Equitable and Consistent Support in New Zealand Law for Defence Force and Emergency Services Personnel

Regimes of Scientific Recognition and an Expanded Conceptual Framework

Rex Alexander and Samuel Mann

Otago Polytechnic NZ
Capable, College of Work Based Learning





It took 37 years for the toxic effects of Agent Orange on NZ troops to be recognized by the government, for the apology to be delivered and redress provided. To safely return to society

PROBLEM

Service-related harm can outlast recognition

Repeated exposure can produce cumulative or delayed harm.

Medical, operational and compensation records remain fragmented.

Discharge from service can disrupt monitoring and continuity of care.

Recognition must lead to treatment, redress and whole-of-life support.

Three regimes of scientific recognition

Regime	Central question
Accompanying Science	How can action be technically managed?
Warning Science	Do warning signs justify precaution?
Critical Reconstruction	Why did recognition arrive late?

Ideal types can coexist. They are not a compulsory sequence.

A comparative conceptual case analysis

Case 1 examines psychological harm across military and emergency services.

Case 2 examines disease and other physical effects of service.

Evidence includes legislation, official reports and published research.

The study applies and extends a framework. It creates no new dataset.

The Nikolaenko-Alexander Model

Critical Practice

What must change now?

Protection, monitoring, redress and operational change.

Critical Regeneration

How must the system change?

Continuing research, connected records and accountable governance.

Five regimes connect recognition with present action and future redesign.

Fragmented records weaken recognition

Service histories and health outcomes do not connect automatically.

Stigma and disrupted transitions can reduce reporting.

Small, separate cohorts limit analysis of shared risks.

Existing data provide a basis for better linkage but is currently siloed across agencies.

The warning signal is already measurable

FENZ survey group	Probable PTSD
Uniformed firefighters	13.4%
Communication centre staff	30.9%

Screening results among 2023 survey respondents, not clinical diagnoses.

Source: Whanaungatanga Wellbeing Survey, 2023.



Unlike the body, there is no physical protection for the psyche, or the soul



An event-based test can miss cumulative harm

The paper examines ACC section 21B's event-based mental injury test.

Repeated occupational trauma challenges a single-incident framework.

Remote exposure raises specific barriers for communications staff.

The authors call for recognition rules that reflect service realities.

Similar duties can lead to different support pathways

Pathway examined	Recognition issue
Qualifying military service	Defined conditions can use service-specific presumptions
Routine and emergency service	Individual work-related causation tests
Volunteer service	Have no similar protections in law because they are not employed

Comparable risks deserve an explicit review of equitable protection.

Physical illness requires a history of exposure

Long latency can separate illness from the service that preceded it.

Cumulative toxic exposure requires more than incident counts.

Presumptive pathways already exist but only for defined veteran conditions.

The authors propose stronger occupational recognition and monitoring.

Critical Practice addresses the harm now

Preserve and connect existing exposure and health records.

Maintain care and support through discharge or retirement.

Provide accessible assessment, rehabilitation and redress pathways.

Revise operational practice to reduce continuing exposure.

Critical Regeneration changes the system

Standing research programmes connect services and disciplines.

Exposure registers preserve evidence across a working lifetime.

Independent review and escalation make warning signs actionable.

Governance incorporates worker voice and support for families.

Recognition must produce action

Fragmented evidence can conceal a continuing process of harm.

Critical Practice addresses present consequences.

Critical Regeneration prevents the repetition of recognition failures.

Equitable support requires connected science, governance and practice.

We need our heroes





Mā te mahi tahi o tēnei rā
ka tata mai te tāhapatū o te rangi
mō ngā pāraeroa o āpōpō me ō rātou whānau

Our collective effort today
brings the horizon closer
for tomorrow's veterans and their families

Key references

Alexander, R., & Mann, S. (2026). Equitable and Consistent Support. Pollution and Diseases 2: 168–198. doi: 10.66659/8vjw4853

Nikolaenko, D. (2026). Military Contamination and Regimes of Scientific Recognition. doi: 10.66659/bb4q9n88

Fire and Emergency NZ / AUT (2023). Whanaungatanga Wellbeing Survey: Detailed Report.

Barr, M., & Young, D. (2024). Building an Evidence Base for Understanding Veteran Outcomes. Social Wellbeing Agency.

Veterans' Affairs NZ. Conclusively Presumed Conditions. Official guidance updated 21 April 2026.

A continuing system of recognition and support

Rex Alexander and Samuel Mann

Otago Polytechnic NZ
Capable, College of Work Based Learning

rex.alexander@envirocom.co.nz

Recognition must lead to support and changes in the conditions of service.

Full paper and references

doi: 10.66659/8vjw4853