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Rethinking “Critical Risks” and the Hidden Burden of Workplace Harm

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Dear Editor,

I am writing regarding the intensifying emphasis on “critical risk” within New Zealand health and safety discourse, particularly in the context of the current review of the Health and Safety at Work Act (HSWA). While the prevention of harm is unquestionably essential, recent political and organisational rhetoric risks narrowing our national risk management approach. The framing of critical risk has unintentionally obscured the more widespread, long-term burdens of harm affecting large sections of our workforce, especially women, minority groups, and low-paid workers.

This letter examines how our regulatory structures, risk definitions, and organisational practices may be reinforcing inequities in both exposure to harm and access to protection.

The Regulatory Framing: A Strength and a Limitation

The HSWA 2015 clearly requires PCBUs to manage risk “so far as reasonably practicable” (SFARP) and does not distinguish between acute and chronic risks. WorkSafe New Zealand’s Good Practice Guidelines on Managing Risks and Hazardous Work explicitly ask PCBUs to consider both “acute consequences” and “long-term harms,” including occupational health exposures, cumulative injuries, and psychosocial risks.

WorkSafe’s Strategy recognises that catastrophic harm accounts for less than 2% of workplace harm (WorkSafe NZ, 2024). This fact conflicts with recent Ministerial statements following the 2024–2025 legislative review, which have urged the regulator to “prioritise critical risks and address over-compliance”.

The Minister has stated that critical risks are those that are notifiable to the regulator (Section 23, HSWA 2015) or serious diseases caused by work (Schedule 2, ACC Act 2001) (Van Velden, 2025). The idea of “over-compliance” appears to be directed at poorly designed health and safety management systems rather than at New Zealand workplaces somehow being too safe.

This emphasis is understandable. Catastrophic events attract public attention and political pressure. However, the more we focus on the risk of sudden fatalities, the greater the likelihood we will neglect to address the quieter, vast majority of workplace harm.

A cynical person might also conclude that the focus on “critical risks” is designed to protect those with legal responsibilities (and therefore political influence) rather than to address the risks faced by those doing the work.

Critical Risks and Gendered Work Patterns

The absence of a statutory definition for “critical risk” means organisations decide for themselves what qualifies as “critical”. Unsurprisingly, most risks deemed worth prioritising are associated with traditionally male-dominated industries such as construction, forestry, manufacturing, and agriculture. These generally involve risks that cause immediate harm, which occupational health and safety practitioners and organisational leaders find easiest to understand and therefore mitigate. The Minister has recently indicated that a statutory definition is forthcoming; however, how this will be interpreted by the judiciary and the regulator remains uncertain until case law develops.

WorkSafe’s own statistics confirm that acute, traumatic fatalities are concentrated in the above industries. This aligns with international data, including studies by the International Labour Organisation (Gammarano, 2025), which show that male workers worldwide account for the majority of fatal and serious traumatic injuries.

However, research by the World Health Organization (2011), EU-OSHA (2021) and scholars such as Messing & Mager Stellman (2006) and Campos-Serna et al (2013) shows that women face disproportionate levels of long-term, non-fatal occupational health problems, particularly

musculoskeletal disorders, repetitive strain injuries, mental health issues, and chronic illnesses. This trend is reflected in WorkSafe's own data on sprains, strains, and long-term injury claims.

Put simply:

> Men are more likely to die suddenly at work; women are more likely to suffer continuously through work.

Yet only the former tends to qualify as "critical."

The Invisible Epidemic of Cumulative Harm

New Zealand's own regulator has already recognised this discrepancy. WorkSafe's Position Paper on Work-Related Health (WorkSafe NZ, 2017) states that work-related health exposures cause 750–900 deaths annually, compared to fewer than 100 traumatic fatalities. The Ministry of Health's Burden of Disease Study (Tobias, 2016) further identifies work-related exposures as major contributors to chronic illness.

Despite this, many organisational critical risk programmes exclude:

- cumulative musculoskeletal harm
- occupational disease
- fatigue-related harm
- low-level chemical exposures
- gendered ergonomic mismatches
- work intensification in low-wage roles

These exclusions are not due to a lack of harm; they result from the absence of dramatic, catastrophic events. A care worker who develops a degenerative back injury after 20 years of patient transfers is not classified as a "critical risk" case. Similarly, the cleaner with chronic respiratory issues caused by daily exposure to chemicals is not included. The same applies to the production worker with osteoarthritis from repetitive, high-speed tasks, as well as to many other vital roles.

Internationally, this misalignment is well documented. The European Agency for Safety and Health at Work (EU-OSHA) has warned that musculoskeletal disorders and psychosocial stressors constitute an increasing burden of occupational harm across Europe (EU-OSHA, 2024). A paper on the global, regional and country estimates of the work-related burden of diseases and accidents in 2019 found that the cumulative health harms are the main contributors to work-related deaths worldwide, far exceeding traumatic incidents, with 2.58 million of the 2.9 million total deaths from occupational disease (Takala, 2024).

In short, catastrophic risk thinking protects against rare harms at the expense of the common harms.

Risk Assessment & Verification vs. Genuine Work Redesign

Critical risk programmes concentrate on critical control verifications to ensure officers and boards fulfil their due diligence obligations (HSWA s44). These verification efforts often act as a proxy for genuine engagement with the complexities of real work.

The type of risk assessment commonly used when chronic health risks are included in critical risk programmes demonstrates a lack of understanding of these issues. The prevalence of "Bow Tie" risk assessments, a useful process safety tool, to assess complex risks associated with occupational health and human interactions, shows the immaturity of the current approach.

Ethnographic approaches, often promoted as Safety II or the New View, encourage PCBUs to understand how work is performed. However, critical risk programmes can have the opposite effect, leading to standardised checks, compliance reporting, and the belief that verifying a control means the risk is managed.

Ben Hutchinson outlines how safety system artefacts can become more speculative than functional, reinforcing beliefs through observable forms and increasingly attracting management attention rather than addressing the real issues (Hutchinson et al., 2022). This verification-centred approach to risk management often neglects the daily risks faced by workers in female-dominated, low-paid, or minority-majority roles.

Why We Consistently Undervalue Long-Term Harm

The under-prioritisation of long-term harm is not exclusive to New Zealand; it is a worldwide pattern driven by human cognition and systemic bias.

1. Immediate threats trigger immediate responses

Psychological research on risk perception (Slovic, 2000) demonstrates that people naturally overvalue acute, dramatic risks and undervalue chronic, cumulative ones.

2. Politicians respond to outrage.

A fatal incident draws headlines; a slowly disabling condition does not.

3. Traditional "dangerous" work is culturally masculinised.

Sociological studies, such as those outlined in Karen Messing's Book, Bent Out of Shape (Messing, 2021), show that societies overvalue the dangers traditionally faced by men while undervaluing the health burdens disproportionately borne by women.

4. Many chronic harms manifest decades later.

New Zealand's asbestos legacy and the emerging silicosis crisis demonstrate how easily long-latency diseases can be overlooked until it is too late. The fact that these well-publicised examples predominantly affect men is also telling.

5. Risk assessment tools themselves are biased, especially those used to rank risk level

Research indicates that risk matrices often misrepresent low-probability/high-consequence events and underestimate high-probability/medium-consequence harms (Cox, 2008; Peace, 2017).

Who Pays the Price for Our Blind Spots?

The term 'low-skilled' is often used to describe roles such as care work, cleaning, and service labour. It has faced heavy criticism in labour research, including from the ILO (2015) and from prominent sociologists, who show that these jobs require considerable interpersonal, cognitive, and physical skills, despite being consistently undervalued

These workers:

- have the least control over the pace and structure of work
- often work quickly and in uncomfortable postures
- experience limited job security and low wages
- may be excluded from meaningful participation in risk assessments, and even when included, are less likely to voice concerns.

Their work might not appear on governance dashboards, but it is equally harmful. As WorkSafe (2018) emphasises in its Good Work Design Principles, safety must be integrated *into* work, not added *afterwards*.

Toward a More Equitable and Evidence-Based Approach

If New Zealand is to truly enhance occupational health and safety, we need to expand our national perspective on what counts as a risk and how we prioritise our limited resources.

1. Clear guidance on the management of risks that cause chronic and acute harm.

Guidance should address long-term, cumulative negative workplace harm, consistent with HSWA's emphasis on both health *and* safety, with equal enforcement weight for both.

2. Elevate occupational health

Align with the World Health Organization's global calls for rebalancing safety and health priorities.

3. Use demographic-informed risk assessment

Include gender, size, age, neurodiversity, language, and physical ability in risk assessments, aligned with AS/NZS ISO 45003 (2021, psychosocial risk) and ISO 6385 (2016, ergonomics principles).

4. Shift from verification to genuine work redesign

Expand on the UK Health & Safety Executive's Managing for Health and Safety (HSG65) (HSE, 2013) model by integrating modern ergonomic design principles and complexity science frameworks to develop meaningful and healthy jobs.

5. Invest in research on traditionally female and minority-dominated occupations

New Zealand data on work-related health has significant research gaps, especially in caregiving, cleaning, hospitality, and production work.

6. Treat chronic harm as equally "critical"

Given WorkSafe's own estimate (WorkSafe, 2019) that 6–9 times more workers die from occupational health exposures than from acute incidents, it is neither logical nor ethical for cumulative harm to be regarded as secondary.

Conclusion: Redefining What Matters in Worker Protection

New Zealand must determine whether our health and safety strategy will mainly address the most visible, dramatic, and politically prominent risks or concentrate on the risks that truly cause the greatest level of harm.

Critical risk thinking has value. However, if we allow it to dominate our national approach without recognising its limitations and biases, we risk protecting workers from rare events while exposing them to more common ones.

A truly modern and fair health and safety system must recognise the full spectrum of workplace harm. Illnesses and injuries that develop gradually, invisibly, and unevenly across gendered and marginalised groups are no less a risk to society, and their impact on organisations and the economy is equally significant. Without a healthy, supported workforce there is no growth.

Thank you for considering this contribution to the New Zealand dialogue on the future of health and safety practice.

Sincerely,

Mick Bates

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