

# The evolution of the OHS profession in New Zealand

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## 1. Introduction

This article examines the evolution of the OHS profession in Aotearoa New Zealand (hereafter New Zealand) and we argue that development of a profession cannot be considered in isolation at one moment in time. We show that an occupational group develops as a result of historical contextual issues that shape how stakeholders perceive the need for, status, and role of that group, and whether it should be seen as a distinct trade or a profession. We also provide a working definition of “a profession” and outline the early development of New Zealand’s generalist OHS professions in New Zealand. We conclude with a discussion of the key themes and future challenges facing the OHS profession in New Zealand. We commence, however, with a brief explanation of the methodology applied in this exercise.

### 1.1. Methodology

Using a literature review covering 1840–2018, personal enquiries, our own experiences spanning 40 years, and experiences of others, we trace key external and internal socioeconomic and legislative influences that helped delay and then shape the development of OHS as an occupation and, more recently, a profession, in New Zealand.

We use a timeline (Fig. 1) to connect these events with changes in legislation and socioeconomics and the geography of New Zealand to illustrate how these factors influenced the development of safety, occupational health and of the OHS profession. The timeline includes some key dates from the UK and elsewhere that act as reference points.

Geoffrey Palmer (1998), an ex-Prime Minister, noted:

*Sometimes it does us a power of good to remind ourselves that we live on two volcanic rocks where two tectonic plates meet, in a somewhat lonely stretch of windswept ocean just above the Roaring Forties. If you want drama – you’ve come to the right place.*

Such natural hazards can affect safety generally and occupational health and safety specifically in New Zealand – an issue we return to.

We describe changes that followed one man-made and one natural disaster in 2010 that were a turning point in societal safety and OHS and then describe the OHS professions in New Zealand as at mid-2019.

Statistics for workplace deaths, injuries and disease show that occupational disease is the dominant case of deaths in New Zealand. We therefore note that occupational *health* and safety is a recent adaptation of occupational *safety* and health to place greater emphasis on occupational health. This follows the 1995 objectives for occupational health enunciated by the World Health Organization and International Labour Organization:

*The promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations; the prevention amongst workers of departures from health caused by their working conditions; the protection of workers in their employment from risks resulting from factors adverse to health; the placing and maintenance of the worker in an occupational environment adapted to his physiological and psychological capabilities; and, to summarize: the adaptation of work to man and of each man to his job.*

Definition of the term “profession” has been the subject of some debate and so we start with a brief consideration of its meaning. The article then builds from early settlement of New Zealand, through the 20th century, and into the 21st century, weaving in events and changes that shaped OHS over the last 160 years. We conclude with a discussion of work in progress and optimism that deaths of 29 men in one mining disaster may result in greater collaboration between the OHS professions and avoidance of further such disasters.

### 1.2. What is a profession?

Saks (2012) provides an overview of the definition of a “profession”, starting in the 1950s and 1960s with the taxonomic approach centred on knowledge and expertise and that distinguished a given profession from other professions. Characteristics were held to include: playing a positive part in the community; codes of conduct; altruism; rationality

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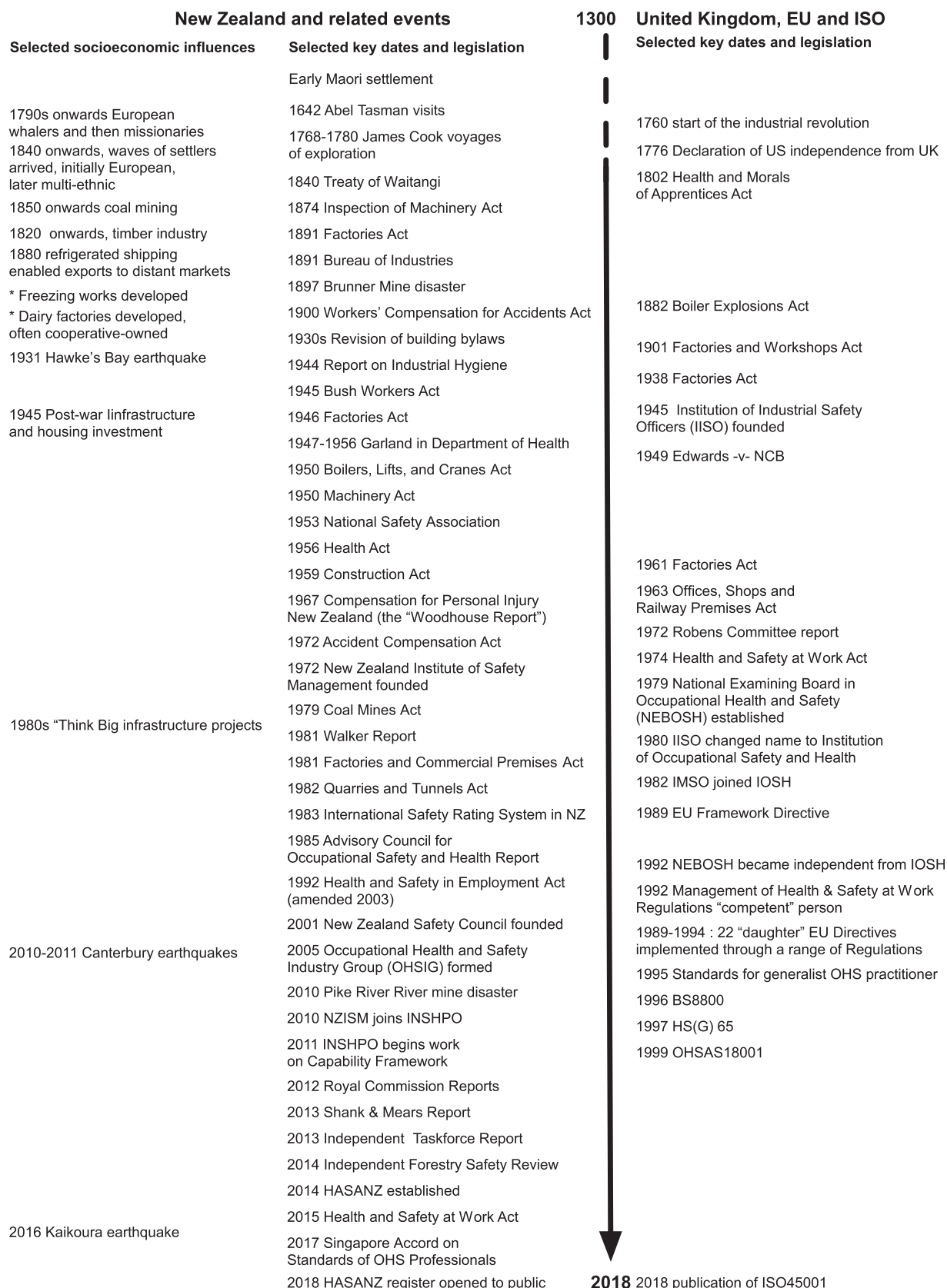


Fig. 1. Timeline for selected influences on occupational health and safety in New Zealand.

and educational credentials (typically from higher education). Saks (2012: 5) argued that “professionalisation can be seen as a socio-political process involving power and interests in the market” for, as

professions develop, they develop their own purposes and discourse that justifies their special status, sometimes in the form of legal protection for a name or status.

The website of [Professions Australia \(n.d.\)](#), a trade group, provides a definition that aligns with Saks:

*A Profession is a disciplined group of individuals who adhere to ethical standards and who hold themselves out as, and are accepted by the public as possessing special knowledge and skills in a widely recognised body of learning derived from research, education and training at a high level, and who are prepared to apply this knowledge and exercise these skills in the interest of others.*

The definition then becomes a description of how a profession should apply its code of ethics.

*It is inherent in the definition of a Profession that a code of ethics governs the activities of each Profession. Such codes require behaviour and practice beyond the personal moral obligations of an individual. They define and demand high standards of behaviour in respect to the services provided to the public and in dealing with professional colleagues. Further, these codes are enforced by the Profession and are acknowledged and accepted by the community.*

Drawing on [Saks \(2012\)](#) and [Professionals Australia](#), we conclude that the hallmarks of the OHS profession will include: higher education necessary to gain a body of special knowledge; skills developed over a period of time; adherence to a code of conduct that is supported by disciplinary procedures; and community service and altruism. We return to these hallmarks when discussing collective professional criteria of the OHS profession in New Zealand.

## 2. Development of the generalist OHS professions in Aotearoa New Zealand

### 2.1. Early influences 1840–1900

Aotearoa – the Land of the Long White Cloud – was originally settled and named by Maori around 1000 CE with intermittent visits by European explorers who renamed the country New Zealand ([Fig. 1](#)). European settlement began slowly in the 18th century until the Treaty of Waitangi was signed on 6 February 1840, commonly regarded as the date when modern New Zealand was founded. By then the Industrial Revolution was proceeding in the UK which already had early OHS legislation in place, albeit poorly enforced.

New Zealand is more than 1600 km north to south, and nearly 20,000 km from many overseas suppliers and customers ([King et al., 2010](#)). In the 1800s, marine transport from those markets could take several months and internal travel between its main centres could take several weeks. Internal travel times reduced with construction of the main trunk railway and roads but each main centre developed its own local character with provincial centres mainly servicing forestry, farming and (on the coast) fishing.

In the period 1840–1900, New Zealand experienced waves of European settlement, land wars and the growth of self-employment in forestry and agriculture ([King, 2007](#)), with the population reaching 534,030 in 1881 ([King et al, 2010](#)). Coal mining started in the 1850s, growing to supply the export and local markets. This in turn enabled a small-scale “industrial revolution” involving industrial engineering for production of agricultural implements and equipment. Initially, sheep farming was for wool production but from about 1880 refrigerated shipping enabled frozen lamb to be exported, supplied from large “freezing works”. Dairying also benefited from refrigeration and enabled development of local dairy factories (often owned by co-operatives) making butter and cheese for export. Some of these industrial sites remained in use until the 1980s.

By the late 1800s larger factories were increasingly common but workplaces were still predominantly small- and medium-sized ([Martin, 1996](#)). Despite the Factories Act 1891 (the first New Zealand OHS legislation) standards of basic health and safety were poor and enforcement of the Act was weak. Furthermore, working conditions and

pay deteriorated and work-related deaths increased during the “Great Depression” between 1870s and 1900s. As a result there were numerous bitter industrial strikes which highlighted the poor OHS standards, putting pressure on successive governments to strengthen OHS law and enforcement, and to provide OHS advisory services ([Davidson, 1945; Hare, 1946](#)). After the acrimonious Maritime Strike of 1890 and the subsequent election of the Liberal Party government there was a concerted effort to improve the OHS of New Zealand workers, particularly those working in dangerous jobs. The Bureau of Industries was established in 1891, becoming the Department of Labour in 1892 and employing inspectors to enforce the Factories Act 1891. There were about 7500 small and medium-sized “factories” by 1900 ([Martin, 1996, pp. 378–380](#)) but the limited number of inspectors meant many went without inspection and, thus, without the provision of OHS-related services by the State.

### 2.2. 20th Century influences 1900–1947

The population of New Zealand passed 1 million in 1908 and the earlier pattern of many small- and medium-sized businesses continued, with OHS-related services provided by the Department of Labour inspectorates. There was a general view that inspectors should have a trade background but there is evidence that some inspectors gained additional qualifications germane to their job, such as the Royal Sanitary Institute qualification and marine qualifications. The 1914–1918 war resulted in the deaths of many tradesmen and professionals and, by the 1930s, the impact of the Great Depression had resulted in a decline in the number of inspectors, halting efforts to improve working conditions ([Martin, 1996, p. 186](#)). Notwithstanding the negative impact of the Great Depression on OHS standards and enforcement, the 1931 Napier earthquake, which destroyed the city centre killing 256 people (many of whom were workers), led to improved building controls, including for new workplaces ([King, 2007, pp. 300–312](#)).

The general response to both natural and industrial disasters was to enact legislation aimed at controlling specific hazards or activities, typically with a range of exemptions, leaving uncertainty about what and who was covered ([Lamm, 2010](#)). For example, the 1897 Brunner mine disaster killed 69 men, leading to the Workers’ Compensation for Accidents Act 1900 ([Campbell, 1996, pp. 14–15](#)); a scaffolding collapse in 1922 that killed four men, leading to changes in the Scaffolding Inspection Act; and the Ballantynes’ department store fire in 1947 that killed 45 people, leading to changes in fire precautions legislation ([Martin, 1996](#)). An apparent emphasis on compensation for occupational injuries appears to have set priorities for compensation rather than prevention ([Lamm, 1994, p. 65](#)).

In 1943 the then Department of Health gained the temporary services of a Medical Inspector of Factories on secondment from the British Ministry of Labour. His report ([Davidson, 1945](#)) covered a cross-section of New Zealand industry. He commented that, although industrialisation was only then starting (relative to the UK), the working conditions of many people were “hot, dusty, laborious, dirty” with workers suffering from “fatigue” and “poor conditions of work”. Legislation was out of date (relative to the UK Factories Act 1938) for the large number of “small factories that frequently require relatively more State supervision and attention to safeguard the health of workpeople than would normally be accorded to larger concerns”, and “inspectors should be specially trained”. Similar concerns were expressed by [Hare \(1946\)](#) who argued the problem included “poorly qualified and motivated factory inspectors in contrast with their British counterparts who were highly qualified, well paid and of high status”, a recurring issue and a significant problem as the State provided OHS services.

### 2.3. The post-war years 1945–1980

The need for more effective, wide reaching OHS-related services

was further confirmed in 1948 when of the “18,000 or so factories registered in New Zealand, nearly 16,000 employed 10 or fewer workers” and would have “rarely, if ever, been visited by an overworked inspector” (Glass, 2003). However, Davidson’s (1945) and Hare’s (1946) reports had laid out the case for a new unit in the Department of Health, staffed by occupational health specialists.

In response to these recommendations Parliament passed or amended six Acts (Fig. 1) and, in the early 1950s, a new unit for occupational health was established in the then Department of Health. The first appointee as “industrial hygienist” was Dr Tom Garland from the UK; his work led to the training of peripatetic occupational health nurses who visited factories (Glass, 2003). Occupational health nurses have since had well-established requirements for professional experience and academic qualifications, now at graduate level. Garland’s work also led to the development of local industrial health clinics for workers. Some of these clinics, such as one in Penrose (Auckland), were still operating in the early 2000s but most had closed by the early 1990s (Beek et al, 1995, p. 183). And although inspectors were now to be qualified, the provision of state-funded OHS services remained inadequate for a rapidly growing and diversifying economy (Martin, 1996, pp. 244–245).

In 1953 the *Workers’ Compensation Board* established the *National Safety Association* to carry out its responsibilities to further the cause of accident prevention in industry (Martin, 1996). As it grew and its staff came into contact with those responsible for safety the need for practitioners to meet together was recognised. By 1962 there were more than 30 New Zealand members of the *Safety Engineering Society of Australasia* and it was considered that a New Zealand division should be established. When formed in 1965, it had 38 members and (in 1975) became independent as the *New Zealand Institute for Industrial Safety*, changing its name to the *New Zealand Institute for Safety Management* (NZISM) in 1977. In the early 1980s NZISM established criteria for different membership grades that included qualifications and experience but, initially, “immigrants from other countries brought their qualifications to New Zealand which, in those days, had none for OH&S” (Jarvie, 2018). NZISM now has more than 1600 members from a wide range of occupations and consultancies.

By contrast, the Institution of Industrial Safety Officers was founded in the UK in 1945, changing its name in 1980 to the Institution for Occupational Safety and Health, with the Institution of Municipal Safety Officers merging with it in 1982. This created a strong, active professional body, able to set professional standards and, in 1979, establish the National Examining Body for Occupational Safety and Health (Fig. 1).

Membership of NZISM ebbed and flowed broadly in line with the economy and emphasis placed on prevention under Accident Compensation Corporation incentive schemes. However, it was not possible to prevent unqualified people from presenting as consultants and after implementation of the 1992 Act:

*Other New Zealand professionals migrated to OHS as consultants. The situation was unregulated, uncontrolled and dangerous. The existing professional bodies sought to reign in the madness by instituting their own internal standards for members. The membership demanded more qualifications, more career pathways and, most importantly, New Zealand qualifications that would be recognisable on an international scene. To this end professionalism was driven by member demand, a need to self-regulate plus add value to members for their membership subscription. (Jarvie, 2018)*

Other professional groups were established around that time. For example, the Ergonomics Society of Australia and New Zealand was established in 1966 and became an independent New Zealand society in 1986, (known as the New Zealand Ergonomics Society). In 1991, it became a federated member of the International Ergonomics Association. Recognition of the increasing need for professionalism of human factors practitioners in New Zealand saw efforts begin in 1996

to establish a certification scheme. The Board for Certification of New Zealand Ergonomists was created in 1997 and began assessing applications in 1998, operating as an independent sub-committee of the main society. In 2012, the Society changed its name to the Human Factors and Ergonomics Society of New Zealand to align with world-wide understanding of the sector.

Investment in infrastructure and housing from 1945 led to the development of some heavy industry and increased construction capability (King, 2007), with some of the larger businesses providing their own occupational health service. Until the mid-1970s, qualified practitioners employed in the private sector were mainly occupational health nurses; OHS consultants at that time often lacked formal OHS qualifications (Beek et al, 1995). Moreover, the management approach to OHS in the 1980s was primarily compliance-oriented, but with foreign-owned businesses and the trade unions having a strong influence on safety performance (McIntosh and Gurdon, 1986).

The influence of foreign-owned businesses in raising OHS standards was apparent in the government-sponsored “Think Big” energy and transport projects during the 1980s, where such companies were heavily involved (King, 2007, p. 417). These projects concluded towards the end of the 1980s, coinciding with economic downturn and restructuring, resulting in a number of specialist OHS advisors and professionals losing their jobs. Conversely, there was steady immigration of qualified OHS professionals, mainly from the UK, who introduced best practices.

#### 2.4. Accident compensation influences 1900–2018

A major influence on the growth and development of the OHS professional and generalist practitioner was the introduction of workers’ compensation and the creation of a workers’ compensation agency. The *Workers’ Compensation for Accidents Act (1900)* introduced an insurance scheme for people while “at work” (a fertile area for legal argument), which, despite many amendments, often left workers without adequate compensation (Campbell, 1996), sometimes with consequences for others, for example:

*In 1919 my maternal grandfather, a sawmill owner and worker, was kicked in the chest by a horse, with his injuries preventing his working for two years; this caused my grandmother to set up an importing business and my mother to leave school aged 14 to care for her father and three younger children. (Brassington, 2019)*

A report by Woodhouse et al. (1967, known as the “Woodhouse Report”) recommended to the government that a national scheme be developed to provide “no fault” universal accidental injury cover for everyone, 24 h a day, seven days a week. The scheme, introduced in 1972, is administered by the Accident Compensation Corporation (ACC), a state monopoly insurer, and covers injury to health as well as bodily injury. It therefore was and remains unique internationally, overcoming some of the issues noted above by Brassington. The scheme prohibits litigation for negligence; this has been claimed to induce complacency about OHS (Peace, 2008), possibly reducing the perceived need for an in-house OHS advisor or a consultant.

Since 1972, various experience-rating schemes have attempted to encourage New Zealand employers to improve OHS and, between 1982 and 1987, the ACC attempted to introduce the use of the *International Safety Rating System*, an occupational health and safety management system framework and audit tool. The system was comprehensive and well-received by NZISM members in Wellington but was perhaps too complex for all but major employers. Development was discontinued because the Government wanted to concentrate OHS in the Department of Labour (Slappendel, 1995, p. 234). Dorman (2000, p. 364) also argued that such incentive schemes are not suitable when dealing with occupational diseases with a long latency period and where workers might move through a number of jobs in a lifetime before showing symptoms. Such occupational diseases were unlikely to be detected



before the development of epidemiological services and may continue to account for up to 700–1000 work-related deaths due to occupational diseases (Allen and Clarke, 2007). Such diseases require specialist knowledge that generalist OHS practitioners may lack.

In the 1980s the ACC had its own safety division whose injury prevention consultants provided free-of-charge advisory services until the advisors were transferred to the Department of Labour in 1992. Evaluation of the unit by Campbell (1996, pp. 224–241) and others noted its positive effects on OHS and lamented its closure. More recently, a “workplace safety management practices” discount (ACC, 2002) was offered and in-house consultants again employed by the Corporation. However, introduction of the *Health and Safety at Work Act (2015)* led to the demise of this scheme in 2018 and redundancies of the consultants, again removing a cadre of OHS advisors.

## 2.5. Attempted reforms 1980–1992

For a population of 3 million in 1981 (King et al, 2010) New Zealand’s OHS legal framework and regulatory agencies can best be described as “Balkanised”, having 14 Acts specifically relating to occupational health and safety and approximately 50 sets of Regulations enforced by six key agencies (Allen and Clarke, 2007). Each of these agencies provided a limited range of OHS services that sometimes overlapped. For example, the Department of Labour was responsible for industrial accidents even if they contained a health component for which the Department of Health was accountable. Moreover, despite recognition in the early 1980s of the need for more inspectorial staff (Walker, 1981), occupational health services remained with the Department of Health with the Department of Labour remaining under-resourced by perhaps 50 percent. As a result, many of the smaller industrial workplaces were rarely visited by those supposed to provide OHS advice (Lamm et al., 2013).

While providing a nod to 20th century Robens-style legislation, the *Factories and Commercial Premises Act (1981)* remained prescriptive and clearly Victorian in its origins. Throughout the 1980s several attempts were made to improve the administration of occupational health and safety services, starting with the report by Walker (1981), advocating “one Act, one authority” (as had been discussed in the UK by Lord Robens et al (1972)). This was followed by the work of the *Co-ordinating Committee of Departments on Occupational Health and Safety* in 1982, and a report from the *Advisory Council for Occupational Safety and Health (1988)* which later also reported on the need for the “one Act, one authority” (Fig. 1).

In 1989, an *Officials’ Working Party and Consultative Group* was tasked with developing the changes necessary for the proposed new Act (Martin, 1996, pp. 356–358), including a policy change that started the move from an advisory inspectorate to a regulatory inspectorate. The review also led to the transfer of Accident Compensation Corporation injury prevention staff and Department of Health occupational hygiene staff to the Department of Labour. Thus, the State employed the majority of OHS practitioners.

An *Occupational Health and Safety Bill 1990* developed by the Labour Government with the assistance of the Trades Unions was introduced to Parliament but withdrawn following a general election. The incoming National Party Government replaced the Bill with the *Health and Safety in Employment Bill*, which passed in 1992. This Act provided a stimulus for provision of OHS advice to employers other than via the State.

In contrast, by 1994 the UK had met the requirements of the European Union Framework Directive and 22 “Daughter Directives”, helping ensure the updating of its OHS legislation and further development of the OHS profession. New Zealand lacked such imperatives and thus the need to train, resource and employ competent OHS practitioners.

## 2.6. Settling in, under-resourcing 1992–2010

The 1992 Act led to consolidation of all occupational health and safety services into one business unit within the Department of Labour and moved towards the Robens-style general duties in the UK HSWA. However, whereas the UK Act used the *reasonably practicable* test, the New Zealand Act used a novel requirement that employers take *all practicable steps* to comply with the required hazard management regime. As a result “enormous time and resources were funnelled into identifying hazards” (Jarvie, 2018) but often without employers proactively managing workplace risks. The high fatal accident rate in New Zealand persisted, in part due to the weaknesses in the legislation, inadequate resourcing of the regulator, and lack of support from many businesses for OHS.

A 2004 report (Driscoll et al., 2004) showed that about 70 people per year were dying in New Zealand as a result of workplace injuries. A further 750–1000 were dying due to occupational disease with about one third due to occupational cancers. On this basis, the 1992 Act was not working.

Wren (1996), reviewing the 1981–1992 reforms and the 1992 Act, found that employers’ groups had lobbied the National Government to “withdraw from any detailed intervention in their affairs” other than to “promote the adoption by employers of ‘risk management systems’” including the *International Safety Rating System*. Although officials subsequently promoted the use of such systems as a means of compliance with the 1992 Act, Wren concluded that OHS had become an industrial relations issue rather than a working conditions issue, moving the need for in-house advisors from OHS to human resources managers.

The New Zealand Safety Council (NZSC, <https://www.safetycouncil.nz/>) was formed in 2001. NZSC recognised the need to raise professional standards and provide a pathway for professional registration and:

*In 2003 a core competency standard was developed with assistance from the American Society of Safety Engineers (ASSE) and National Safety Council of Australia (NSCA). NZSC has mostly aligned its own Registered Safety Professional (RSP) standard with the new INSHPO standard and has migrated its [health and safety professional] marking and grading system to identify key INSHPO criteria. This standard provides a pathway for existing [health and safety professionals] to demonstrate their portfolio of education, experience and competency to gain registration with NZSC. Those falling short are coached and mentored to achieve the desired standard. (Beattie, 2018)*

Where the years up to 1992 had seen work to reduce “Balkanised” legislation and agencies and develop “one Act, one authority”, the OHS professions (already small) were now in danger of becoming fragmented. However, the Occupational Health and Safety Industry Group (OHSIG) was formed in 2005 to enable practitioners to have input into the strategic development of OHS. Initially, it included representatives from the New Zealand Occupational Health Nurses’ Association, New Zealand Institute for Safety Management and the New Zealand Occupational Hygiene Society, and subsequently was joined by the New Zealand Safety Council.

## 2.7. The turning point? 2010–2019

On 4 September 2010, a major earthquake struck Christchurch and the Canterbury region causing widespread damage to workplaces, homes and infrastructure (Gledhill et al, 2010). This was followed by numerous aftershocks and, on 22 February 2011, a further major earthquake that destroyed much of the Christchurch central business district, killing 181 people including many workers (Stevenson et al, 2011).

On 19 November 2010, the Pike River mine exploded killing 29 miners (Macfie, 2013).

These two events were widely reported by local and international media and formed a watershed in public and political opinion, resulting in reconsideration of standards for workplace safety and for building safety.

*New Zealand was in a fascinating position on health and safety at work after the Pike River disaster. After many years where health and safety had a low priority, in the public and political worlds, both spheres were now seized with the notion that 'something must be done'. This was the environment I entered as Chief Executive of the new independent regulator, WorkSafe New Zealand in 2014. (McDonald, 2018)*

The Government appointed the [Royal Commission on the Pike River Coal Mine Tragedy \(2012\)](#), a Taskforce on legislative deficiencies ([Jager et al, 2013](#)) and an independent review of the performance of the OHS regulatory agency at the time of the explosion ([Shanks and Meares, 2013](#)). These reviews accelerated work started in 2005 but now with political and public imperatives.

[Jager et al \(2013\)](#) commented that “there are major capacity and capability constraints among ... health and safety practitioners” (p. 27) and an “objective of the workforce development strategy should be to develop the capacity and capabilities of the health and safety professional sector so that in the longer term some form of occupational regulation or the promotion of a register of practitioners is feasible” ([Jager et al, p. 110](#)) “by the end of 2018” (p. 111).

The proposed registration scheme was to be based on international best practice, run by an umbrella agency for all occupational health and safety-related practitioners (p. 109). Oversight should be by “the new agency ... through the expectations it sets for its own staff’s capabilities [and] the shift in standards for workplace health and safety practitioners that will make possible the occupational regulation or voluntary registration of health and safety practitioners” (p. 108). This would help employers know how to obtain competent OHS advice (pp. 97 and 110).

[Jager et al \(2013, p. 24\)](#) also commented that “inspectors should be highly trained and adequately remunerated, and the role professionalised with a clear competency framework, practising certificates and career pathways”. This recommendation was reinforced by the [Shanks and Meares \(2013\)](#) report to the Ministry of Business, Innovation and Employment that now included the OHS-regulatory unit. The Shanks & Meares report provided “crucial lessons about what it means to be an effective regulator of the mining industry – and of many other industries as well” (p. 5). One conclusion was that “there were actions or (more often) inactions on the part of officials ... that may have contributed to the tragedy”. Shanks & Meares noted (p. 33) that the Royal Commission had “identified training deficiencies for mining inspectors in hazard identification, auditing, workplace culture, management practices, emergency response, inspections and investigations” – basic subjects for any OHS practitioner, let alone those employed by a regulator.

Forestry, which remains one of the most dangerous industries in New Zealand, commissioned the *Independent Forestry Safety Review* ([Adams et al., 2014](#)). One of its recommendations was that there needed to be effective worker participation and representation schemes and a network of trained worker representatives for the forestry industry as well as competency standards required for safety critical roles.

The four reports provided the impetus to establish a well-funded, independent regulator, WorkSafe New Zealand, as well as the enactment of modern OHS legislation, the Health and Safety at Work Act (HSWA) (2015), that reflected the changing nature of work. The HSWA was heavily influenced by the Australian [Model Work Health and Safety Bill \(2011\)](#) in which the emphasis was on managing risk. For the new Act to be successful it would require tertiary qualified OHS specialists, professionals and generalists. The training, qualifications, competency and registration of practitioners (including regulatory staff) clearly required input from the tertiary education and private sectors, an issue we return to later.

In 2014 there was collaboration between the Ministry of Business Innovation and Employment, the member Associations of Occupational Health and Safety Industry Group (OHSIG), which now included the Human Factors and Ergonomists Society of NZ (HFESNZ), Institute of Professional Engineers (IPENZ), the Maintenance Engineers of NZ (MENZ), Occupational Therapy NZ (OTNZ), Physiotherapy NZ’s Occupational Group (PTNZ) and the Australian New Zealand Society of Occupational Medicine (ANZSOM) along with other groups not associated with OHSIG, including the NZ Safety Council and the NZ Institute of Hazardous Substances Management. As a result of recommendations from the independent taskforce review ([Jager et al, 2013](#)) OHSIG was disestablished and reborn as a new organisation initially known as the Health and Safety Professionals Alliance (HaSPA). This new group soon renamed itself as the Health and Safety Association New Zealand (HASANZ, <https://www.hasanz.org.nz/>), and set about developing its purpose and objectives.

A key differentiator between OHSIG and HASANZ was that the new group had formal Government support via the newly formed WorkSafe NZ. Furthermore, the inaugural members elected an independent chair to oversee its activities.

The key objectives of HASANZ are to (1) raise professional standards of the Health and Safety Practitioners and Professionals, described as the supply side, (2) educate the business community about their duties as they relate to health and safety, known as the demand side, and (3) to connect these two groups together. As it set about its work, one of its early projects was the development of a register of OHS professionals.

## 2.8. Corporate governance

A key issue in the Pike River Coal Mine disaster was the lack of OHS knowledge and oversight by the company’s board of directors. In response to this disconnect between the company directors and OHS responsibilities, section 44 of the HSWA sets out the duty of “officers” (ie, directors and executive managers) to apply due diligence to ensure that OHS requirements are being met ([Peace et al., 2017](#)). Guidance on this crucial area was subsequently published jointly by the Ministry of Business, Innovation and Employment and the Institution of Directors (MBIE and IoD, 2013). The [New Zealand Stock Exchange \(2017\)](#) and [Financial Markets Authority \(2018\)](#) have reissued principles for effective corporate governance, both requiring directors to know about risk and its management in organisations they are accountable for.

## 2.9. HASANZ and the register of professionals: 2018

[Jager et al \(2013\)](#) had recommended establishment of a registration scheme by the end of 2018. Funding by WorkSafe (the new OHS regulator) and the Accident Compensation Corporation helped to support the development of HASANZ as an “association of associations”, and the register was opened in July 2018. HASANZ requires that member associations set requirements that members must:

- have qualifications at least equal to New Zealand Qualifications Authority level 6 (certificate or diploma)
- have experience meeting specified minimum requirements
- be participating in continuing professional development
- meet their association’s code of ethics
- be of good character
- hold current professional indemnity and public liability insurance.

These broadly match the hallmarks of a profession suggested by [Saks \(2012\)](#) and [Professions Australia \(n.d.\)](#) (ie, higher education necessary to gain a body of special knowledge, skills developed over a period of time, adherence to a code of conduct that is supported by disciplinary procedures, and community service and altruism).

HASANZ acts as an umbrella organisation for the following OHS-

related professional bodies in NZ:

- New Zealand Institute for Safety Management (NZISM)
- New Zealand Safety Council (NZSC)
- Hazardous Substances Professionals New Zealand (HSPNZ)
- Human Factors and Ergonomics Society of New Zealand (HFESNZ)
- NZ Occupational Health Nurses Association (NZOHNA)
- NZ Occupational Hygiene Society (NZOHS)
- Physiotherapy New Zealand (Occupational Health Group)
- Occupational Therapy New Zealand Whakaora Ngangahau Aotearoa (OTNZ - WNA).

There are four associate organisations: (1) the NZ Institute of Hazardous Substances Management (NZIHSM); (2) Human Resources Institute of New Zealand (HRINZ); (3) Australian/New Zealand Society of Occupational Medicine (ANZSOM); (4) Maintenance Engineers Society of New Zealand (MESNZ). WorkSafe and ACC not only funded HASANZ, but have also funded development of the NZISM Accreditation scheme, the expansion of the accreditation scheme enabling employment of professional support staff and upgrading of its website. As McDonald (2018), the first chief executive officer of WorkSafe NZ, commented:

*To its great credit, the health and safety professionals recognised [the post-Pike River needs] and with the regulator's support and great commitment from many individuals, set about developing competence frameworks under the umbrella of a guiding committee bringing together the interests of all the disparate groups.*

## 2.10. Individual and collective professional criteria

A HASANZ (2017) survey of businesses managers and practitioners revealed confusion and uncertainty around what professional qualifications were needed and what the standards required. Survey responses showed that “Health and safety professionals are looking for a recognised, rounded-out professional standard to measure themselves against”, an issue that was also of concern to the first chief executive of WorkSafe (McDonald, 2018):

*A key ingredient in filling the void of advice on what good, practical health and safety looks like was the health and safety profession. But the 'profession' ranged hugely from narrowly targeted groups with well-established competence frameworks to the more generalist health and safety advisors without such frameworks. And without these there was no way that the punter purchasing services could be assured of their quality. Whilst many advisers were up to scratch, those that weren't were in danger of discrediting health and safety and turning it into an exercise in bureaucracy rather than effective risk management.*

Although Paul and Pearce (2015) had criticised the quality, structure and content of the Safety Institute of Australia *Core Body of Knowledge for Generalist OHS Professionals* (OHS BoK, 2012; now the 2017 edition) it was adopted as the *Occupational Health and Safety Professional Capability Framework* by the International Network of Safety and Health Practitioner Organizations (INSHPO, 2017). NZISM had also adopted the OSHBoK when it went through the process of enhancing its accreditation scheme during 2015 and 2016, and will further develop the scheme to align with the revised OSHBoK (Pryor, 2019).

The Singapore Accord (<http://singaporeaccord.org/web/>) enables organisations and business to show their support and intent to adopt the INSHPO *Capability Framework* as a guiding principle in the development of the OHS professionals. NZISM was an original contributor when the framework was first discussed in 2011 and signed the accord in September 2017. NZISM is pursuing full adoption of the INSHPO (2017) standards and developing its systems to enable the standards to be applied as a tool for grading new members and regrading existing members, thereby providing a competency framework and addressing

the concerns raised by McDonald (2018). As noted, the New Zealand Safety Council has also developed a core competency standard that provides a pathway for existing practitioners to demonstrate their portfolio of education, experience and competency to gain registration with NZSC.

These competency frameworks have been accepted by HASANZ (<https://www.hasanz.org.nz/p./hasanz-register/>) and provide criteria against which members of NZISM and NZSC can be certified. The competency frameworks have differences and both are subject to refinement as the INSHPO and American Society of Safety Professionals and OSHBoK standards evolve. The frameworks are applied to meet unusual (sometimes unique) combinations of qualifications and experience gained locally and overseas by NZ residents and immigrants. The frameworks also provide: members with a personal development framework; prospective employers with criteria to establish job descriptions and judge the competence of prospective employees or consultants; and guidance for local development of tertiary qualifications.

In developing its Certificate and Diploma in Workplace Health and Safety and a Master of Health, Victoria University of Wellington also, in late 2018, become a signatory to the Singapore Accord. This is based on its reference to and use of the INSHPO Framework in the development of its curriculum.

## 2.11. Education and continuing professional development

As a result of the disasters in New Zealand and the law changes outlined above, many public and private organisations are now including OHS management and workers' compensation in their key performance indicators (HASANZ, 2017). This, and pressure from state sector organisations and NZISM and NZSC, is driving demand for undergraduate and postgraduate training.

In the South Pacific region, New Zealand often led the way in developing the OHS professions, including occupational medicine at Otago University almost 150 years ago, and a graduate diploma in OHS at Massey University from the mid-1970s (Quinlan et al., 2010). For many years the Massey diploma acted as a benchmark qualification, later forming part of a suite of OHS qualifications. Other universities have also developed qualifications, some dominated by occupational health, and the Southland Institute of Technology (a Polytechnic) offers a range of courses from undergraduate to degree level. The New Zealand Qualifications Authority (<https://www.nzqa.govt.nz/>) has developed a National Certificate in Occupational Health and Safety that is offered by some industry training organisations.

However, while Victoria University of Wellington will host the WorkSafe New Zealand Chair in Health and Safety (WorkSafe and Victoria University of Wellington, 2019) the academic response has generally been patchy. For example, the University of Auckland and Auckland University of Technology (AUT) offer some OHS-related papers at the undergraduate and postgraduate levels across disciplines as diverse as Engineering and Design, Health Sciences, Law and Management Studies. Nonetheless, these qualifications have enabled NZISM and NZSC to develop and improve arrangements for mapping members' qualifications against its grades.

In the UK the Management of Health and Safety at Work Regulations 1992 (Fig. 1) introduced the concept of a “competent person” to give advice on health and safety. New Zealand has yet to mandate such a specific requirement beyond the general duty for all workers to “take reasonable care that his or her acts or omissions do not adversely affect the health and safety of other persons” (section 45(b) HSWA (2015)). Introduction of a requirement comparable to that in the UK might further accelerate training, education and continuing professional development of OHS practitioners and professionals.

## 3. Current position and interactions

New Zealand now has a population of about 4.9 million. From



personal knowledge, we estimate the total number of New Zealand OHS specialists and generalists to be about 5000, spread across:

- inspectorate services in WorkSafe, Maritime New Zealand, and the Civil Aviation Authority
- health and safety specialists, including occupational physicians, occupational health nurses, occupational hygienists, physiotherapists and ergonomists
- health and safety generalists, including consultants and those employed within organisations.

Historically, New Zealand OHS generalist practitioners and other OHS professions (some very small by international standards) have enjoyed a cordial relationship with each respecting others' specialities. For example, NZISM has recently enabled a nomination from the Human Factors and Ergonomics Society to a joint Standards Australia and Standards New Zealand committee tasked with reviewing an international standard on Human Aspects of Dependability. Many occupational professionals or specialists join multiple associations with, for example, some occupational health nurses being members of both NZISM and the Occupational Health Nurses Association (<https://www.nzohna.org.nz/>).

Development of the UK competency standards were compared by [Faupeel and Harvey \(2002\)](#) to guidance on management systems with, they claimed, the emphasis moving from practitioners absorbing knowledge and demonstrating expertise to showing how health and safety is a management discipline of equal merit and value to other management disciplines. A similar approach is evident in the [International Network of Safety and Health Practitioner Organizations \(2017\)](#) framework. [ISO45001 \(2018\)](#) has replaced much of the earlier guidance on occupational health and safety management systems, and all International Standards Organization management system standards are being structured using [ISO/IEC Annex SL \(2012\)](#) to ensure their consistency and enable their integration within an organisation. This provides an opportunity for OHS professionals to move from subject matter experts to management advisors. Such work aligns with Part C12 in the INSHPO framework where a health and safety professional designs management systems and a health and safety practitioner implements them under the guidance of a professional.

#### 4. Discussion and conclusions

Development of OHS as a profession in New Zealand has been delayed by the influences of its government, geography, history, legislation and economic development. Since 1840 there have been long periods when inadequate provision of OHS-related services by the State contributed to a lack of improvement in OHS. This was especially true between 1992 and 2010 when *laissez-faire* enforcement and underfunding of OHS services contributed to the Pike River disaster ([Martin, 1996](#); [Shanks and Meares, 2013](#)).

As outlined earlier, New Zealand has moved from a system of “government management” of OHS up to 1981, to a partial “tripartite management system” by 1990, and then by 1995 to an “employer hazard management system” ([Jarvie, 2018](#); [Wren, 1996](#)). Following the national crises caused by the Pike River and Canterbury earthquake disasters, the OHS professions had to accelerate work already started in 2002 on developing a professional grading system.

*What has been delivered: a recognised professional grading system, an internal CPD system and NZ qualification system that is largely based on the work from INSHPO and the just released independent register of verified practitioners – all this in 10–15 years (Jarvie, 2018)*

[McDonald \(2018\)](#) had a guarded view of these considerable results but over a shorter timescale:

*The test of the effectiveness of the health and safety professional*

*community cannot be assessed yet – the whole health and safety system in New Zealand is still developing. But the strides made in unifying the professional groups, developing competency frameworks and registers of ‘assured’ professionals from which businesses could select with a degree of confidence, all in a matter of roughly 2 years, felt like real progress.*

Moreover, it is argued that there is still a need to develop “special knowledge and skills in a widely recognised body of learning derived from research, education and training at a high level” held by a disciplined group of individuals “who are prepared to apply this knowledge and exercise these skills in the interest of others” (Professions Australia, n.d.). Economic, social, technical, and environmental changes will require that OHS practitioners be well-educated and outward looking if they are to provide the necessary thought leadership to employers. This will require management and analytical skills beyond those traditionally forming part of their training and continuous revision of INSHPO standards and tertiary education. Recent research and anecdotal evidence, for example, suggests a widespread lack of knowledge among OHS practitioners of the assessment and management of risks, a fundamental requirement of the current OHS legislation. Of particular concern is the lack of knowledge in some OHS generalist practitioners (often not members of NZISM or NZSC) of risks due to occupational exposure to substances, and subsequent latent disease.

Nonetheless, progress has been possible due to earlier developments in other countries but has been achieved in eight years as compared with about 25 years in the UK ([Fig. 1](#)). The necessary improvements in workplace health and safety that New Zealand aspires to will need to be achieved through the collaborative efforts of government, business, tertiary education and the health and safety professions. These need to include closing the capability and capacity gaps identified in the Taskforce report ([Jager et al, 2013](#)), contributing to professionalisation of OHS practitioners, and so helping build confidence with business and creating pathways for professional development. We are optimistic that changes following the Pike River disaster will continue to enable closer development between the OHS professions. Finally, as we have highlighted, what makes New Zealand unique is that most of the OHS professional groups are very small by international standards, thus providing opportunities for closer working and integration of services.

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#### Appendix A. Supplementary material

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.ssci.2019.07.005>.

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