



15 May 2023

The Manager
Accident Compensation Policy
Ministry of Business, Innovation and Employment

Email to: ACregs@mbie.govt.nz

Tēnā koe

Seeking proposals for additions to the list of occupational diseases under the Accident Compensation Act 2001.

The Perioperative Nurses College of the New Zealand Nurses Organisation (NZNO), Tōpūtanga Tapuhi Kaitiaki o Aotearoa, welcomes the opportunity to comment on the Ministry of Business, Innovation and Employment (MBIE) proposals for additions to the list of occupational diseases under the Accident Compensation Act (ACC) 2001.

Perioperative nurses promote excellence in nursing practice in the pre, intra and postoperative care of patients. Furthermore, perioperative nursing care is provided in a variety of settings including, but not limited to outpatient departments, day surgery units, intervention and investigative units, radiological departments, surgical inpatient units, operating rooms, and post anaesthetic care units.

Perioperative nurses demonstrate the application of speciality and sub-speciality nursing knowledge in the provision of assessment, therapeutic interventions, treatment modalities, working within an Inter-professional team and appropriate referrals.

NZNO represents nurses, midwives, students, kaimahi hauora and health workers on professional and employment matters. NZNO embraces te Tiriti o Waitangi and contributes to the improvements of the health status and outcomes for all people of Aotearoa New Zealand through influencing health, employment, and policy development.

Proposed additions to the list of Occupational diseases, ACC Act 2001, Schedule 2

The Perioperative Nurses College reinforces *diseases of a type generally accepted by the medical profession as caused by surgical smoke plume, need to be added to Schedule 2 of the ACC Act 2001.*

Surgical smoke plume

Surgical smoke plume is a by-product of the vaporization of tissue with energy-based devices during approximately 95% of all surgical procedures. The plume contains carbon, cellular debris, viral particulates, toxic gases such as carbon monoxide and benzene, and a number of carcinogenic and mutagenic substances. Plume affects both patients and any person entering or working in the enclosed space of an operating room or treatment room where these procedures are occurring. For example, gram of tissue vaporized using diathermy produces plume that is the equivalent of smoking 6 cigarettes in 15 minutes¹.

Blood-borne pathogens may also be present in surgical plumes. Often a noxious odour is emitted within the surgical plume due to the *hot* tool impacting tissue. The visible plume is often referred to as a *smoke* plume. Plume may include visible and invisible aerosol particulates, smoke and gases.

Healthcare professionals in the Perioperative environment.

Perioperative healthcare workers, who are exposed, often complain of burning, running eyes, coughing, sore throat, asthma, allergic reactions, nausea, and headaches, and may suffer the potential of more serious long-term health problems. If doctors, nurses, or others in the contaminated environment, feel sick, are coughing, or have prolonged headaches, they cannot fulfil their most important role in the operating room, safe care, and advocacy for patients during their most vulnerable times. Hence, surgical smoke plume continues to be a concern for healthcare professionals in the Perioperative environment.

Investigations undertaken by the Perioperative Nurses College found that the Clean Air Action within Worksafe² in 2017 did not identify surgical smoke plume hazards nor provide guidelines³ on how to deal with it. The Perioperative Nurses College journal *Dissector*⁴ published an article in June 2017 highlighting the harm of surgical smoke plume; the legislation and risk management processes required to create surgical smoke free environments.

The Ministry of Health, New South Wales, have developed Work Health and Safety – controlling Exposure to Surgical Smoke Plume Guidelines⁵. New Zealand requires the equivalent to support those working in an environment where surgical plume exists.

Furthermore, ACC could be proactive in protecting workers' health and safety by promoting a workplace monitoring / surveillance scheme; improving worker engagement, reporting

¹ Tomita Y., Mihashi S., Nagata K. Mutagenicity of Smoke condensates induced by CO₂-laser irradiation and electrocauterization. *Mutat Res.* 1981;89 (92):145-149.

² Worksafe New Zealand, Blazing train in providing a health workplace for surgical staff (2017). Retrieved from; <https://www.worksafe.govt.nz/the-toolshed/case-studies/work-related-health-case-studies/blazing-trail-in-providing-a-healthy-workplace-for-surgical-staff/>

³ <https://www.stuff.co.nz/national/health/80546628/toxic-hospital-smoke-protection-for-patients-staff-too-slow-Surgeon-says>

⁴ Vollweiler, M. (2017). Is your hospital smoke free? *The Dissector*, 45(1), 12-13.

⁵ Ministry of Health NSW, 'Work Health and Safety Guidance Document - Controlling Exposure to Surgical Plume', (2015). Retrieved from http://www1.health.nsw.gov.au/pds/ActivePDSDocuments/GL2015_002.pdf

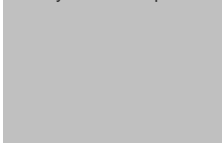
suspected harm with some prospect of it being investigated and workers being eligible for ACC compensation.

The Perioperative Nurses College of New Zealand Nurses Organisation looks forward to Surgical Smoke Plume being considered for inclusion in the list of Occupational Diseases under the ACC Act 2001, Schedule 2.

Thank you for the opportunity to participate in this consultation process.

Yours sincerely

Privacy of natural persons

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Privacy of natural persons

Chairperson
Perioperative Nurses College
New Zealand Nurses Organisation