
Regulatory Operations Group
Comcare
s 22

GPO Box 1993, Canberra, ACT 2601 I www.comcare.gov.au

From: s 22
Sent: Monday, September 16, 2024 3:23 PM
To: s 22
Cc: s 22
Subject: RE: ABC 7.30 - Navy divers blast exposure [SEC=OFFICIAL]

OFFICIAL

Thanks s 22 ,

As already indicated, DoD are working in with the US DoD on this topic. Article confirms "US Deputy Defense Secretary has ordered immediate action to protect troops in training" – again Aus Minister for Defence is reportedly across the issue here in Australia. Article also notes the Royal Commission recommendations which the ADF are quoted as aware of. Support from DVA and Joint Health Command were mentioned previously as well.

I can reach out to the point of contact to ask whether our DoD is doing anything else specifically related to diving? Would we need an exhaustive list to compare against articles?

My advice to DoD remains the same, communicate their plan to stakeholders to allay concerns.

Thoughts?

s 22

Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C'th)
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

From: s 22
Sent: Friday, September 13, 2024 10:23 AM
To: s 22
Cc: s 22
Subject: FW: ABC 7.30 - Navy divers blast exposure [SEC=OFFICIAL]

OFFICIAL

s 22

Please consider in light of your previous inquiries on this hazard, and recommend what, if any, action is warranted.

Regards,

s 22

Acting Senior Director National Operations
Regulatory Operations Group
Comcare
s 22

GPO Box 1993, Canberra, ACT 2601 I www.comcare.gov.au

From: s 22
Sent: Friday, September 13, 2024 8:07 AM
To: s 22

Cc: s 22

s 47E(d) Media <Media@comcare.gov.au>

Subject: ABC 7.30 - Navy divers blast exposure [SEC=OFFICIAL]

OFFICIAL

Morning all,

From 7.30 last night – Navy clearance divers' exposure to blasts and links to brain injury/PTSD/suicide (link to TV story within this version):

Former navy clearance divers suffering mysterious brain injuries years after service - ABC News

This is a follow-up to a story last month: The enemy within: Blasts from Australian soldiers' own weapons may be causing brain injury - ABC News

s 22

s 22 **| Media Manager**
Marketing & Communications
s 22

media@comcare.gov.au

Sensitive: This document may contain sensitive information as defined under Section 6 of the Privacy Act.

s 22

From:
To:
Subject: DoD BOP pam [SEC=OFFICIAL]
Date: Friday, 20 September 2024 9:39:00 AM
Attachments: D BOP RIG 20240522_508.pdf
image001.png
image003.png
image005.png
image006.png

OFFICIAL

As discussed, this is publicly accessible on the internet.

s 22

Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C'th)
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

DoD Blast Overpressure Reference and Information Guide (D-BOP RIG)

May 2024

DoD Requirements for Managing Brain Health Risks from Blast Overpressure (BOP) / D-BOP RIG

- Specifies recommended stand-off distances for those (1) involved in training (e.g., instructors, range safety officers) and (2) involved in operations of the weapon system (e.g., assistant gunners, spotters and loaders) if there are options pertaining to their proximity to the weapons system, with consideration given to safe training and operations

- The stand-off distances will be updated as additional characterizations are completed, including additional weapons systems and/or variations in ammunition or charges, configuration (e.g., non-open terrain, shipboard)

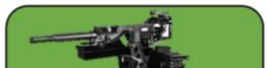
As Low as Reasonably Achievable (ALARA)

1. **Minimize number of personnel** in vicinity of BOP event
2. **Increase standoff distances** from weapons
3. **Minimize the duration of live-fire events**
4. Adhere to the **maximum allowable number of rounds that may be fired** during each event or time period
5. Ensure appropriate **use of personal protective gear and equipment (PPE)**
6. **Train and educate others** on BOP hazards and risk management actions

- Avoid unnecessary exposure
- Fewer personnel
- Increased distances
- Shorter durations
- Limit number of rounds
- Use PPE
- Educate others

Contents—Examined Tier 1 Weapon Systems

FOUO Docu t SOLEX11729

Shoulder Launched Munitions	. 50 Caliber Weapons	Indirect Fire System – Howitzers	Indirect Fire System – Mortars	Explosive Breachers
 M3, MAWWS	 M107 sniper rifle	 M119 A3	 120mm	 Breacher Open Space
 M136, AT4	 M2A1 machine gun	 M777 A2	 81mm	 Breacher Door
 LAW	 MK15	 M109 A6	 60mm	 Breacher Wall
	 GAU21			

67

How to use this guide

This Flipbook leverages data collection efforts performed by the USUHS CONQUER program.

Title:
- Weapon system name and type

M3 Multi-role Anti-Armor Antipersonnel Weapon System (MAAWS) (Carl Gustav)

STANDING

Position

DoD Personal Protective Equipment Guidance

- *Personal protective gear and equipment (PPE) level.* Protections associated with each PPE level

DoD Personal Protective Equipment Guidance

Hearing protection Within a 100-m radius must wear properly inserted foam earplugs as well as earmuffs (double hearing protection), single hearing protection within 500m while firing HE, HEAT, TP, smoke, and illumination.

Eye protection all personnel on the range.

Helmet and flak jacket required when firing.

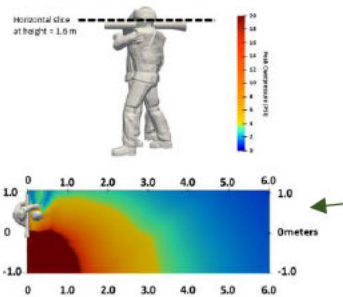
Data Collection Information and Recommended Stand-off Distances

Weapons System: M3 MAAWS (Carl Gustav)
Ammunition: DODIC: A557
Round Type: 84mm HEAT TP 552
Data Collection: 1 shot
BOP Sensor: 5.2 ft above ground

Approx. 15/16 ft

Minimum Stand-off Distance:
Based on collected data, minimum stand-off distance for observers and non-essential personnel to minimize exposure to 4psi:
16 ft approximately the length of a HMMWV

Blast Overpressure Measurement Data



Graph: A bird's eye view of blast overpressure zones color-coded based on pounds per square inch (psi) levels collected around the weapon.

Data Collection Information and Recommended Stand-off Distances: Weapon system, ammunition, and sensor information under which BOP data was collected
Minimum standoff distance for personnel in vicinity of the stationary weapon system based off 4psi contour.

Output graph key: Grid is in meters

68

Shoulder Launched Munitions

M3 Multi-role Anti-Armor Antipersonnel Weapon System (MAAWS) (Carl Gustav)

M-136A1 AT4 Confined Space (AT-4CS)

M72 Light Antitank Weapon (LAW)

M3 Multi-role Anti-Armor Antipersonnel Weapon System (MAAWS) (Carl Gustav)

STANDING

DoD Personal Protective Equipment Guidance

Hearing protection Within a 100-m radius must wear properly inserted foam earplugs as well as earmuffs (double hearing protection), single hearing protection within 500m while firing HE, HEAT, TP, smoke, and illumination.

Eye protection all personnel on the range.

Helmet and flak jacket required when firing.

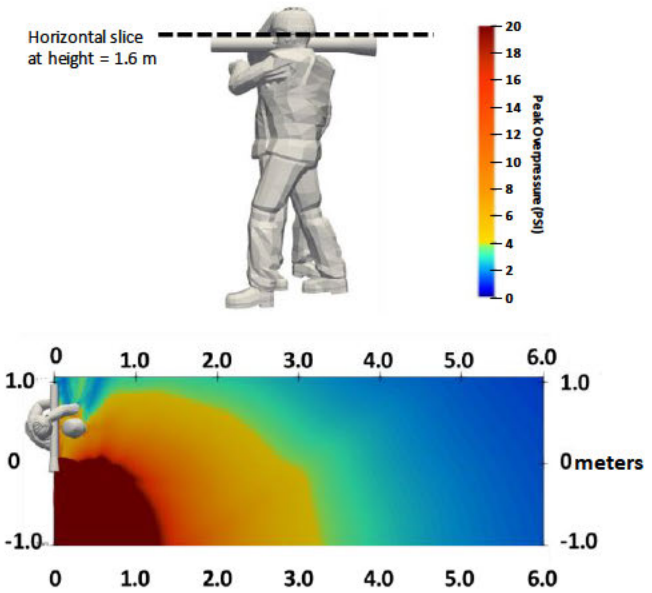
Data Collection Information and Recommended Stand-off Distances

Weapons System: M3 MAAWS (Carl Gustav)
Ammunition: DODIC: A557
Round Type: 84mm HEAT TP 552
Data Collection: 1 shot
BOP Sensor: 5.2 ft above ground

Approx. 15/16 ft

Minimum Stand-off Distance:
Based on collected data, minimum stand-off distance for observers and non-essential personnel to minimize exposure to 4psi:
16 ft or approximately the length of a HMMWV

Blast Overpressure Measurement Data



70

M-136A1 AT4 Confined Space (AT-4CS)

STANDING

DoD Personal Protective Equipment Guidance

Hearing protection Double hearing protection must be worn within a 100m radius (inserted foam earplugs as well as earmuffs), single hearing protection will be worn by personnel within 390m of the firing point.

Eye protection all personnel on the range.

Helmet and flak jacket required when firing.

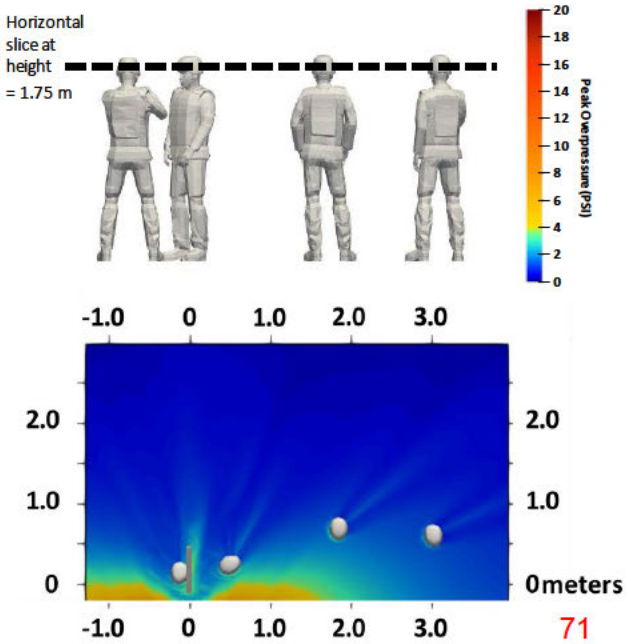
Data Collection Information and Recommended Stand-off Distances

Weapons System: M136A1 AT4 Confined Space (AT4CS)
Round Type: 84mm AT4CS-RS TP 552
Data Collection: 1 shot
BOP Sensor: 5.2 ft above ground

Approx. 10 ft

Minimum Stand-off Distance:
Based on collected data, minimum stand-off distance for observers and non-essential personnel to minimize exposure to 4psi:
10 ft or approximately 2 people 2-arms length

Blast Overpressure Measurement Data



M72 Light Antitank Weapon (LAW)

STANDING

DoD Personal Protective Equipment Guidance

Hearing protection single hearing protection will be worn by personnel within 390 m of the firing point. Gunners and other personnel within 20m will wear personal protective gear such as improved body armor. Sleeves should be down and collars up.

Eye protection all personnel on the range.

Helmet and flak jacket required when firing.

Data Collection Information and Recommended Stand-off Distances

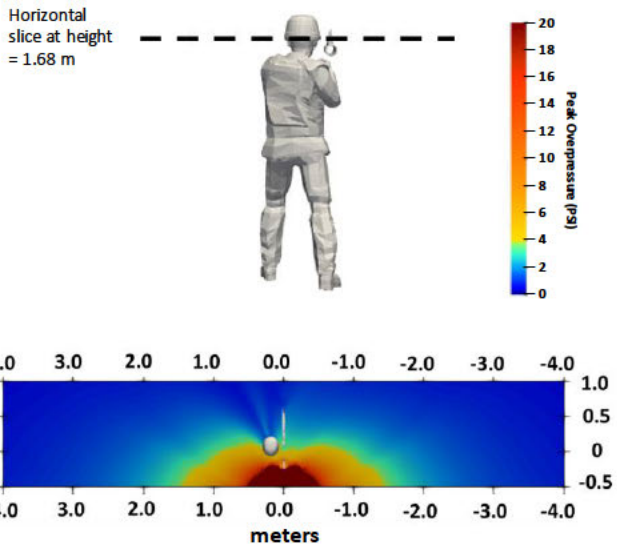
Weapons System: M72 LAW - Standing
Round Type: 66mm HEAT
Data Collection: 1 shot
BOP Sensor: 5.2 ft above ground

Approx. 10 ft

Minimum Stand-off Distance:
Based on collected data, minimum distance for observers and non-essential personnel to minimize exposure to 4psi:

10 ft or approximately 2 people 2-arms length

Blast Overpressure Measurement Data



72

. 50 Caliber Weapons

M107 Sniper Rifle

M2A1 Machine Gun

MK 15 MOD 1

GAU-21 Machine Gun

M107 Sniper Rifle

PRONE

DoD Personal Protective Equipment Guidance

Hearing protection 180 ft to the side of the weapon, and 39 ft to the rear.

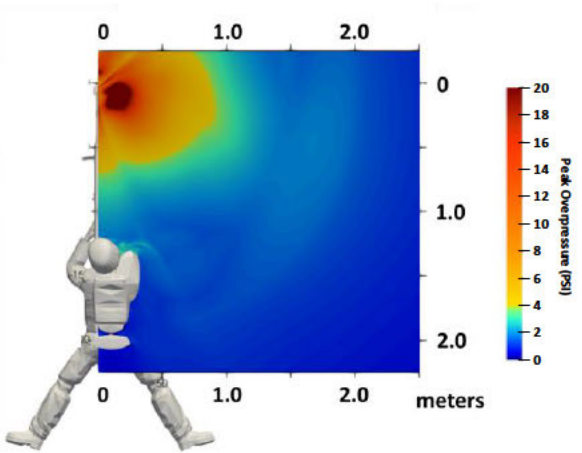
Eye protection for those on the range.

Data Collection Information and Recommended Stand-off Distances

Weapons System: .50 cal blow-back operated semi-automatic sniper rifle with dual chamber detachable muzzle brake
Ammunition: DODIC: A557
Round Type: .50 BMG – M33 Ball with Propellant: WC 860
Data Collection: 10 shots
BOP Sensor: 0.3 ft above ground

Minimum Stand-off Distance:
Based on collected data, minimum distance for observers and non-essential personnel to minimize exposure to 4psi:
7 ft or approximately 2-arms length

Blast Overpressure Measurement Data



74

M2A1 Machine Gun

STANDING

DoD Personal Protective Equipment Guidance

Hearing protection single hearing protection will be worn by personnel within 390 m of the firing point.

Eye protection all personnel on the range.

Helmet and flak jacket required when firing.

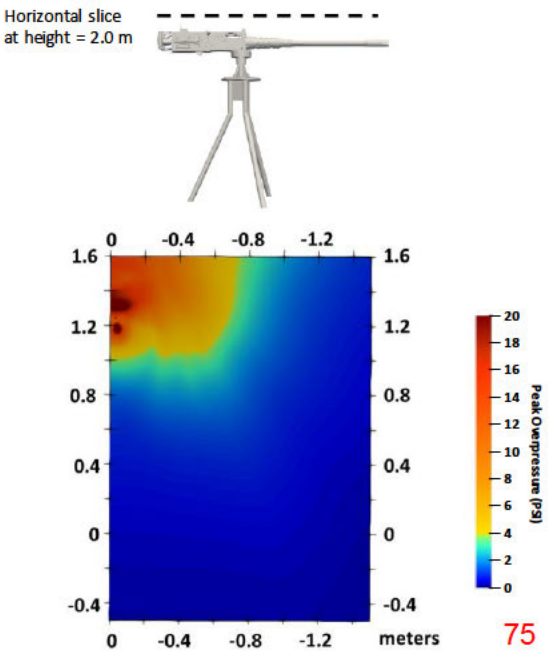
Data Collection Information and Recommended Stand-off Distances

Weapons System: .50 caliber semi-automatic machine gun
Round Type: .50 cal M8 API
Data Collection: 4 firing bursts
BOP Sensor: 5.2 ft above ground

Approx. 7 ft

Minimum Stand-off Distance:
Based on collected data, minimum distance for observers and non-essential personnel to minimize exposure to 4psi: **7 ft or approximately 2-arms length**

Blast Overpressure Measurement Data



75

MK 15 MOD 1

PRONE

DoD Personal Protective Equipment Guidance

Hearing protection single hearing protection will be worn by personnel within 390 m of the firing point.

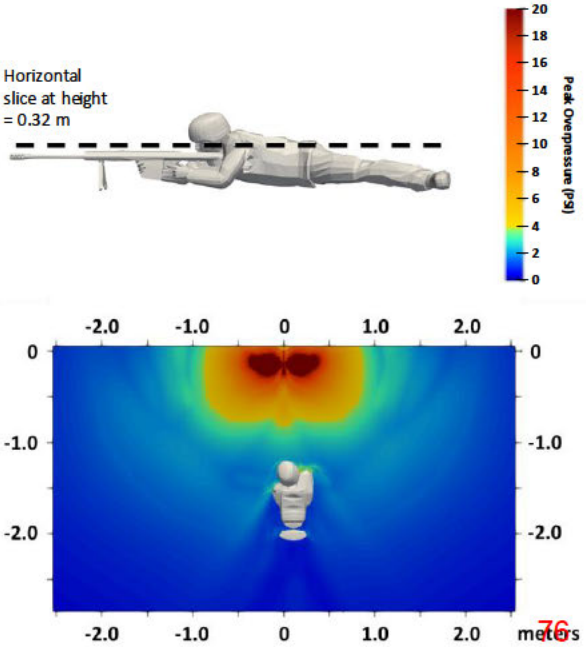
Eye protection all personnel on the range.

Data Collection Information and Recommended Stand-off Distances

Weapons System: .50 cal bolt action sniper rifle
Round Type: .50 cal M33 Ball
Data Collection: 8 shots
BOP Sensor: 4" above ground

Minimum Stand-off Distance:
Based on collected data, Recommended minimum distance for observers and non-essential personnel to minimize exposure to 4psi: **7 ft or approximately 2-arms length**

Blast Overpressure Measurement Data



GAU-21 Machine Gun

DoD Personal Protective Equipment Guidance

Hearing protection single hearing protection will be worn by personnel within 390 m of the firing point.

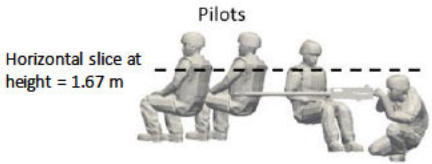
Eye protection all personnel on the range.

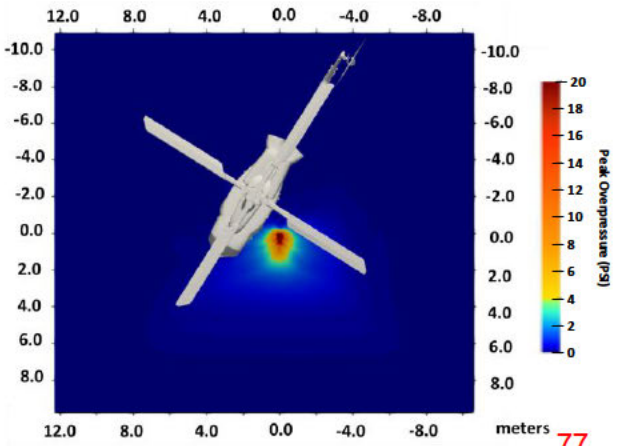
Data Collection Information and Recommended Stand-off Distances

Weapons System: .50 caliber automatic machine gun
Round Type: .50 BMG M33 Ball w/ WC860 Propellant
Data Collection: 8 firing bursts
BOP Sensor: 3.3ft above ground

Minimum Stand-off Distance (Ground):
Based on collected data, minimum distance for observers and non-essential personnel to minimize exposure to 4psi: **Measurements are < 4 pounds per square inch; maximize stand-off distances to the greatest extent possible (i.e., As Low As Reasonably Achievable principle) while balancing training requirements**

Blast Overpressure Measurement Data





77

Indirect Fire System – Howitzers

M109 A6/A7 155MM Paladin Howitzer

M119A1-A3 105MM Howitzer

M777A2 155MM Howitzer

M109 A6/A7 155MM Paladin Howitzer

DoD Personal Protective Equipment Guidance

Hearing protection will be required within 800m.

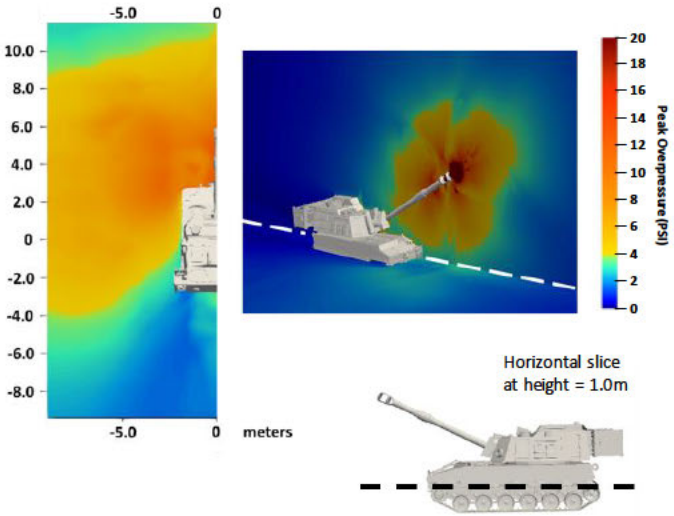
Eye protection all personnel on the range.

Data Collection Information and Recommended Stand-off Distances

Weapons System: M72 LAW Light Antitank Weapon
Round Type: 66mm HEAT
Data Collection: 1 shot
BOP Sensor: 2.3 ft above ground

Minimum Stand-off Distance:
Based on collected data, minimum distance for observers and non-essential personnel to minimize exposure to 4psi:
Measurements are < 4 pounds per square inch; maximize stand-off distances to the greatest extent possible (i.e., As Low As Reasonably Achievable principle) while balancing training requirements

Blast Overpressure Measurement Data



79

M119A1-A3 105MM Howitzer

STANDING

DoD Personal Protective Equipment Guidance

Hearing protection will be required within the hearing hazard zone or if not available, 800m.

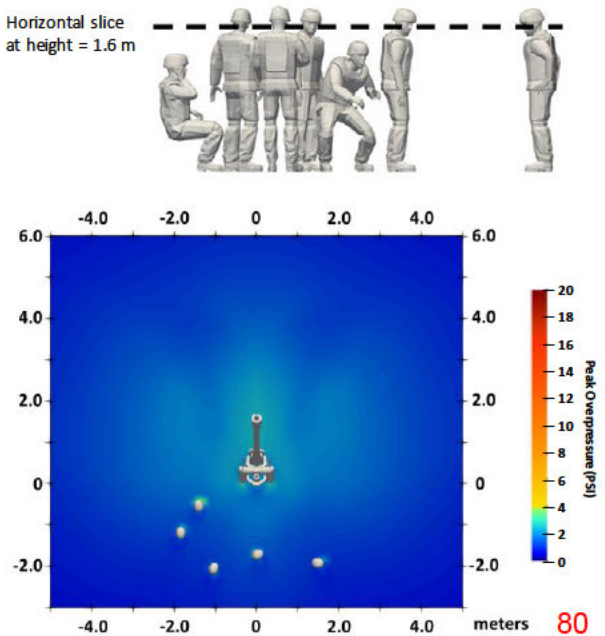
PPE: all personnel immediately engaged in firing will wear body armor and helmet, hearing/eye protection.

Data Collection Information and Recommended Stand-off Distances

Weapon Type: Indirect Fires System Artillery Cannons
Round Type: M1 projectile, 105mm HE M67 propellant system charge-6
Data Collection: 1 shot
BOP Sensor: 5.2 ft above ground

Minimum Stand-off Distance:
Based on collected data, minimum distance for observers and non-essential personnel to minimize exposure to 4psi:
Measurements are < 4 pounds per square inch; maximize stand-off distances to the greatest extent possible (i.e., As Low As Reasonably Achievable principle) while balancing training requirements

Blast Overpressure Measurement Data



80

M777A2 155MM Howitzer

STANDING

DoD Personal Protective Equipment Guidance

Hearing protection will be required within the hearing hazard zone or if not available, 800m.

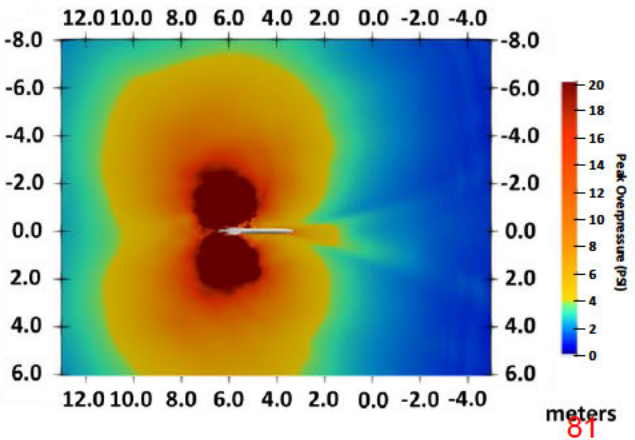
PPE: all personnel immediately engaged in firing will wear body armor and helmet, hearing/eye protection.

Data Collection Information and Recommended Stand-off Distances

Weapon Type: Indirect Fires System Artillery Cannons
Round Type: Round fired w/ 2M231 charges ("2LIMA")
Data Collection: 1 shot
BOP Sensor: 5.2 ft above ground

Minimum Stand-off Distance:
Based on collected data, minimum distance for observers and non-essential personnel to minimize exposure to 4psi:
Measurements are < 4 pounds per square inch; maximize stand-off distances to the greatest extent possible (i.e., As Low As Reasonably Achievable principle) while balancing training requirements

Blast Overpressure Measurement Data



Indirect Fire System – Mortars

M120/121 120 MM Mortar

M252 81 MM Mortar

M224 60 MM Mortar

M224 60 MM Mortar

KNEELING

DoD Personal Protective Equipment Guidance

Hearing protection single hearing protection will be required within 200m.

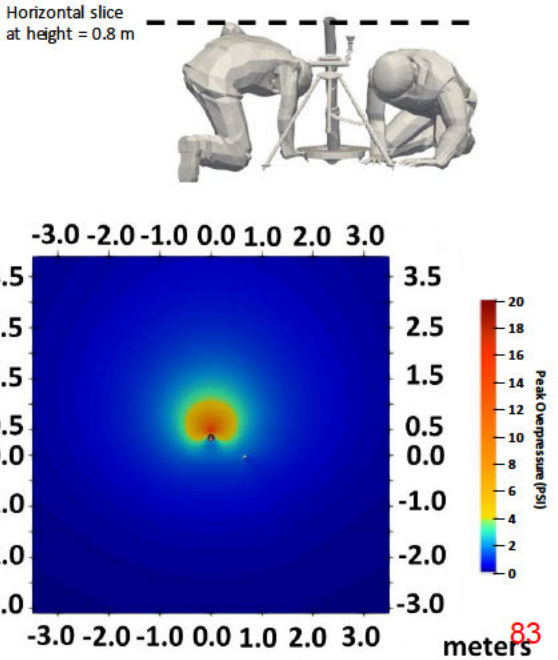
PPE: All personnel who take part in mortar firing will wear a minimum of IBA and helmet (PPE Level 1).

Data Collection Information and Recommended Stand-off Distances

Charge Type: M224 60 MM Mortar
Round Type: M1061 (B29) HE mortar cartridge, 2 propelling charges
Round fired with Charge 2
Data Collection: 1 shot
BOP Sensor: 3.2 ft above ground

Minimum Stand-off Distance:
Based on collected data, minimum distance for observers and non-essential personnel to minimize exposure to 4psi: **3 ft or approximately 1 arm length**

Blast Overpressure Measurement Data



M252 81 MM Mortar

KNEELING

DoD Personal Protective Equipment Guidance

Hearing protection hearing protection will be required within 200m.

PPE: All personnel who take part in mortar firing will wear a minimum of IBA and helmet (PPE Level 1).

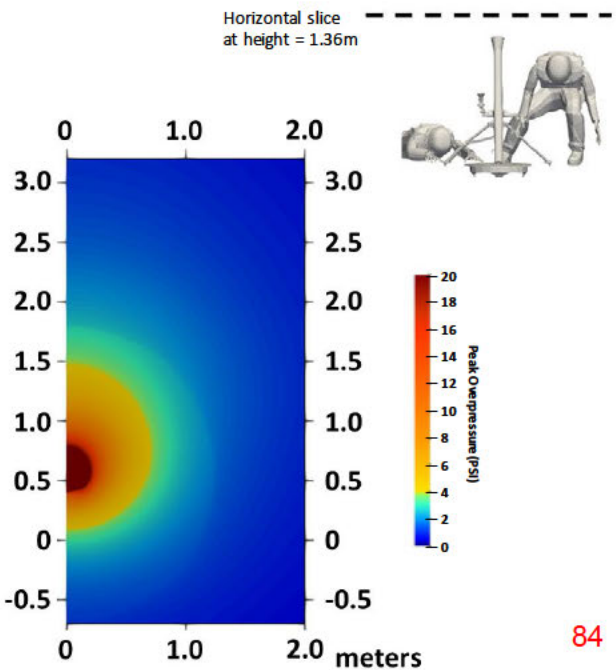
Data Collection Information and Recommended Stand-off Distances

Charge Type: M252 81 MM Mortar
Round Type: M889A2 HE mortar cartridge, M223 propelling charge
Round fired with Charge 2
Data Collection: 1 shot
BOP Sensor: 5.2 ft above ground

Approx. 7 ft

Minimum Stand-off Distance:
Based on collected data, minimum distance for observers and non-essential personnel to minimize exposure to 4psi:
7 ft or approximately 2-arms length

Blast Overpressure Measurement Data



84

M120/121 120 MM Mortar

KNEELING

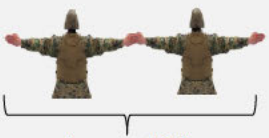
DoD Personal Protective Equipment Guidance

Hearing protection will be required within the hearing hazard zone or if not available, 200m.

PPE: All personnel who take part in mortar firing will wear a minimum of IBA and helmet (PPE Level 1).

Data Collection Information and Recommended Stand-off Distances

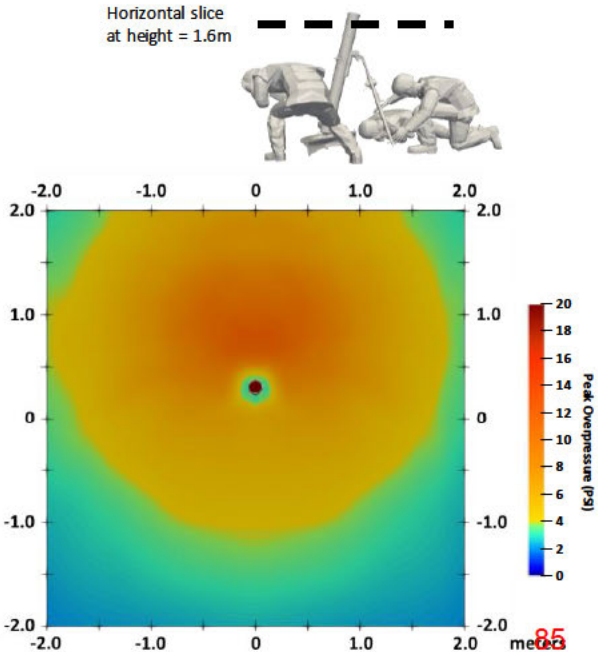
Charge Type: M120/121 120 MM Mortar
Round Type: M933 HE mortar cartridge, M230 propelling charge
Round fired with Charge 3
Data Collection: 1 shot
BOP Sensor: 5.2 ft above ground



Approx. 10 ft

Minimum Stand-off Distance:
Based on collected data, minimum distance for observers and non-essential personnel to minimize exposure to 4psi:
13 ft or slightly more than 2 people 2-arms length

Blast Overpressure Measurement Data



Explosive Breachers

Breacher Door

Breacher Wall

Exterior Beaching: Water Door Charge 0.11 lb N.E.W.

DoD Personal Protective Equipment Guidance

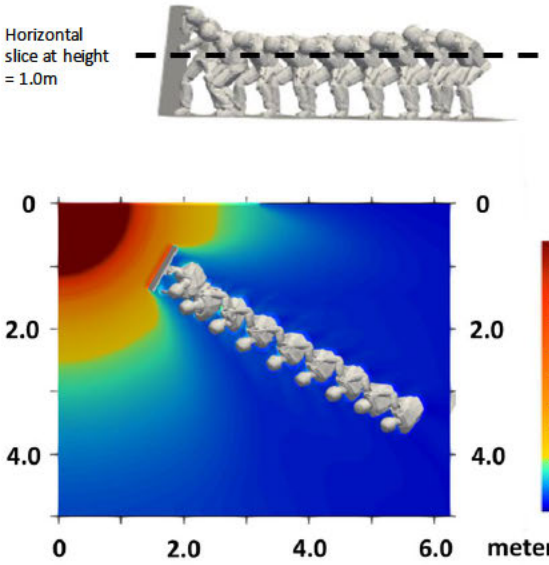
PPE: IBA, helmet, and hearing and eye protection will be worn by personnel within the SDZ but outside the missile-proof shelter.

Data Collection Information and Recommended Stand-off Distances

Charge Type: Explosive Breaching
Charge Type: Door water charge w/ NEW: 0.11lbs
Data Collection: 1 blast
BOP Sensor: 5.24 ft above ground

Minimum Stand-off Distance:
Based on collected data, Recommended minimum distance for observers and non-essential personnel to minimize exposure to 4psi: **13 ft or slightly more than 2 people 2-arms length**

Blast Overpressure Measurement Data



87

Methods and Acknowledgements

Field Data Collection

Funding Source: OASD Health Affairs/USUHS
Study Title: CONQUER; PI: CDR Josh L. Duckworth, MD
Award Numbers: HU0001-18-2-0006, HU0001-19-2-0049

Measurement & Recording Equipment

- PCB pencil gauges (Model 137B23B)
- Microphones (G.R.A.S.47BX-S7¼"CCP)
- BlackBox Biometrics (B3) Gen 7 Blast Gauge System
- Hi-Techniques Ruggedized Echelon Data Acquisition System (DAQ)
- Video: Sony DSC-RXOM2 Mini Cameras & CCB-WD1 Control Boxes; GOPRO MAX 360 Camera

Data Processing, Reporting & Visualization

- Validated high-fidelity simulations based upon data from both scientific instruments and blast gauges
- Second-Order Hydrodynamic Automatic Mesh Refinement Code (SHAMRC) simulations provided voxel-based maximum peak overpressure estimates to support blast overpressure contour visualization
- Two-dimensional slices of environmental overpressure, based upon high fidelity simulation data, provide visual estimates of maximum peak environmental overpressure.
- Three-dimensional contour plots, also based upon high fidelity simulation, provide visual estimates of maximum peak surface pressure on objects and service members.
- B3 Blast Gauge data as captured on engineering stake-mounted gauges were processed using Stata 17 (StataCorp, College Station, TX) for graphic display.

Research Team Members

Neurotactical Research Team (NTRT)

- CDR Josh L. Duckworth, MD
- CDR USN(ret) Todd Massow
- SOCS USN(ret) Wallace Graves, III
- MSGT USA(ret) James Reid
- MSGT USA(ret) Josh Whitty
- SO1 USN(sep) Cyrus Dunbar
- Fabio Leonessa, MD
- Richard A. Bauman, PhD
- Suthee Wiri, PhD
- Eric B. Schneider, PhD
- Joseph K. Canner, MHS
- Maria Voelkel
- Julissa Reyes

BOS Team members & Other Researchers

- Raj K. Gupta
- Steven Jones
- Ryland Gaskins
- Andrew Dominijanni
- Jesse Moore
- Tony Petro
- Elizabeth Brokaw
- Lisa Lalis
- Rachel W. Spencer
- Olivia Webster
- CAPT Scott Cota
- Mr. Michael Evans
- Mr. John Lenox
- Jasmyne Longwell
- Craig Watry
- Jakob Brisby
- Chris Ong
- George Medan
- Ryan Schindler
- Troy Dent
- Henry Happ

Other

The Uniformed Services University of the Health Sciences
Yale University, New Haven, CT
Applied Research Associates (ARA0 Albuquerque, NM
The Henry M. Jackson Foundation for the Advancement of Military Medicine
Military Leadership and Service Members

- United States Army
- United States Army National Guard (Arkansas)
- United States Navy
- United States Marine Corps
- United States Special Operations Command

s 22

From:
To:
Subject: RE: DoD BOP pam [SEC=OFFICIAL]
Date: Friday, 20 September 2024 12:48:17 PM
Attachments: image001.png
image002.png
image003.png
image004.png

OFFICIAL

s 22

Many thanks. Interesting read.

s 47C

Please consider – happy to discuss.

Regards,

s 22

Acting Senior Director National Operations
Regulatory Operations Group
Comcare
s 22

GPO Box 1993, Canberra, ACT 2601 I www.comcare.gov.au

From: s 22
Sent: Friday, September 20, 2024 9:40 AM

To: s 22
Subject: DoD BOP pam [SEC=OFFICIAL]

OFFICIAL

As discussed, this is publicly accessible on the internet.

s 22

Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C'th)
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

From: s 22
To:
Subject: RE: DoD BOP pam [SEC=OFFICIAL]
Date: Tuesday, 24 September 2024 1:03:00 PM
Attachments: image001.png
image007.png
image010.png
image011.png
image002.png
image003.png

OFFICIAL

Thanks s 22

I can confirm that my initial conversation with Defence was regarding singular and cumulative effects, which is central to the reason for US research. Current work recording overpressure for implementation when exposure limits are set. Works in with next para (interim controls).

Current training and supervision etc, combined with current practice is believed to be under the 4PSI, pressure monitors will advise if this is different (monitoring). Health monitoring is up to date as mentioned, and if symptoms are displayed, are implemented.

Large scale risk assessment due in November may reveal more, s 47E(d)

I will engage with Defence again in November and seek further clarity.

Regards,

s 22

Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C'th)
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

From: s 22
Sent: Friday, September 20, 2024 12:48 PM

To: s 22
Subject: RE: DoD BOP pam [SEC=OFFICIAL]

OFFICIAL

s 22

Many thanks. Interesting read.

s 47C

Please consider – happy to discuss.

Regards,

s 22

Acting Senior Director National Operations
Regulatory Operations Group
Comcare
s 22

GPO Box 1993, Canberra, ACT 2601 I www.comcare.gov.au

From: s 22
Sent: Friday, September 20, 2024 9:40 AM
To: s 22
Subject: DoD BOP pam [SEC=OFFICIAL]

OFFICIAL

As discussed, this is publicly accessible on the internet.

s 22

Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C'th)
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

From: s 22
To:
Cc:
Subject: FW: ADF brain trauma study [SEC=OFFICIAL]
Date: Wednesday, 6 November 2024 2:03:05 PM
Attachments: Diggers" trauma study a disgrace.pdf
image001.png
image002.jpg

OFFICIAL

s 22

Please add the attached to your IA.

s 47C

Happy to discuss.

Regards,

s 22

Director Regional Operations - ACT
Regulatory Operations Group
Comcare
s 22

GPO Box 1993, Canberra, ACT 2601 | www.comcare.gov.au

From: s 22
Sent: Wednesday, 6 November 2024 9:22 AM
To: s 22

Cc: s 22
Subject: FW: ADF brain trauma study [SEC=OFFICIAL]

OFFICIAL

FYI s 22

s 22 – onenote has been updated this this article and a brief from s 22 on ACT activity - Defence: Brain trauma

Regards
s 22

Executive Officer for the General Manager
Regulatory Operations Group
Comcare
s 22

A: GPO Box 9905, Canberra, ACT 2601
1300 366 979 | www.comcare.gov.au

I work a nine-day fortnight, and I am out of the office every second Wednesday (30 October; 13,27 November & 11 December 2024).

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

Comcare acknowledges the Traditional Owners and Custodians of country throughout Australia and acknowledges their continuing connection to land, sea and community. We pay our respects to the people, the cultures and the elders past, present and emerging.

From: s 22
Sent: Monday, 4 November 2024 10:18 AM
To: s 22
Cc: s 22

Media <Media@comcare.gov.au>
Subject: ADF brain trauma study [SEC=OFFICIAL]

OFFICIAL

Hi s 22

The attached story ran in the Hun this morning – vets critical of a brain trauma study on soldiers' exposure to blasts that essentially produced no findings.

Cheers,

s 22

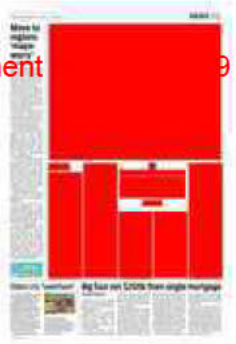
s 22 | Media Manager
Marketing & Communications
s 22

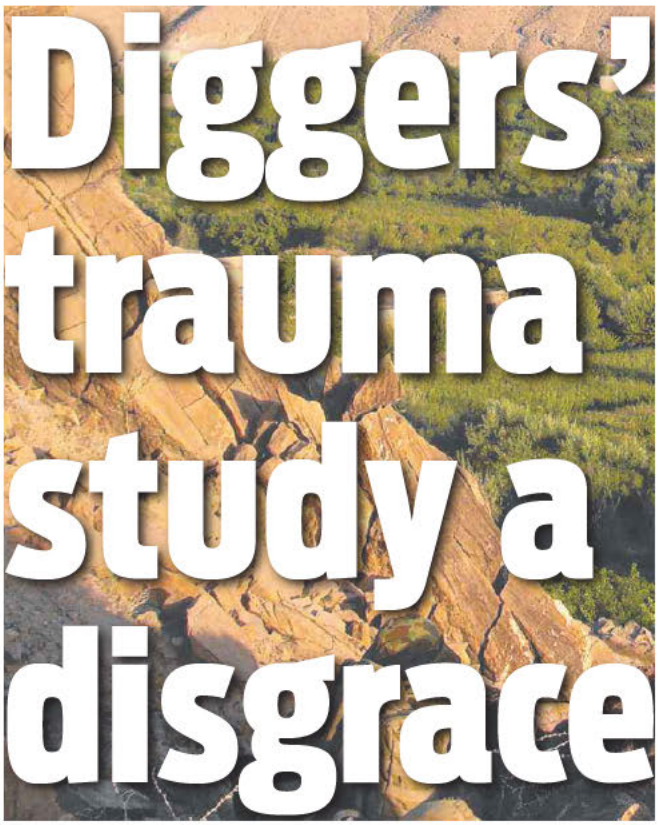
media@comcare.gov.au

Diggers' trauma study a disgrace

By Wendy Carlisle

Herald Sun
Monday 4th November 2024
715 words
Page 9 | Section: NEWS
660cm on the page





Army veteran slams research with no health benefits, findings

Wendy Carlisle

EXCLUSIVE

Australia's only taxpayer-funded study into brain trauma in soldiers who served in Iraq and Afghanistan has been slammed for failing to produce any health benefits or findings.

The $577,000 project – to examine brain injuries caused by exposure to repeated blasts in training and battle – was led by Dr Paul McCrory, a disgraced former concussions adviser to the AFL.

But documents seen by the Herald Sun confirm no results came from the work on brain trauma, which has been dubbed the "signature injury" for a generation of soldiers engaged in the global war on terrorism.

The federal Health Department has said it is "not in the public interest", nor would it "inform debate on a matter of public importance", to explain why.

Whistleblower Lieutenant Colonel Paul Scanlan (retired) – who served in Afghanistan, Iraq and East Timor – described the department's response as "deeply troubling", adding it was a "disgrace that nothing was achieved" and demanding a "transparent, independent investigation".

And after inquiries from the Herald Sun, Health Minister Mark Butler said he was seeking a report on the grant.

Dr McCrory was awarded the research grant by the Turnbull government in 2018.

But in August 2024, when highly decorated Special Forces officer Mr Scanlan used Freedom of Information laws to seek access to reports on Dr McCrory's research, he only received a heavily redacted document with no detail.

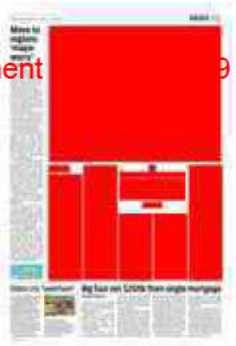
In an email to Mr Scanlan, Melbourne's Florey Institute, where Dr McCrory was based, said: "No publications have directly arisen from the work supported by the fellowship.

"We thank you for your interest in traumatic brain injury in veterans, but as you will appreciate, definitive outcomes from research of this nature can take many years. Unfortunately the Florey does not currently have any ongoing research projects into mTBI (mild traumatic brain injury)."

The Florey said it had returned "unspent" grant money, but did not say how much, with Mr Scanlan calling for the entire investment to be redirected "with interest" to the Department of Veterans' Affairs so it can start Australia's first dedicated research program for soldier brain health.

"This was research funded by public money, intended to address issues affecting our veterans – individuals who have served and sacrificed for our country," he said.

Soldiers using semiautomatic sniper rifles and rocket launchers, navy gunners and clearance divers, combat engineers, air defence guards and explosive ordnance disposal personnel are all repeatedly



exposed to high-pressure blasts in combat and training.

Mr Scanlan believes many soldiers have been misdiagnosed with PTSD when they really have brain injuries.

In September the Royal Commission into Defence and Veteran Suicide found brain trauma was "associated with a heightened risk of death, including by suicide" and also with CTE, a type of dementia found in contact sports and victims of domestic violence.

Mr Scanlan also said the secrecy around Dr McCrory's role "raises questions about what is being hidden".

In 2022 the prestigious British Journal of Sports Medicine retracted several of Dr McCrory's articles on concussion in sport, saying their "trust" in his work had been broken after they verified allegations against him of plagiarism and misquoting.

The international scandal resulted in the AFL distancing itself from the neurologist, saying the plagiarism was an "embarrassing blemish".

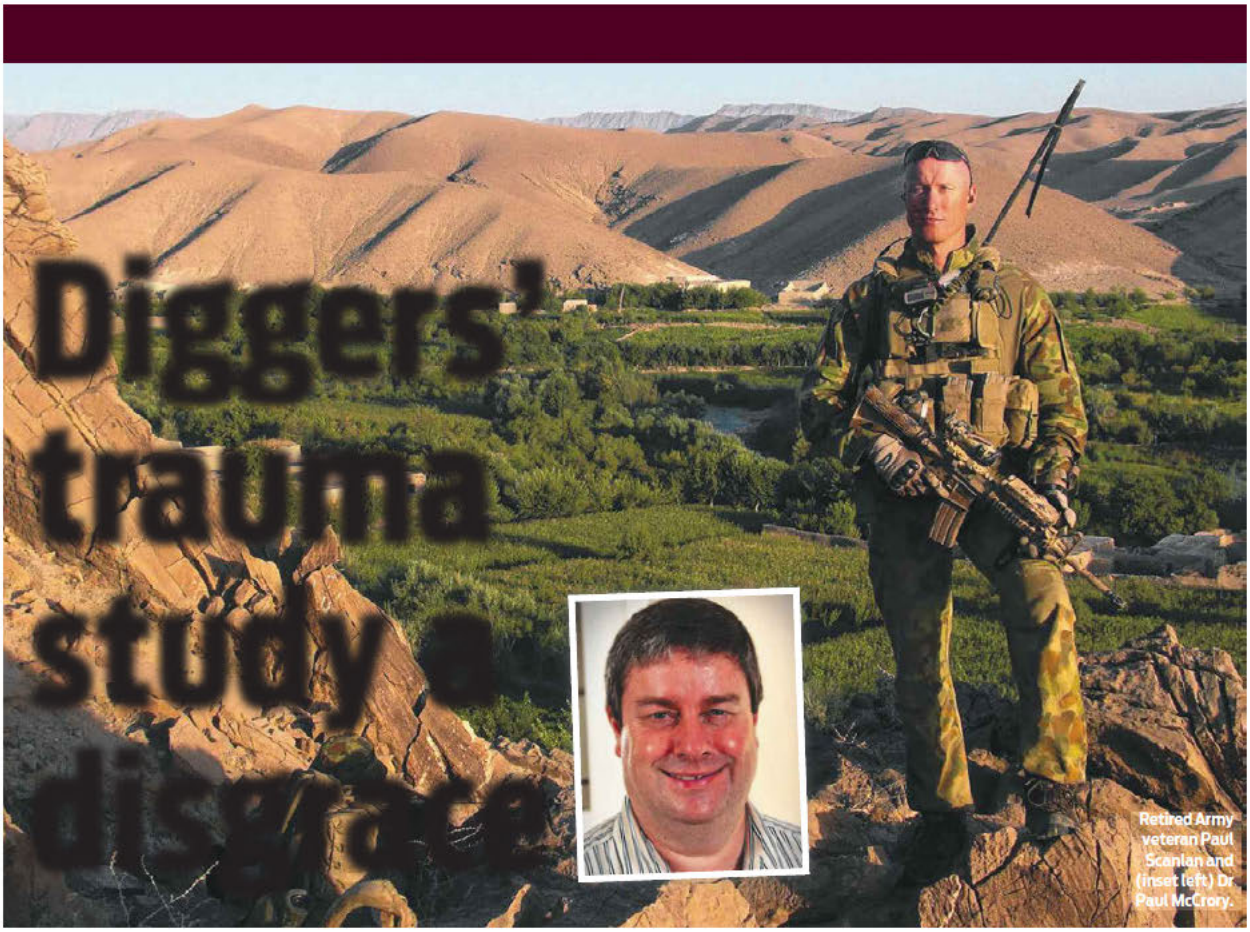
Dr McCrory, who has received at least $2m in federal grants over the past decade, left the Florey Institute in 2022, but the body has declined to say why.

Mr Scanlan played a key role in the royal commission's recommendation that the Defence Department monitor exposure to "high-pressure blasts" and record brain injuries in soldiers. But while he welcomed the commission's recommendations, he said they did not do far enough.

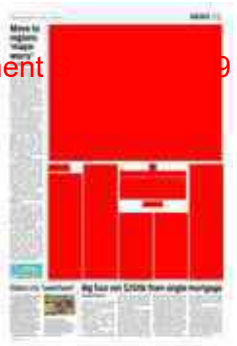
"Why aren't veterans a research priority now?" he asked. "The UK already has a structured plan to tackle these critical issues, so where is Australia's plan?"

Veterans' Affairs Minister Matt Keogh has said the government will respond to the commission by the end of the year.

"We've let Diggers down for too long, we can't fail them again," he said.



Retired Army veteran Paul Scanlan and (inset left) Dr Paul McCrory.



> This was research funded by public money, intended to address issues affecting our veterans

Paul Scanlan

s 22

From:
To:
Subject: 2024-11-29 DoD mTBI ongoing research and risk assessment [SEC=OFFICIAL]
Date: Friday, 29 November 2024 11:20:00 AM
Attachments: image001.png
image004.png
image002.png
image005.png

OFFICIAL

Morning s 22

An update on Defence's mild Traumatic Brain Injuries (mTBI) and blast overpressure program.

s 47E(d)

Regards,

s 22

Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C'th)
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

s 22

From:
To:
Subject: RE: 2024-11-29 DoD mTBI ongoing research and risk assessment [SEC=OFFICIAL]
Date: Monday, 2 December 2024 10:59:24 AM
Attachments: image001.png
image002.png
image003.png
image004.png

OFFICIAL

s 22

All good.

This should form a component of our inquiries next year, once the US Defense report is completed.

Regards,

s 22

Director Regional Operations - ACT
Regulatory Operations Group
Comcare
s 22

GPO Box 1993, Canberra, ACT 2601 | www.comcare.gov.au

From: s 22
Sent: Friday, 29 November 2024 11:21 AM
To: s 22
Subject: 2024-11-29 DoD mTBI ongoing research and risk assessment [SEC=OFFICIAL]

OFFICIAL

Morning s 22

An update on Defence's mild Traumatic Brain Injuries (mTBI) and blast overpressure program.

s 47E(d)

s 47E(d)

Regards,

s 22

Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C'th)
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

s 22

From:
To:
Cc:
Subject: FW: ABC/ADF blast overpressure injuries [SEC=OFFICIAL]
Date: Thursday, 13 February 2025 12:58:52 PM
Attachments: image001.png
image003.png
image005.jpg
image006.png
image007.png

OFFICIAL

s 22

s 47C

Regards,

s22

Director Regional Operations - ACT
Regulatory Operations Group
Comcare
s22

GPO Box 1993, Canberra, ACT 2601 | www.comcare.gov.au

From: s22
Sent: Wednesday, 12 February 2025 1:21 PM
To: s 47E(d)

Subject: ABC/ADF blast overpressure injuries [SEC=OFFICIAL]

OFFICIAL

Hi All

Is anyone aware of any inspections related to the below media? If not can you also provide a nil response.

Regards

s 22

Senior Director National Operations

Regulatory Operations Group | Comcare

s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

From: s 22
Sent: Wednesday, 12 February 2025 8:27 AM
To: s 22
Cc: s 22
Subject: FW: ABC/ADF blast overpressure injuries [SEC=OFFICIAL]

OFFICIAL

Hi both

Please be aware of the attached article re blast injuries at Defence.

I recall some previous compliance activity in relation to blast injuries. Can I get an update on that work and can you advise whether this matter requires a dedicated response?

s 22

General Manager

Regulatory Operations Group
Comcare
s 22
A: GPO Box 9905, Canberra, ACT 2601
1300 366 979 | www.comcare.gov.au

From: s 22
Sent: Wednesday, 12 February 2025 7:28 AM
To: s 22
Cc: s 22

s 47E(d) Media <Media@comcare.gov.au>
Subject: ABC/ADF blast overpressure injuries [SEC=OFFICIAL]

OFFICIAL

H s 22

Further to earlier stories, the ABC is running this piece on brain injuries from blast overpressure – this time focussing on injuries from the use of high-powered sniper rifles:

First his nose started bleeding, then he didn't know who he was. How sniper weapons can cause irreversible brain injuries - ABC News

s 22

s 22 **| Media Manager**
Marketing & Communications
s 22
media@comcare.gov.au

From: s 22
To:
Subject: FW: ABC/ADF blast overpressure injuries [SEC=OFFICIAL:Sensitive]
Date: Friday, 14 February 2025 10:29:49 AM

OFFICIAL: Sensitive

Not for file, but well done!

Regards,

s 22

Director Regional Operations - ACT
Regulatory Operations Group
Comcare
s 22

GPO Box 1993, Canberra, ACT 2601 | www.comcare.gov.au

From: s 22
Sent: Friday, 14 February 2025 9:24 AM
To: s 22
Cc: s 22

Subject: RE: ABC/ADF blast overpressure injuries [SEC=OFFICIAL:Sensitive]

OFFICIAL: Sensitive

Thanks s 22

Appreciate the update.

s 22 – please include in my estimates pack. Happy with s 22 summary of the issue to be used as dot points.

s 22

General Manager
Regulatory Operations Group
Comcare
s 22
A: GPO Box 9905, Canberra, ACT 2601
1300 366 979 | www.comcare.gov.au

From: s 22
Sent: Thursday, 13 February 2025 12:54 PM
To: s 22
Cc: s 22

s 22

Subject: RE: ABC/ADF blast overpressure injuries [SEC=OFFICIAL:Sensitive]

OFFICIAL: Sensitive

s 22

BLUF

As previously advised, we are likely to see more reports of historic blast exposure resulting in injury to Defence workers. It is not reasonable to conduct separate inquiries into each of these, though this would depend on the circumstances of each (e.g. likely recklessness/negligence). Defence is participating in a US Defense study to determine 'safe' levels of blast exposure. Pending receipt of the report, Defence conducted a review of likely sources of blast injury to ensure it is managing the risk.s 47C

Summary

The report highlights historical blast injuries potentially arising from the use of sniper rifles during operations in Iraq. The soldiers involved incurred minor injuries but appear not to have understood these as potential indicators of more serious injuries over time. It is unclear whether the soldiers reported these matters and/or what actions they took to mitigate the risk – the article indicates no action was taken.

This report is one of several media reports relating to blast injury. I assess many more will follow.

Comcare's focus should be on current practices and controls to ensure safety of workers.

Comcare is aware of recent reporting in the media regarding the risk of blast exposure to Defence personnel.

Comcare engaged with Defence to confirm it was aware of the potential risk and gain an understanding of its response.

Comcare notes Defence is participating in a substantial United States Defense Department trial, which Defence will use to inform its approach. Comcare also notes Defence reviewed:

- The potential risk of blast exposure to its personnel from existing systems to minimise the potential for harm resulting from blast exposure.
- Internal medical advice to include assessment and treatment of blast injuries.

Comcare notes completion of the study will provide Defence with the necessary understanding

to take sound measures in relevant areas.

Comcare is satisfied that this presents a reasonably practicable approach to this extremely complex and challenging risk to health and safety.

Regards,

s 22

Director Regional Operations - ACT
Regulatory Operations Group
Comcare
s 22

GPO Box 1993, Canberra, ACT 2601 | www.comcare.gov.au

From: s 22 u>
Sent: Wednesday, 12 February 2025 8:27 AM
To: s 22
Cc: s 22
Subject: FW: ABC/ADF blast overpressure injuries [SEC=OFFICIAL]

OFFICIAL

Hi both

Please be aware of the attached article re blast injuries at Defence.

I recall some previous compliance activity in relation to blast injuries. Can I get an update on that work and can you advise whether this matter requires a dedicated response?

s 22

General Manager
Regulatory Operations Group
Comcare
s 22
A: GPO Box 9905, Canberra, ACT 2601
1300 366 979 | www.comcare.gov.au

From: s 22
Sent: Wednesday, 12 February 2025 7:28 AM
To: s 22
Cc: s 22

s 47E(d) ; Media <Media@comcare.gov.au>
Subject: ABC/ADF blast overpressure injuries [SEC=OFFICIAL]

OFFICIAL

H s 22

Further to earlier stories, the ABC is running this piece on brain injuries from blast overpressure – this time focussing on injuries from the use of high-powered sniper rifles:

First his nose started bleeding, then he didn't know who he was. How sniper weapons can cause irreversible brain injuries - ABC News

s 22

s 22 **| Media Manager**
Marketing & Communications
s 22

media@comcare.gov.au

Sensitive: This document may contain sensitive information as defined under Section 6 of the Privacy Act.
Sensitive: This document may contain sensitive information as defined under Section 6 of the Privacy Act.

From: s 22
To:
Cc:
Subject: RE: ABC/ADF blast overpressure injuries [SEC=OFFICIAL]
Date: Friday, 14 February 2025 4:32:00 PM
Attachments: image001.png
image008.png
image011.png
image012.png
image013.jpg
image003.png
image005.png

OFFICIAL

s 22 and s 22 ,

I contacted Lt.Col s 47F in relation to the news article. Lt.Col s 47F offered that the steering committee was due to convene again shortly and was inviting the Department of Veteran's Affairs to discuss the sniper rifle article and effects.

s 47E(d)

s 47C

Regards,

s 22

Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C'th)
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

From: s 22
Sent: Thursday, 13 February 2025 12:59
To: s 22
Cc: s 22
Subject: FW: ABC/ADF blast overpressure injuries [SEC=OFFICIAL]

OFFICIAL

s 22

s 47C

Regards,

s 22

Director Regional Operations - ACT
Regulatory Operations Group
Comcare
s 22

s 22

GPO Box 1993, Canberra, ACT 2601 | www.comcare.gov.au

From: s 22
Sent: Wednesday, 12 February 2025 1:21 PM
To: s 47E(d)

Subject: ABC/ADF blast overpressure injuries [SEC=OFFICIAL]

OFFICIAL

Hi All

Is anyone aware of any inspections related to the below media? If not can you also provide a nil response.

Regards

s 22

Senior Director National Operations

Regulatory Operations Group | Comcare
P: s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

Comcare acknowledges the Traditional Owners and Custodians of country throughout Australia and acknowledges
their continuing connection to land, sea and community. We pay our respects to the people, the cultures and the elders past, present and emerging.

From: s 22
Sent: Wednesday, 12 February 2025 8:27 AM
To: s 22
Cc: s 22

Subject: FW: ABC/ADF blast overpressure injuries [SEC=OFFICIAL]

OFFICIAL

Hi both

Please be aware of the attached article re blast injuries at Defence.

I recall some previous compliance activity in relation to blast injuries. Can I get an update on that work and can you advise whether this matter requires a dedicated response?

s 22

General Manager
Regulatory Operations Group
Comcare
s 22
A: GPO Box 9905, Canberra, ACT 2601
1300 366 979 | www.comcare.gov.au

From: s 22
Sent: Wednesday, 12 February 2025 7:28 AM
To: s 22
Cc: s 22

s 47E(d) Media <Media@comcare.gov.au>
Subject: ABC/ADF blast overpressure injuries [SEC=OFFICIAL]

OFFICIAL

Hi s 22

Further to earlier stories, the ABC is running this piece on brain injuries from blast overpressure – this time focussing on injuries from the use of high-powered sniper rifles:

First his nose started bleeding, then he didn't know who he was. How sniper weapons can cause irreversible brain injuries - ABC News

s 22

s 22 **| Media Manager**
Marketing & Communications
s 22

media@comcare.gov.au

s 22

From:
To:
Cc:
Subject: RE: ABC/ADF blast overpressure injuries [SEC=OFFICIAL]
Date: Wednesday, 19 February 2025 11:33:42 AM
Attachments: image001.png
image002.png
image003.png
image004.png
image005.png
image006.png
image007.jpg

OFFICIAL

s 22

Many thanks.

Coordinate a meeting with DoD per your proposal. s 47C

.

Regards,

s 22

Director Regional Operations - ACT
Regulatory Operations Group
Comcare
s 22

GPO Box 1993, Canberra, ACT 2601 | www.comcare.gov.au

From: s 22
Sent: Friday, 14 February 2025 4:32 PM
To: s 22
Cc: s 22
Subject: RE: ABC/ADF blast overpressure injuries [SEC=OFFICIAL]

OFFICIAL

s 22 and s 22

s 47E(d)

s 47C

Regards,

s 22

Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C'th)
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

From: s 22
Sent: Thursday, 13 February 2025 12:59
To: s 22
Cc: s 22
Subject: FW: ABC/ADF blast overpressure injuries [SEC=OFFICIAL]

OFFICIAL

s 22

s 47C

Regards,

s 22

Director Regional Operations - ACT
Regulatory Operations Group
Comcare
s 22

GPO Box 1993, Canberra, ACT 2601 | www.comcare.gov.au

From: s 22
Sent: Wednesday, 12 February 2025 1:21 PM
To: s 47E(d)

Subject: ABC/ADF blast overpressure injuries [SEC=OFFICIAL]

OFFICIAL

Hi All

Is anyone aware of any inspections related to the below media? If not can you also provide a nil response.

Regards

s 22

Senior Director National Operations

Regulatory Operations Group | Comcare
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

Comcare acknowledges the Traditional Owners and Custodians of country throughout Australia and acknowledges
their continuing connection to land, sea and community. We pay our respects to the people, the cultures and the elders past, present and emerging.

From: s 22
Sent: Wednesday, 12 February 2025 8:27 AM
To: s 22
Cc: s 22
Subject: FW: ABC/ADF blast overpressure injuries [SEC=OFFICIAL]

OFFICIAL

Hi both

Please be aware of the attached article re blast injuries at Defence.

I recall some previous compliance activity in relation to blast injuries. Can I get an update on that work and can you advise whether this matter requires a dedicated response?

s 22

General Manager
Regulatory Operations Group
Comcare
s 22
A: GPO Box 9905, Canberra, ACT 2601
1300 366 979 | www.comcare.gov.au

From: s 22
Sent: Wednesday, 12 February 2025 7:28 AM

To: s 22
Cc: s 22

s 47E(d) Media <Media@comcare.gov.au>
Subject: ABC/ADF blast overpressure injuries [SEC=OFFICIAL]

OFFICIAL

Hi s 22

Further to earlier stories, the ABC is running this piece on brain injuries from blast overpressure – this time focussing on injuries from the use of high-powered sniper rifles:

First his nose started bleeding, then he didn't know who he was. How sniper weapons can cause irreversible brain injuries - ABC News

s 22

s 22 **| Media Manager**
Marketing & Communications
s 22
media@comcare.gov.au

From: Comcare - ROG - ACT Inspectorate
To: Comcare - ROG - ACT Inspectorate
Subject: Inspector Car [SEC=OFFICIAL]

OFFICIAL

Inspector vehicle booked for site meeting at Fyshwick – s 22 and s 22

Microsoft Teams Need help? <https://aka.ms/JoinTeamsMeeting?omkt=en-US>
s 47E(d)

<https://www.comcare.gov.au/__data/assets/image/0020/393410/Comcare_logo_grab3.png>

Privacy and security <https://www.comcare.gov.au/site-information/privacy>

MC0003765 DEFENCE HQJOC

5MAR25 10-1200

HQJOC - FYSHLWICK

s 22 /s 47F

s 22 introduced us as inspectors, displaying inspector ID. Confirmed focus of visit - management of risks during operational planning. s 47F provided an overview of systems and approaches. Each Service applies its safety management arrangements, though HQJOC can set common requirements. HQJOC appoints a lead Service dependant on the mission, and that Service has primary responsibility. s 47F provided a brief on current operations and major exercises, focussing on those that could reasonably expect to see blast injuries/exposure. s 47F explained that in the exercises Australian Service personnel would use non-in-Service weapons systems and/or be exposed to/operate near them. Prior to this, Defence conducts assessments to ensure safety. Assessments include the system,

ammunition, maintenance, and employment. s 47F mentioned part of pre-deployment process is to train people on how to make non-Australian small-arms 'safe'. Defence is increasingly looking to achieve inter-operability and 'inter-changeability' to meet the requirements of the National Defence Strategy and supporting Theatre Campaign Plan. Defence conducts concurrent planning at strategic/operational/tactical levels - with greater fidelity at lower levels. HQJOC has dedicated planning teams for strategic planning. These teams liaise with and support the in-theatre Australian commanders. The teams are multi-disciplinary and consist of the standard NATO planning elements (e.g. logistics, personnel, intelligence, operations, cyber - although in JOC this is a component equivalent to air/land/sea, international engagement, science & technology). s 47F stated that Defence will use other nation's facilities, without applying Australian requirements as this is not reasonably practicable. Instead

Defence seeks to identify any differences and manage these. There is a 'weapons lead' for the support to Ukraine. JOC seeks to set a common approach to managing common hazards where relevant (e.g. heat in middle-east). Defence personnel in Ukraine were qualified in relevant small arms before training others. The Joint force Land Commander (One Star) is responsible for all land operations. Component commander (land/sea/air) report to both JOC and their parent Service (for technical control/command). Commanders set 'critical commander information requirements' to maintain oversight of operations, including detecting incidents or trends that are not anticipated. Reports and returns also detect changes to plans/activities and validate any assumptions made in the planning, triggering reviews s 47F gave an example of an unexpected health event that triggered a review that identified/resolved the cause). JOC monitors reports of incidents, including assessing trends, to drive reviews. s 47F acknowledged issue with 131

potential under-reporting, noting some reports are made after return-to-Australia or during psychological screening. SOC does get reports from non-Australian medical support facilities, but this appears to occur primarily based on funding, rather than for safety reasons. People in-theatre can reach back through their technical chains for assistance/support as necessary. In-theatre the local Australian command element may not be expert in all elements under their command. There is some reliance on inter-national partners to provide a level of supervision (e.g. the US range-control-officer on a US range would provide a degree of over-sight). Structured and programmed visits by technical elements is missing. s 22 thanked s 47F and others. Prior to departing, we were afforded a walk-through of the facility. s 22

10:00hrs 5 MAR 2025. s 22 s 47F s 47F

(10). NATO wpn systems well known, pre-deployment training provided. Acc by medical baseline for nTBI. Oth req to operate weapon systems of partner nations, still some systems to complete assessment. SE Asia also directed. USA also. National Defence Strategy / Theatre Campaign Plan. Meaning not just Aus. Govt, but also partner nations are driving the requirement. An event will trigger planning phase, such as event in foreign country. JOC has two teams, 1 is global, 1 is domestic. They are permanent & have lists of current operations they are responsible for in their areas of responsibility. Tiered system with JOC safety rep embedded. Contains other streams of expertise and all consulted across, up, and down through tiers. These include, Legal, EO, Range-Lead, Health, Joint Logistics, public affairs, environment, Intel, review. (Of note, review section has access to historic data and is to provide continuous improvement as part of planning & close identified deficiencies) Science & Tech. (Of note they have carriage of nTBI research & program participation. Each of these is supported by Land / Sea / Air / Cyber / Space / Spec ops. Each of these contains another level of previous such as range-lead, Health etc. Each step down refines the process with more task specific knowledge. Final step is at unit level. Each then feeds back to high level for application to Risk Assessment. For example, Commander may have list of requirements, this will trigger back to JOC & component areas causing re-assessment of RA's & other requirements, flowing up/down chain & across same level. (Of note, ex. provided around trend analysis for current operations) Psych eval conducted post-op as means of reactive assessment, specific nTBI criteria now due to awareness. Other trigger mechanisms such as medical feedback to remove reliance on self-reporting (goes to trend analysis to) potential weakness of other country medical such as USA, requiring cost recovery as a trigger outside internal req. Where possible, planning identifies this & prepares for avenues on lines of reporting by other means. More difficult where more remote, s 47F mentioned providing in location medics with the correct questions. Technical reporting chain exists outside / alongside in location, for example, medic requires item not trained in, or diagnosis is anomalous, raised with tech chain which also triggers inside tiered system of components under JOC, causing re-assessment. Early planning by components can set reporting windows such as 24hourly. (proactive / reactive). This system has had significant reforms & improvements in the last 12 months to exist in current state. s 47F observes this is a result of NDS / TCP directing interoperability which has resulted in need to work out complexities. Meeting Concluded 12:00hrs

JJ

Modified on: 31/07/2024 9:20 AM

FOI Document S 9

Note modified by s 22

2024-07-30 call s 22 to s 47F @ Regulator Relations to identify POC

15:25hrs call s 47F s 22 o discuss media article and Defence actions into blast related brain injuries. asked s 47F f there was a relevant point of contact to discuss. s 47F aware of an occupational hygienist by the name o s 47F s 22 told s 47F an email requesting would follow. s 47F agreed that would be best through Regulator Relations and s 47F would supply the contact details. s 22 told s 47F the process was an IA and would be voluntary, with Comcare offering advice but not using powers. Call ended 15:33hrs

Modified On: 31/07/2024 9:20 AM

View less

137

From:
To: s 47F
Cc: Regulator Relations
Subject: 2024-07-31 Information and Advice activity IA00004300 - blast related brain injuries [SEC=OFFICIAL]
Date: Wednesday, 31 July 2024 8:30:00 AM
Attachments: image001.png
image004.png
image002.png
image005.png

OFFICIAL

Good morning s 47F

I appreciate our chat on the phone yesterday afternoon, it was immensely helpful in identifying a starting point in Defence regarding research into blast related brain injuries.

As we discussed, this email is a formal request for the point of contact currently believed able to discuss the matter further with me. I believe it was s 47F , an Occupational Hygienist, who is working on this matter for Defence at an enterprise level.

Thanks s 47F feel free to call or email to discuss if needed.

Regards,

s 22

Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C'th)
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

From: s 47F MR on behalf of Regulator Relations
To:
Cc: Regulator Relations
Subject: RE: 2024-07-31 Information and Advice activity IA00004300 - blast related brain injuries [SEC=OFFICIAL]
Date: Wednesday, 31 July 2024 5:33:35 PM
Attachments: image003.png
image006.png
image008.png
image009.png

OFFICIAL

Good afternoon

Thanks again for formalising this. s 47F had yesterday and today off so unfortunately I have not been able to have a discussion with him (I am also on leave from tomorrow until Tuesday)

However, I have tasked him an email with the background and what you are looking to achieve. In short, I have asked him to facilitate a conversation with yourself and decide way forward. Alternatively if he believes there is a more suitable POC he will provide those details.

I have asked my colleague in reg rels, s 47F , to track this. Any issues or follow up, please reach out to him via the usual inbox.

Cheers,

Kind Regards,
s 47F
Regulator Relations
Strategy, Policy and Assurance
Work Health and Safety Branch
Department of Defence
s 47F | Brindabella Business Park
s 47F

From: s 22
Sent: Wednesday, 31 July 2024 8:30 AM
To: s 47F
Cc: Regulator Relations <regulator.relations@defence.gov.au>
Subject: 2024-07-31 Information and Advice activity IA00004300 - blast related brain injuries [SEC=OFFICIAL]

OFFICIAL

Good morning s 47F

I appreciate our chat on the phone yesterday afternoon, it was immensely helpful in identifying a starting point in Defence regarding research into blast related brain injuries.

As we discussed, this email is a formal request for the point of contact currently believed able to discuss the matter further with me. I believe it was s 47F , an Occupational Hygienist, who is working on this matter for Defence at an enterprise level.

Thanks s 47F feel free to call or email to discuss if needed.

Regards,

s 22

Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C'th)
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

11:20hrs 2/8/24. s 47F Acting Director WHS Branch, Occupational Hygienist.

s 22 explains interest. s 47F Joint Health Command have procedures for assessing soldiers medically. Defence Science Technology Group doing research. Americans conducting research & have feedback & exposure standards as well as soldier feedback which Australia is relying on. Weekly & update s 47F is receiving. American call it concussion.

Australian research more as confirmatory process. No set exposure standards but ADF are working on tabulated standards for platforms against number of rounds in training. Similar to ~~be~~ or identical to American. Medical back-up when symptoms may begin to show, initiate process. Review last year, currently up to date. Focus on breaching / forced entry. Weapon platforms tested when new or being implemented for blast overpressure in order to set limits for training. Instructor exposures considered. Older platforms using manufacturers data. End of service platforms not on update list, but ceremonials such as howitzer use training standards & manufacturing. Exposure standards being set by American believed to be settling around 4 pascals(?) but not certain off the cuff. Minister of Defence aware, internal comms has this at high priority. American Reserve looking at long-term / life-time effects. s 47F comfortable ADF is doing all it can as a hygienist.

American Research due to wrap-up end of next-year. Should have one-off & cumulative. Call ended 11:48hrs.

From:
To: Regulator Relations
Cc: s 47F
Subject: 2024-08-13 IA00004300 - Regional engagement - blast related brain injuries - DoD [SEC=OFFICIAL]
Date: Tuesday, 13 August 2024 3:49:00 PM
Attachments: image001.png
image004.png
image002.png
image005.png

OFFICIAL

Afternoon Regulator Relations and Mr s 47F

Please pass on my thanks to Mr s 47F , the occupational hygienist with WHS Branch, for engaging with me on this Information and Advice (IA) activity. Mr. s 47F 's awareness and oversight of DoD's actions in relation to this emerging area of focus were very helpful. It was beneficial to confirm DoD are aware of the risks and conducting activities to address the topic, but also to gain a deeper understanding of how DoD are allocating resources and working with research partners to determine effective long-term controls.

s 47C

Lastly, I would look to follow up later in 2025 to conduct another IA activity on the same topic. Comcare would be interested to see how activities are progressing/affected as the research conducted by the USA concludes. It would also provide an opportunity to determine if there are avenues to share the results as mentioned above.

Regards,

s 22
Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C'th)
s 22

GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

From: s 47F on behalf of Regulator Relations
To:
Cc: Regulator Relations
Subject: RE: 2024-08-13 IA00004300 - Regional engagement - blast related brain injuries - DoD [SEC=OFFICIAL]
Date: Friday, 16 August 2024 10:40:24 AM
Attachments: image003.png
image006.png
image008.png
image009.png

OFFICIAL

Good morning s 22

Thanks again for your collaboration on this matter. I am pleased the discussion with s 47F was beneficial.

I have passed on your advice to the team and will file this accordingly in anticipation of future activity.

Kind Regards,
s 47F
Regulator Relations
Strategy, Policy and Assurance
Work Health and Safety Branch
Department of Defence
s 47F | Brindabella Business Park
s 47F

IMPORTANT: This email remains the property of the Department of Defence. Unauthorised communication and dealing with the information in the email may be a serious criminal offence. If you have received this email in error, you are requested to contact the sender and delete the email immediately.

From: s 22
Sent: Tuesday, 13 August 2024 3:49 PM
To: Regulator Relations <regulator.relations@defence.gov.au>
Cc: s 47F
Subject: 2024-08-13 IA00004300 - Regional engagement - blast related brain injuries - DoD [SEC=OFFICIAL]

OFFICIAL

Afternoon Regulator Relations and Mr s 47F

Please pass on my thanks to Mr s 47F , the occupational hygienist with WHS Branch, for engaging with me on this Information and Advice (IA) activity. Mr. s 47F awareness and oversight of DoD's actions in relation to this emerging area of focus were very helpful. It was beneficial to confirm DoD are aware of the risks and conducting activities to address the topic, but also to gain a deeper understanding of how DoD are allocating resources and working with research partners to determine effective long-term controls.

s 47C

Lastly, I would look to follow up later in 2025 to conduct another IA activity on the same topic. Comcare would be interested to see how activities are progressing/affected as the research conducted by the USA concludes. It would also provide an opportunity to determine if there are avenues to share the results as mentioned above.

Regards,

s 22

Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C'th)
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

From:
To: s 47F Mr 1
Subject: 2025-04-28 draft report MC00037615 [SEC=OFFICIAL:Sensitive]
Date: Monday, 28 April 2025 12:06:00 PM
Attachments: image001.png
image004.png
2025-03-25 - Inspector Report - MC00037615 – DoD-JOC.docx
image002.png
image003.png

OFFICIAL: Sensitive

Afternoon s 47F ,

Please review the attached draft inspector report. If you can check for factual correctness and provide any comments by tomorrow I would appreciate it.

Thanks for your patience and understanding, feel free to call to discuss any concerns.

Regards,

s 22

Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C'th)
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

INSPECTOR REPORT

COMCARE REFERENCE NUMBER	MC00037615
PCBU DETAILS	Name: Department of Defence - Military ABN: 68 706 814 312 ACN:
REPORT ISSUED TO	Name: s 47F Position: Director, JOC Group – Safety, Security & Facilities, Headquarters Joint Operations Command Cc:

BACKGROUND

1. On 14 February 2025 Comcare received information regarding a work health and safety concern. The information indicated workers of the Department of Defence (**DoD**) suffered mild Traumatic Brain Injury (**mTBI**) from repeated exposure to overpressure from the firing of non-service sniper rifles when deployed to Iraq between May and December 2016.

2. Comcare commenced an inspection in relation to this matter on 26 February 2025 to monitor and enforce compliance with the *Work Health and Safety Act 2011* (Cth) (WHS Act) and the *Work Health and Safety Regulations 2011* (Cth) (WHS Regulations).

3. The scope of the inspection was to determine if the DoD has systems in place to identify and manage, reasonably foreseeable WHS risks associated with operations – within the confines of the WHS Act s12D. To assess this, the inspection specifically considered the arrangements in place to mitigate risks to workers arising from the use of non-service small-arms.

OUTCOMES

4. Based on the information reviewed during the inspection, I did not identify any non-compliance with the WHS Act/WHS Regulations with respect to the scope of the inspection.

Information and advice

5. The PCBU must ensure risks to health and safety are eliminated so far as is reasonably practicable, or if not reasonably practicable to do so, are minimised so far as reasonably practicable: s 17 of the WHS Act. PCBUs should have regard to Part 3.1 of the WHS

Regulations and the *Code of Practice: How to Manage Work Health and Safety Risks* when managing risks to health and safety.

6. In relation to this matter, the DoD should consider the following:

    a. Confirmatory oversight mechanisms such as site visits to ensure application of safety processes, with higher frequency where workers are subject to working apart from normal workplace and/or management structures. This should support risk assessments and lines of reporting already implemented by the DoD to prevent deviation arising from operational pressures except where the DoD has assessed, is aware of, and accepts any residual risk – such as in accordance with the WHS Act s12D.

7. Learnings regarding control measures as a result of the inspection should be applied across the organisation where applicable.

8. The inspection is now closed however should an incident of a similar nature occur anywhere within the organisation in the future, Comcare will seek to confirm that the DoD has ensured the control measures are effective and are maintained so that they remain effective.

COMPLIANCE ASSESSMENT

9. I attended the workplace in the conduct of the inspection. The site visit was conducted as an announced inspection. I undertook actions to make relevant Health and Safety Representative/s aware of my attendance at the workplace to afford the opportunity to engage in the inspection process. I was not accompanied by the relevant Health and Safety Representative.

10. Based on the information reviewed, the DoD uses a multi-tiered inter-disciplinary planning team that considers work health and safety systematically, under the management of Joint Operations Command (**JOC**).

    The individual components of each level achieve oversight by application of expertise relevant to the scale of the component's role. Each component consults and communicates across, up, and down, each level to systematically consider variables as part of risk assessments.

    This system maintains oversight for the duration of the activity via reporting and reviewing to ensure risks to health and safety are managed as part of operational requirements. An embedded review mechanism ensures lessons learnt are recorded and systematically applied for future activities. The DoD's awareness of and efforts to resolve mTBI, is part of this system.

11. In risk assessment terminology, DoD seeks to – Identify the hazard:

    a. The DoD is directed by Government under the National Defence Strategy (**NDS**) to maintain interoperability with partner nations. This includes non-service weapon systems, identified through risk assessments at the planning phase.

        i. Example provided of DoD workers being trained in non-service weapons by a partner nation, so they could in-turn provide that expertise elsewhere.

    b. An event requiring a military response by the DoD will trigger a planning phase. JOC is responsible for this process and defines the structure systematically to ensure requirements are identified and assessed.

    c. Where DoD determines it is not reasonably practicable to apply the requirements of the WHS Act to partner nations, DoD identifies and assesses the hazards introduced through interaction with those nations, and where differences exist, risk assess in accordance with the WHS Act.

        i. Example provided of partner nation transport vehicle being risk assessed by DoD and determined as unacceptable. DoD denied the partner nation the authority to operate the vehicle, resulting in elimination of the hazard at the first step.

12. Assess the risk

    a. The JOC planning structure is tiered to achieve successively narrower fields of expertise including but not limited to, health and safety, health services, logistics, science and technology, review, etc.

    b. Each successive tier leverages more specific expertise for consideration as part of risk assessment and planning. Each tier consults internally between components as well as up and down this tiered system. Each layer adds more fidelity to the planning.

    c. Planning and risk assessments determine reporting structures and timeframes, to detect anomalies with anticipated results and changes to plans/activities.

13. Maintain Controls

    a. Once identified and consulted, the appropriate controls are detailed and relevant persons/areas assigned responsibility.

b. To capture detected anomalies or changes to plans/activities, DoD operates two supporting lines of oversight, the command (management) chain, and the technical (subject matter expert) chain, such as medical, weapon safety, etc. These reporting lines are alongside and independent of any other reporting, to assist deployed workers and provide additional oversight.

c. The JOC health and safety component ensure the DoD consider each risk and apply the WHS Act through their role under HQ JOC as part of the process.

d. Science and technology group have carriage of mTBI activities across the DoD. Science and technology component sit within the strategic/operational level of JOC, supporting planning.

e. Health services conduct mTBI assessments to provide medical baseline for workers.

14. Review effectiveness

    a. A mechanism to detect incidents or trends that are not anticipated exists, with JOC monitoring these to drive reviews. JOC maintains control to provide consistency and oversight and ensure coverage.

    b. The Review component ensures any historic incidents and lessons learnt are identified for inclusion into risk assessment(s) as part of continual improvement and close-out of identified deficiencies. This includes other components such as Science and technology and drives continuous review.

        i. Example was provided with monitoring of medical trends that resulted in a review identifying and resolving the cause.

    c. Psychiatric evaluation containing specific mTBI criteria is conducted post-operation.

15. The WHS concern indicated the DoD did not have a system to consider risks to health and safety arising from repeated exposure to blast overpressure specifically related to sniper rifles. This is due to the quantity of work that appeared to exceed safe limits, demonstrated by workers developing symptoms now associated with mTBI.

16. The information available to me indicates the DoD is specifically aware of, and dedicating resources toward, blast overpressure and resulting mTBI. Additionally, the information available to me indicates the DoD applies a systematic approach, with embedded work health and safety elements, to identify and resolve anomalies more broadly, including such hazards as sniper rifles and blast overpressure in operational settings.

17. Based on this assessment, I form the reasonable belief that the DoD, through JOC, has systems to identify and apply control measures to prevent workers on operations being exposed to reasonably foreseeable hazards such as blast overpressure and the inspection is now closed.		
REPORT ISSUED BY	Inspector	s 22
	Inspector ID number	240
	Email	s 22
	Phone	s 22
	Date	
	Signature	

DISCLAIMER

This report contains information that may assist you to take steps regarding your obligations under the WHS Act. You must refer to the Commonwealth *Work Health and Safety Act 2011* (WHS Act) and the *Work Health and Safety Regulations 2011* (WHS Regulations) to understand your duties and obligations. Comcare's external website contains links to WHS legislation.

Comcare does not accept liability for any errors or omissions or for any loss or damage suffered by you or any person which arises from your reliance on this report or for any breach by you of your obligations under the WHS Act. Where a Comcare inspector has inspected a particular workplace, it is not a representation by Comcare that the particular workplace is in any way free of hazards.

IF YOU DO NOT AGREE WITH A DECISION

If you disagree with the outcome of this inspection, you may seek an internal reconsideration of the inspector's decision. A request for a review should be sent to statutory.oversight@comcare.gov.au including any additional information or evidence you have to support your request. Comcare will review your request and advise of the outcome in writing within 20 business days.

If you would like to clarify any aspect of this report, you can contact the inspector directly.

Comcare has a range of publications and fact sheets to help explain your responsibilities and provide guidance to make your workplace safer. The Compliance and Enforcement Policy provides guidance as to how Comcare approaches regulation. To access these, visit our website.

PRIVACY STATEMENT

Your privacy is important to us. Comcare will only collect, use or disclose personal information in accordance with the Commonwealth *Privacy Act 1988* and if it is reasonably necessary for, or directly related to, one or more of our functions, powers and/or activities. These include functions and activities under the following Commonwealth legislation: *Safety, Rehabilitation and Compensation Act 1988*, the WHS Act, the *Seafarer's Rehabilitation and Compensation Act 1992*, and the *Asbestos-related Claims (Management of Commonwealth Liabilities) Act 2005*. If Comcare does not collect personal information from you, for the purposes of its legislated functions or related functions, we may not be able to respond appropriately.

Comcare is the Commonwealth agency authorised by the WHS Act to collect personal information relevant to the exercise of functions and powers under the WHS Act, WHS Regulations and the administration and evaluation of Comcare's WHS programmes. Any personal information collected in these forms will be used for those purposes.

In exercising our functions and powers, Comcare may disclose personal information, subject to confidentiality of information provisions under the WHS Act, to the following bodies and agencies, including but not limited to:

- Comcare's internal and external legal advisers
- the Safety, Rehabilitation and Compensation Commission
- a court or tribunal
- state or territory work health and safety regulatory agencies
- personnel engaged by Comcare to conduct research related activities
- enforcement agencies or bodies
- state and territory Coroners
- Commonwealth, state or territory industry regulators
- any other person assisting Comcare in the performance of its functions or exercise of its powers, including contractors and consultants
- any other person where there is an obligation under law to do so (for example but not limited to, responding to the direction of a court to produce documentation).

For further information on how Comcare handles personal information, please read the Privacy Policy on Comcare's website. To request a change to your personal information or to make a complaint, please phone or email privacy@comcare.gov.au.

From: s 47F
To: s 22
Subject: RE: 2025-04-28 draft report MC00037615 [SEC=OFFICIAL:Sensitive]
Date: Monday, 28 April 2025 12:17:54 PM
Attachments: image006.png
image009.png
image002.png
image003.png
image001.png
image005.png

OFFICIAL: Sensitive

Thanks s 22 for the opportunity to review the accuracy of the information in your report. I have no concerns regarding the accuracy of the report provided.

Kind regards,

s 47F
Director (06), JOC Group – Safety, Security & Facilities
Headquarters Joint Operations Command
s 47F | General John Baker Complex | Kings Highway, Bungendore NSW 2621
Skype for Business: s 47F | **Mobile** s 47F
Email s 47F | Group Inbox: joc.whs@defence.gov.au
-
'People First, Mission Always'

From: s 22
Sent: Monday, 28 April 2025 12:07 PM
To: s 47F
Subject: 2025-04-28 draft report MC00037615 [SEC=OFFICIAL:Sensitive]

OFFICIAL: Sensitive

Afternoon s 47F

Please review the attached draft inspector report. If you can check for factual correctness and provide any comments by tomorrow I would appreciate it.

Thanks for your patience and understanding, feel free to call to discuss any concerns.

Regards,

s 22
Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C'th)
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

From: s 22
To: s 47F
Subject: RE: 2025-04-28 draft report MC00037615 [SEC=OFFICIAL:Sensitive]
Date: Monday, 28 April 2025 1:10:00 PM
Attachments: image004.png
image008.png
image011.png
image012.png
image013.png
image014.png
image015.png
image016.png
image003.png
image005.png

OFFICIAL: Sensitive

Much appreciated, I will send a final copy in due course.

s 22
Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C'th)
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

From: s 47F
Sent: Monday, 28 April 2025 12:18
To: s 22
Subject: RE: 2025-04-28 draft report MC00037615 [SEC=OFFICIAL:Sensitive]

CAUTION: This email originated from outside the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

OFFICIAL: Sensitive

Thanks s 22 for the opportunity to review the accuracy of the information in your report. I have no concerns regarding the accuracy of the report provided.

Kind regards,

s 47F
Director (06), JOC Group – Safety, Security & Facilities
Headquarters Joint Operations Command
s 47F | General John Baker Complex | Kings Highway, Bungendore NSW 2821
Skype for Business: s 47F Mobile s 47F
Email [s 47F | Group inbox: joc.whs@defence.gov.au
'People First, Mission Always'

From: s 22
Sent: Monday, 28 April 2025 12:07 PM
To: s 47F
Subject: 2025-04-28 draft report MC00037615 [SEC=OFFICIAL:Sensitive]

OFFICIAL: Sensitive

Afternoon s 47F

Please review the attached draft inspector report. If you can check for factual correctness and provide any comments by tomorrow I

would appreciate it.

Thanks for your patience and understanding, feel free to call to discuss any concerns.

Regards,

s 22
Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C'th)
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

Sensitive: This document may contain sensitive information as defined under Section 6 of the Privacy Act.

From:
To:
Subject: 2025-04-30 - Comcare Monitoring and Compliance activity MC00037615 - sniper rifle mTBI - IRAQ [SEC=OFFICIAL:Sensitive]
Date: Wednesday, 30 April 2025 2:10:00 PM
Attachments: image001.png
image004.png
2025-03-25 - Inspector Report - MC00037615 – DoD-JOC.pdf
image002.png
image003.png

OFFICIAL: Sensitive

Dear s 47F ,

CLOSURE ADVICE - COMCARE INSPECTION MC0037615

Comcare has completed Inspection MC00037615 relating to the risk management of mild Traumatic Brain Injury (**mTBI**) from .50cal sniper rifles in operational settings through Joint Operations Command. Please find attached a copy of the Inspector Report for your attention.

Section 47 of the *Work Health and Safety Act 2011* (Cth) (WHS Act) requires PCBUs to consult with workers who are, or are likely to be, directly affected by a work health and safety matter. Where workers are represented by a HSR, the PCBU must include that HSR in the consultation process (s 48). The PCBU should consult with relevant workers and/or their representatives when making decisions relating to the contents of this report. Comcare notes that consultation would be most effective where the PCBU shares the safety outcomes/lessons related to the report where appropriate and to the extent possible in the circumstances.

Comcare notes while the WHS Act does not require a PCBU to provide a copy of the report to a HSR or other worker within the PCBU, Comcare would encourage you to share the content of the report to the extent possible with relevant workers and their representatives. Comcare recommends that the PCBU reviews each report when it is received and considers its obligations under the relevant privacy legislation (and/or other applicable laws) before sharing or otherwise using the report, if the report contains individuals' personal information.

In your capacity as the Department of Defence's (**DoD**) representative, could you please confirm by return email that you received this Inspector Report and that you will ensure the report is appropriately distributed and actioned by the DoD.

Regards,

s 22

Senior Inspector
Regional Operations ACT | Regulatory Operations Group
Inspector appointed under S.156 *Work Health and Safety Act 2011* (C'th)
s 22

Comcare
GPO Box 9905, Canberra, ACT 2601
1300 366 979
www.comcare.gov.au

Australian Government
Comcare

INSPECTOR REPORT

COMCARE REFERENCE NUMBER	MC00037615
PCBU DETAILS	Name: Commonwealth of Australia represented by its responsible agency the Department of Defence ABN: 68 706 814 312 ACN:
REPORT ISSUED TO	Name: s 47F Position: Director, JOC Group – Safety, Security & Facilities, Headquarters Joint Operations Command Cc:

BACKGROUND

1. On 14 February 2025 Comcare received information regarding a work health and safety concern. The information indicated workers of the Department of Defence (**DoD**) suffered mild Traumatic Brain Injury (**mTBI**) from repeated exposure to overpressure from the firing of non-service sniper rifles when deployed to Iraq between May and December 2016.

2. Comcare commenced an inspection in relation to this matter on 26 February 2025 to monitor and enforce compliance with the *Work Health and Safety Act 2011* (Cth) (WHS Act) and the *Work Health and Safety Regulations 2011* (Cth) (WHS Regulations).

3. The scope of the inspection was to determine if the DoD has systems in place to identify and manage, reasonably foreseeable WHS risks associated with operations – within the confines of section 12D of the WHS Act. To assess this, the inspection specifically considered the arrangements in place to mitigate risks to workers arising from the use of non-service small-arms.

OUTCOMES

4. Based on the information reviewed during the inspection, I did not identify any non-compliance with the WHS Act/WHS Regulations with respect to the scope of the inspection.

Information and advice

5. The PCBU must ensure risks to health and safety are eliminated so far as is reasonably practicable, or if not reasonably practicable to do so, are minimised so far as reasonably practicable: s 17 of the WHS Act. PCBUs should have regard to Part 3.1 of the WHS

Australian Government
Comcare

Regulations and the *Code of Practice: How to Manage Work Health and Safety Risks* when managing risks to health and safety.

6. In relation to this matter, the DoD should consider the following:

    a. confirmatory oversight mechanisms such as site visits to ensure application of safety processes, with higher frequency where workers are subject to working apart from normal workplace and/or management structures. This should support risk assessments and lines of reporting already implemented by the DoD to prevent deviation arising from operational pressures except where the DoD has assessed, is aware of, and accepts any residual risk – such as in accordance with the WHS Act s12D.

7. Learnings regarding control measures as a result of the inspection should be applied across the organisation where applicable.

8. The inspection is now closed. Should an incident of a similar nature occur anywhere within the organisation in the future, Comcare will seek to confirm that the DoD has ensured the control measures are effective and are maintained so that they remain effective.

COMPLIANCE ASSESSMENT

9. I attended the workplace in the conduct of the inspection. The site visit was conducted as an announced inspection. I undertook actions to make relevant Health and Safety Representative/s aware of my attendance at the workplace to afford the opportunity to engage in the inspection process. I was not accompanied by the relevant Health and Safety Representative.

10. Based on the information reviewed, the DoD uses a multi-tiered inter-disciplinary planning team that considers work health and safety systematically, under the management of Joint Operations Command (**JOC**).

    The individual components of each level achieve oversight by application of expertise relevant to the scale of the component's role. Each component consults and communicates across, up, and down, each level to systematically consider variables as part of risk assessments.

    This system maintains oversight for the duration of the activity via reporting and reviewing to ensure risks to health and safety are managed as part of operational requirements. An embedded review mechanism ensures lessons learnt are recorded and systematically applied for future activities. The DoD's awareness of and efforts to resolve mTBI, is part of this system.

Australian Government
Comcare

11. In risk assessment terminology, DoD seeks to – Identify the hazard:

    a. The DoD is directed by Government under the National Defence Strategy (**NDS**) to maintain interoperability with partner nations. This includes non-service weapon systems, identified through risk assessments at the planning phase.

        i. Example provided of DoD workers being trained in non-service weapons by a partner nation, so they could in-turn provide that expertise elsewhere.

    b. An event requiring a military response by the DoD will trigger a planning phase. JOC is responsible for this process and defines the structure systematically to ensure requirements are identified and assessed.

    c. Where DoD determines it is not reasonably practicable to apply the requirements of the WHS Act to partner nations, DoD identifies and assesses the hazards introduced through interaction with those nations, and where differences exist, risk assess in accordance with the WHS Act.

        i. Example provided of partner nation transport vehicle being risk assessed by DoD and determined as unacceptable. DoD denied the partner nation the authority to operate the vehicle, resulting in elimination of the hazard at the first step.

12. Assess the risk

    a. The JOC planning structure is tiered to achieve successively narrower fields of expertise including but not limited to, health and safety, health services, logistics, science and technology, review, etc.

    b. Each successive tier leverages more specific expertise for consideration as part of risk assessment and planning. Each tier consults internally between components as well as up and down this tiered system. Each layer adds more fidelity to the planning.

    c. Planning and risk assessments determine reporting structures and timeframes, to detect anomalies with anticipated results and changes to plans/activities.

13. Maintain Controls

    a. Once identified and consulted, the appropriate controls are detailed and relevant persons/areas assigned responsibility.

Australian Government
Comcare

b. To capture detected anomalies or changes to plans/activities, DoD operates two supporting lines of oversight, the command (management) chain, and the technical (subject matter expert) chain, such as medical, weapon safety, etc. These reporting lines are alongside and independent of any other reporting, to assist deployed workers and provide additional oversight.

c. The JOC health and safety component ensure the DoD consider each risk and apply the WHS Act through their role under HQ JOC as part of the process.

d. Science and technology group have carriage of mTBI activities across the DoD. Science and technology component sit within the strategic/operational level of JOC, supporting planning.

e. Health services conduct mTBI assessments to provide medical baseline for workers.

14. Review effectiveness

a. A mechanism to detect incidents or trends that are not anticipated exists, with JOC monitoring these to drive reviews. JOC maintains control to provide consistency and oversight and ensure coverage.

b. The Review component ensures any historic incidents and lessons learnt are identified for inclusion into risk assessment(s) as part of continual improvement and close-out of identified deficiencies. This includes other components such as Science and technology and drives continuous review.

i. Example was provided with monitoring of medical trends that resulted in a review identifying and resolving the cause.

c. Psychiatric evaluation containing specific mTBI criteria is conducted post-operation.

15. The WHS concern indicated the DoD did not have a system to consider risks to health and safety arising from repeated exposure to blast overpressure specifically related to sniper rifles. This is due to the quantity of work that appeared to exceed safe limits, demonstrated by workers developing symptoms now associated with mTBI.

16. The information available to me indicates the DoD is specifically aware of, and dedicating resources toward, blast overpressure and resulting mTBI. Additionally, the information available to me indicates the DoD applies a systematic approach, with embedded work health and safety elements, to identify and resolve anomalies more broadly, including such hazards as sniper rifles and blast overpressure in operational settings.

Australian Government
Comcare

17. Based on this assessment, I form the reasonable belief that the DoD, through JOC, has systems to identify and apply control measures to prevent workers on operations being exposed to reasonably foreseeable hazards such as blast overpressure and the inspection is now closed.		
REPORT ISSUED BY	Inspector	s 22
	Inspector ID number	240
	Email	s 22
	Phone	s 22
	Date	30 April 2025
	s 22	
	Signature	

Australian Government
Comcare

DISCLAIMER

This report contains information that may assist you to take steps regarding your obligations under the WHS Act. You must refer to the Commonwealth *Work Health and Safety Act 2011* (WHS Act) and the *Work Health and Safety Regulations 2011* (WHS Regulations) to understand your duties and obligations. Comcare's external website contains links to WHS legislation.

Comcare does not accept liability for any errors or omissions or for any loss or damage suffered by you or any person which arises from your reliance on this report or for any breach by you of your obligations under the WHS Act. Where a Comcare inspector has inspected a particular workplace, it is not a representation by Comcare that the particular workplace is in any way free of hazards.

IF YOU DO NOT AGREE WITH A DECISION

If you disagree with the outcome of this inspection, you may seek an internal reconsideration of the inspector's decision. A request for a review should be sent to statutory.oversight@comcare.gov.au including any additional information or evidence you have to support your request. Comcare will review your request and advise of the outcome in writing within 20 business days.

If you would like to clarify any aspect of this report, you can contact the inspector directly.

Comcare has a range of publications and fact sheets to help explain your responsibilities and provide guidance to make your workplace safer. The Compliance and Enforcement Policy provides guidance as to how Comcare approaches regulation. To access these, visit our website.

PRIVACY STATEMENT

Your privacy is important to us. Comcare will only collect, use or disclose personal information in accordance with the Commonwealth *Privacy Act 1988* and if it is reasonably necessary for, or directly related to, one or more of our functions, powers and/or activities. These include functions and activities under the following Commonwealth legislation: *Safety, Rehabilitation and Compensation Act 1988*, the WHS Act, the *Seafarer's Rehabilitation and Compensation Act 1992*, and the *Asbestos-related Claims (Management of Commonwealth Liabilities) Act 2005*. If Comcare does not collect personal information from you, for the purposes of its legislated functions or related functions, we may not be able to respond appropriately.

Comcare is the Commonwealth agency authorised by the WHS Act to collect personal information relevant to the exercise of functions and powers under the WHS Act, WHS Regulations and the administration and evaluation of Comcare's WHS programmes. Any personal information collected in these forms will be used for those purposes.

In exercising our functions and powers, Comcare may disclose personal information, subject to confidentiality of information provisions under the WHS Act, to the following bodies and agencies, including but not limited to:

- Comcare's internal and external legal advisers
- the Safety, Rehabilitation and Compensation Commission
- a court or tribunal
- state or territory work health and safety regulatory agencies
- personnel engaged by Comcare to conduct research related activities
- enforcement agencies or bodies
- state and territory Coroners
- Commonwealth, state or territory industry regulators
- any other person assisting Comcare in the performance of its functions or exercise of its powers, including contractors and consultants
- any other person where there is an obligation under law to do so (for example but not limited to, responding to the direction of a court to produce documentation).

For further information on how Comcare handles personal information, please read the Privacy Policy on Comcare's website. To request a change to your personal information or to make a complaint, please phone or email privacy@comcare.gov.au.

www.comcare.gov.au | 1300 366 979

Defence: Brain trauma

Wednesday, 6 November 2024 9:09 AM

Diggers' trauma study

Internal only

ADDITIONAL INFO BRIEF
Department of Defence – Blast Exposure

Regulatory Operations Group

- Comcare is aware of recent reporting in the media regarding the risk of blast exposure to Defence personnel.
- Comcare engaged with Defence to confirm it was aware of the potential risk and gain an understanding of its response.
- Comcare notes Defence is participating in a substantial United States Defense Department trial, which Defence will use to inform its approach. Comcare also notes Defence reviewed:
    - The potential risk of blast exposure to its personnel from existing systems to minimise the potential for harm resulting from blast exposure.
    - Internal medical advice to include assessment and treatment of blast injuries.
- Comcare notes completion of the study will provide Defence with the necessary understanding to take sound measures in relevant areas.
- Comcare is satisfied that this presents a reasonably practicable approach to this extremely complex and challenging risk to health and safety.

<u>Key Points</u>

- Blast, or over pressure resulting from explosions, can cause trauma (e.g. ear rupture or damage to the lungs) and potentially chronic brain injuries (sometimes referred to as traumatic brain injuries or 'TBI'). The latter is understood to occur during exposure to higher pressures and/or repeated exposure to lower pressures.
- The limits and actions required to prevent direct trauma injuries is reasonably well

understood. The limits and controls required to prevent and manage the outcomes from chronic brain injuries is less well understood. Several nations are undertaking studies to better define these factors. The impacts of chronic brain injuries on behaviours are similarly unclear, and this forms part of the majority of these studies.

Internal only

- Defence is contributing to the United States Defense study into traumatic brain injuries. This is a pragmatic approach given the size of the US study (Australia has a much smaller sample size for any separate study). The US is anticipated to release the report in 2025. Defence will then review the report and apply the findings.
- In the intervening period Defence reviewed the potential risk of blast exposure to its personnel from existing systems to minimise the potential for harm resulting from blast exposure. In 2023, Defence also reviewed its internal medical processes to include advice on assessment and treatment for blast injuries.
- Most Defence blast injuries result from operational exposures, where the ability to control such exposures is more limited.
- The WHS Act does apply extra-territorially. Under section 12(D) the 'Chief of the Defence Force may, by instrument in writing, declare that specified provisions of this Act do not apply, or apply subject to such modifications as are set out in the declaration'.

s 47C

Version: 1.0	Cleared by: s 22
Current at: 1 Nov 24	Phone number:

From: s 22
To: Comcare – WHS Help
Cc: s 22 ; R&A.Intelligence
Subject: FW: FOR INFORMATION: Media articles - ADF blast exposure injuries [SEC=OFFICIAL]
Date: Friday, 19 July 2024 12:54:24 PM
Attachments: Defence 'ignored toll of exposure to explosions'.pdf
Injured soldier Paul Dunbavin 'shines light' on brain injuries.pdf
image001.png
image002.jpg

OFFICIAL

Hello team

Could you please create a WHS Concern based on these media articles and let me know once it's in the decision queue so I can advise the GM and SDNO?

Good pick up from the intel team – well done!

Thanks

s 22

From: s 47E(d)
Sent: Friday, July 19, 2024 12:25 PM
To: s 47E(d)
Subject: FOR INFORMATION: Media articles - ADF blast exposure injuries [SEC=OFFICIAL]

OFFICIAL

Good afternoon, all

Please see the attached media articles regarding Defence personnel suffering brain injuries in training and combat from exposure to explosions.

The articles note that soldiers have an increased risk of chronic brain injuries caused by repeated exposure to blast pressure waves. The condition is known as mTBI, meaning the cumulative effects of mild traumatic brain injuries from explosions in training and combat. It is prevalent among special forces personnel, while being a major health risk for tank and artillery crews, infantry soldiers, engineers, and navy clearance divers. While the primary risk is the brain injury itself, there is research to suggest it is linked to depression, PTSD and suicide.

Noting the ongoing Royal Commission into Defence and Defence and Veteran Suicide, there is a heightened awareness and interest in the physical and psychosocial risks within Department of Defence. I wanted to bring this to your attention for some additional context regarding the significance of the issue.

There have been a couple of notifications and WHS Concerns received recently regarding Defence explosions (see below), and we may receive more in light of this media attention.

NOT00035278 - DOD Army - Incident not notified - Explosive device detonated injuring 3 people - Townsville QLD

NOT00035205 - DOD CIV - Contractor exposed to loud noise/explosion - Ringing in ears - Townsville QLD

My team will look into this further and aim to provide something to ROG soon.

Reach out if you have any questions,

s 22

Assistant Director Intelligence and Data
Risk & Analysis
Regulatory Operations Group |Comcare
s 22

Comcare acknowledges the Traditional Owners and Custodians of country throughout Australia and acknowledges their continuing connection to land, sea and community. We pay our respects to the people, the cultures and the elders past, present and emerging.

From: s 22
Sent: Friday, July 19, 2024 8:43 AM
To: s 22
Cc: s 47E(d)

s 22

Media <Media@comcare.gov.au>
Subject: ADF blast exposure injuries [SEC=OFFICIAL]

OFFICIAL

Morning all,
Please see attached coverage in The Australian – experts/veterans warning of significant numbers of Defence personnel suffering brain injuries in training and combat from exposure to explosions, and lack of research/funding to monitor conditions including CTE (and links to depressionPTSD/ suicide).
The story flags final report recommendations from the Royal Commission into Defence and Veteran Suicide for more research.

s 22
s 22 **| Media Manager**
Marketing & Communications
s 22
media@comcare.gov.au

THE AUSTRALIAN

EXCLUSIVE

Defence ‘ignored toll of exposure to explosions’

By BEN PACKHAM

12 hours ago. Updated 11 hours ago

Defence and Veterans’ Affairs ignored mounting evidence of chronic brain injuries in soldiers caused by repeated exposure to blast pressure waves, abandoning testing and de-funding research that could have eased a suicide epidemic.

The condition, similar to concussion-related diseases in footballers, has been attributed by researchers to the cumulative effects of mild traumatic brain injuries, or mTBI, from explosions in training and combat.

Researchers warn it is prevalent among special forces personnel, and is also considered a major health risk for tank and artillery crews, infantry soldiers, engineers and navy clearance divers. It is linked to depression, PTSD and suicide, but is difficult to conclusively test for until after a person’s death.

The US is moving to protect soldiers from mTBI, or so-called blast overpressure injuries, investing more than $1bn in research and legislating new measures to monitor troops’ exposure and test for signs of injury.

But the Australian government only last month resumed monitoring soldiers’ blast exposure in a small pilot project, after a 2012 study on soldiers in Afghanistan codenamed Project Cerebro was axed amid alarming early results.

Funding was also slashed for a major research project that was examining brain injury and PTSD in 500 Afghanistan veterans, which would have provided the

departments of Defence and Veterans' Affairs with vital evidence that could have been used to protect soldiers from harm.

One of Australia's foremost experts on military brain injuries, Adelaide University professor Alexander McFarlane, said the "invisible wounds" suffered by soldiers were not unique to modern combat, with the term "shell shock" coined in World War I to describe psychological injuries from explosive blasts.

He said mTBI-related harm to soldiers had gained more attention in recent times amid growing awareness over the degenerative brain disease CTE among players of contact sports.

Professor McFarlane was the lead researcher on the 2010 ADF Mental Health Prevalence and Wellbeing Study, which found 9.3 per cent of soldiers who were deployed to Afghanistan reported mTBI symptoms. But he said funding for the project was cut, preventing full analysis of the results and further testing.

"There was little interest in the findings from this study of Afghanistan veterans by the ADF or DVA," he said.

"The planned follow-up and retesting of these veterans was never fully undertaken due to lack of adequate funding.

"There was no consideration of how these findings could be used to assess the impact of blast exposure or other head injuries using available methods of measuring brain function."

Professor McFarlane said the US's Blast Overpressure Safety Act currently before Congress should be a wake-up call for Australia. The act would require troops to wear blast-pressure monitors, undergo regular neurocognitive testing, and ensure medical personnel were trained to recognise blast-exposure injuries.

"There needs to be a co-ordinated research and clinical program investigating mTBI as part of a broader program optimising the health of ADF veterans," Professor

McFarlane said.

The ADF sought to measure the effects of blast exposure on troops using helmet-mounted sensors as part of Project Cerebro, but there is no evidence the data was used to inform any changes in training or operational procedures. One soldier involved in the 2012 study said all those who participated had their blast gauges "red line" when using shoulder-fired anti-tank weapons, hand grenades and explosive entry charges.

"There was nothing you could do about it," he said.

In June, Defence embarked on another monitoring project to assess blast overpressure exposure for an unknown number of personnel, who will also undergo cognitive testing. The results of the 18-month project will inform further research.

The Minister for Veterans' Affairs and Defence Personnel, Matt Keogh, said the health of serving and former personnel was a top priority. " Since this issue was first raised with me last year, I have engaged with senior Defence officials, including the surgeon-general, about what the ADF's experience to date has been, and the research and monitoring that they are now undertaking to better understand repeated blast brain injury," Mr Keogh said. "Defence is also undertaking preventative action to support the ongoing health of ADF personnel."

Veterans group Vigil Australia, which is running a community campaign on blast-overpressure injuries, disputed the government's commitment to addressing the condition.

The group's convener, Paul Scanlan, who attended a Blast and Conflict Injury Conference in London, said he was astounded to find he was the only Australian representative there.

"There was no one from the Department of Defence, the Australian Defence Force, Defence Science and Technology group, DVA or the Department of Health and Ageing," the retired special forces officer said. "When I speak with international

experts, they have had no contacts with our Defence bureaucracy. We are 10 to 20 years behind the US in dealing with this problem."

The Royal Commission into Defence and Veteran Suicide made no mention of the dangers posed by mTBI in its interim report, reflecting the failure of Australian authorities to take the condition seriously. But it's understood its final report will recommend further research be undertaken to inform the government of the risks.

Part of the problem, advocates say, is the failure of the Australian Institute of Health and Welfare, which analyses ADF and veterans' suicide data, to examine the links between specific military occupations and suicide risk.

As research from the US has shown, some military specialties are more at risk from mTBI. A recent Harvard study on 30 career special forces soldiers, for example, found a clear association between blast exposure, altered brain structure and impaired cognitive performance.

Labor MP Luke Gosling, a former 1st Commando Regiment officer, has thrown his support behind the Vigil Australia campaign, calling for the royal commission to provide "meaningful recommendations" on the condition.

"There will be benefits from screening and collaboration for mTBI and blast overpressure, not only for our ADF personnel but for veteran wellbeing too, improving the health and safety of our people," Mr Gosling said.

Noting that the US was "well advanced" in screening for mTBI in its armed forces, Mr Gosling said there could be a role for AUKUS's so-called Pillar II technology partnership in fostering joint research.

Opposition defence spokesman Andrew Hastie called for greater investment to protect soldiers from risking life-altering brain damage as a result of their work.

"Not surprisingly, we are seeing this in allied special operations communities, who carried the heaviest burden of fighting in Afghanistan," Mr Hastie said.

"We need to look closely at blast-overpressure injury, and make sure our troops have preventative measures in place so we can have them serving longer, and have them retiring in a good state of health."

MORE ON THIS STORY

Injured soldier 'shines light' on brain injuries

By BEN PACKHAM

TRENDING

'Time to go': Obama says Biden needs to reconsider his election bid

Joe Biden's future teeters on a knife edge after reports that the most influential figure in the Democratic party now believes the President's path to victory has diminished and the 81-year-old should 'seriously consider' his candidacy.

By CAMERON STEWART, ADAM CREIGHTON

Leak returns fire over Faruqi defamation threat

Johannes Leak was shocked – but not entirely surprised – to discover himself, for the first time, on the end of a legal threat to sue for defamation and a demand to withdraw a cartoon.

By STEPHEN RICE

Taxpayer cost of returning Assange with Rudd revealed

Taxpayers forked out more than $100,000 to return Julian Assange home, with the bill blowing out by nearly 30 per cent because Kevin Rudd accompanied the convicted criminal on his flight into Canberra.

By GREG BROWN

THE AUSTRALIAN

EXCLUSIVE

Injured soldier Paul Dunbavin ‘shines light’ on brain injuries

By BEN PACKHAM

13 hours ago. Updated 12 hours ago

Former special forces soldier Paul Dunbavin was for decades one of the nation’s most elite soldiers – an outgoing, A-type personality, who could be relied on to get the job done.

But today he is a different man; forgetful, often angry, with a traumatic brain injury diagnosis that provides little comfort on what lies ahead.

Dunbavin, a former Warrant Officer with the 2nd Commando Regiment, was exposed to thousands of blasts in training and combat during his 36-year military career.

For a time, he served as a special forces demolition supervisor, “blowing stuff up every day”.

He was also a regular user of the 84mm Carl Gustaf recoilless rifle and 66mm shoulder-fired rockets, which generate big pressure waves for users, and suffered multiple concussions from parachute jumps.

It was his wife, Nicolle, who first noticed something was wrong.

“She just said to me, ‘You’re not firing on all cylinders there’. My emotional regulation was all over the place,” Dunbavin said.

"I was blowing up at the kids, and I was forgetful. I'd go to the shops and I'd get there and couldn't remember what I was going to get."

After extensive testing, his neurologist identified chronic traumatic encephalopathy, or CTE – the progressive and fatal brain condition suffered by professional footballers.

CTE has similar symptoms to the traumatic brain injuries seen in soldiers, but a conclusive diagnosis can't be made while a person is alive.

"The doctor said, 'You're an extremely fit 55-year-old man, but unfortunately, in parts of your brain, you've got no volume there'," he said.

Dunbavin, the executive officer of the Commando Welfare Trust, said he wanted to "shine a light" on veterans' brain injuries in the hope that others could avoid them by "mitigating at the front end of their service".

He put a claim in with the Department of Veterans' Affairs several months ago, seeking acknowledgment his injuries were the result of his military service.

"That's all I really want. I'm not after anything else, because in a couple of years time I could be walking around like Joe Biden," Dunbavin said.

TRENDING

'Time to go': Obama says Biden needs to reconsider his election bid

Leak returns fire over Faruqi defamation threat

Taxpayer cost of returning Assange with Rudd revealed

WHS Details

PCBU *	Department of Defence - Military	Date the concern was first noticed	
WHS concern type *	Media	Notification date *	19/07/2024
			12:54 PM
Full Name *	Media: The Australian	Date form sent	
Contact Number		Relationship to PCBU *	Media

WHS concern summary *

See attached email in documents for the original news articles.

Two articles from The Australian have come out recently noting that soldiers have an increased risk of chronic brain injuries caused by repeated exposure to blast pressure waves. The condition is known as 'mTBI', meaning the cumulative effects of mild traumatic brain injuries from explosions in training and combat. It is prevalent among special forces personnel and is a major health risk for other members of the ADF. The primary risk if brain injury, however research suggests a link to depression, PTSD and suicide as well.

The news articles specify details such as: the 2010 ADF Mental Health Prevalence and Wellbeing Study found that 9.3 per cent of soldiers that were deployed to Afghanistan reported mBTI symptoms, however, further follow up and retesting was never undertaken. The Department of Defence is now allegedly undertaking research and monitoring internally to better understand repeated blast injury after it was raised with the Minister for Veterans' Affairs and Deference Personnel after it was raised in 2023.

Initial Analysis Summary

Brief description *	DOD Army - Media - Allegations of members suffering brain injuries due to r...
Initial recommendation	Inspectorate Action
Recommendation requested date	19/07/2024 1:07 PM
Recommendation requested by	s 22
Analysis and findings (Any additional notes ISO may capture)	See attached email in documents for the original news articles. Two articles from The Australian have come out recently noting that soldiers have an increased risk of chronic brain injuries caused by repeated exposure to blast pressure waves. The condition is known as 'mTBI', meaning the cumulative effects of mild traumatic brain injuries from explosions in training and combat. It is prevalent among special forces personnel and is a major health risk for other members of the ADF. The primary risk if brain injury, however research suggests a link to depression, PTSD and suicide as well. 224 The news articles specify details such as: the 2010 ADF Mental Health

Initial Analysis Summary

Brief description *	DOD Army - Media - Allegations of members suffering brain injuries due to r...
Initial recommendation	Inspectorate Action
Recommendation requested date	19/07/2024 1:07 PM
Recommendation requested by	s 22
Analysis and findings (Any additional notes ISO may capture)	The news articles specify details such as: the 2010 ADF Mental Health Prevalence and Wellbeing Study found that 9.3 per cent of soldiers that were deployed to Afghanistan reported mTBI symptoms, however further follow up and retesting was never undertaken. The Department of Defence is now allegedly undertaking research and monitoring internally to better understand repeated blast injury after it was raised with the Minister for Veterans' Affairs and Deference Personnel after it was raised in 2023.
	s 37

Initial Analysis Summary

Brief description *	DOD Army - Media - Allegations of members suffering brain injuries due to r...	
Initial recommendation	Inspectorate Action	
Recommendation requested date	19/07/2024	1:07 PM
Recommendation requested by	s 22	
Analysis and findings (Any additional notes ISO may capture)	s 37	

Initial Analysis Summary

Brief description *	DOD Army - Media - Allegations of members suffering brain injuries due to r...
Initial recommendation	Inspectorate Action
Recommendation requested date	19/07/2024 1:07 PM
Recommendation requested by	s 22
Analysis and findings (Any additional notes ISO may capture)	s 37

Initial Analysis Summary

Brief description *	DOD Army - Media - Allegations of members suffering brain injuries due to r...
Initial recommendation	Inspectorate Action
Recommendation requested date	19/07/2024 1:07 PM
Recommendation requested by	s 22
Analysis and findings (Any additional notes ISO may capture)	s 37

Initial Analysis Summary

Brief description *	DOD Army - Media - Allegations of members suffering brain injuries due to r...
Initial recommendation	Inspectorate Action
Recommendation requested date	19/07/2024 1:07 PM
Recommendation requested by	s 22
Analysis and findings (Any additional notes ISO may capture)	s 37

Inspectorate Decision

Inspector comments

240725, s 22 NFA
- IA00004300 created and assigned to Inspector s 22
- Scope outlined in IA0004300.

Inspectorate decision: NFA

Decision reason: Other

Decided by: s 22

Decided on: 25/07/2024 3:34 PM