3M Transcript for the following interview: Episode 88 - WorkSafe NZ Work-Related Health Strategy

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Welcome to the 3M Science of Safety podcast presented by 3M Australia and New Zealand Personal Safety Division. This is a podcast that is curious about the science and systems of all things work, health and safety, that keep workers safe and protect their health. I am Mark Reggers, an occupational hygienist, who likes to ask the questions Why, How, and Please Explain. Whether you are a safety professional, occupational hygienist, or someone with any level of WHS responsibility in the workplace, maybe you are a user of safety equipment or maybe you are a bit of a safety nerd who finds this stuff really interesting, then this is a podcast for you.

(R) Today, we're talking about the WorkSafe New Zealand Work-Related Health Strategic Plan with Kerry Cheung. Welcome, Kerry.

(C) Thanks, Mark. Glad to be here.

(R) I've been hanging out for quite a while to do a New Zealand focused podcast. I haven't forgotten about our friends over the ditch, so great to have you here.

(C) Thank you very much, Mark.

(R) So, for our listeners, can you please introduce yourself? Who are you, where are you from and what do you do?

(C) I'm an Occupational Hygienist and I'm also a Technical Specialist in the Work-Related Health team at WorkSafe New Zealand, who is the government regulator for workplace health and safety. I provide subject matter expertise in the area of health risk management and occupational hygiene and I'm based in Christchurch, New Zealand. A little bit about me; I started off as an occupational health researcher at the Centre for Public Health Research at Massey University where I worked on various studies. Most notably, I worked on an intervention study at New Zealand joineries and furniture making factories using real time video exposure monitoring. After about five years and hundreds of samples later, I discovered what I was doing had another name, which was occupational hygiene. So, I got really interested in this field and while I was on my overseas experience in Canada, I worked as an occupational hygiene advisor in the healthcare sector. After my OE, I came back home and worked as an occupational hygiene consultant before joining WorkSafe New Zealand. It's been really exciting coming home to an increased focus in work-related health and occupational hygiene in the recent years.

(R) This is part of why I wanted to focus on what's been happening in New Zealand, because over the last couple of years, I know being in Australia, there definitely seems to be much more focus on work-related health and occupational hygiene capability in New Zealand. But for a background, what has led up to this being the case in your area?

(C) Yeah, so it all started with the Pike River Coalmine tragedy back in 19th of November 2010, where there was an underground explosion at the Pike River Coalmine. 29 men lost their lives. This operation involved the New Zealand Police leading the emergency response, mines rescues crews from New Zealand, New

South Wales and Queensland. But despite this string of efforts by everyone involved, a lack of information concerning the conditions underground prevented a rescue attempt. So, subsequently, there was a second explosion on the 24th of November and that extinguished any hope of the men's survival and it turned into a recovery effort after that.

(R) It's unfortunate it takes sometimes a tragedy like Pike River to initiate change. What were some of the actions that took place?

(C) So, after the Pike River tragedy, there was a Royal Commission which led to a standalone health and safety regulator, WorkSafe, and new legislation, so the Health and Safety at Work Act 2015. This is based on the Australian model health and safety law. One of the recommendations in the Royal Commission Report was the ... first recommendation to improve New Zealand's poor record in health and safety, a new crown agent focusing solely on health and safety should be established, so that's why WorkSafe New Zealand was born. Following Pike River, the report on the independent task force on workplace health and safety recommended the establishment of a register of health and safety practitioners. Also, the New Zealand government's resulting 'Worker Safer' package of reforms in 2013 included a commitment to set up a representative body for health and safety professionals to help prevent serious harm and fatalities at work. So, at the end of 2014, WorkSafe helped to set up HASANZ which stands for the Health and Safety Association of New Zealand, which is a professional body association for all New Zealand health and safety practitioners. Also set up was a register of competent people at the end of 2014. So, the aim of HASANZ is to raise professional standards across the occupational health and safety sector to provide healthier and safer workplaces for New Zealanders.

(R) There's a lot of work that's been happening in New Zealand around health and safety. However, could you comment on the recent focus on occupational health?

(C) The focus on work related health is attributed to Worksafe's strategic plan for work-related health 2016 to 2026. We had been making good progress in addressing work-related safety incidents and acute harm, but the health and safety system has so far failed to adequately address work-related health risks and the harm associated with them. This is despite an acknowledgement that the broader impact on our country from work-related ill-health is significant, and even greater than that from acute work-related injuries. Latest estimates indicate that work-related health deaths are 750 to 900 a year, which is approximately 15 times higher than deaths from acute harm or injury.

(R) You mentioned the term 'work-related health' quite a few times. Is this different to the term 'occupational health' that probably a lot of our listeners are probably more familiar with?

(C) In the past, we've called it occupational health, as it's more commonly known. In essence, it's the same thing as occupational health. We now use the term 'work-related health' to describe the impact work can have on people's health and the impact a person's health can have on their or other's safety at work. So, we use the term 'work-related health' to differentiate it from workplace health promotion and wellbeing.

(R) I've seen some of the New Zealand documents and they've got some good graphics explaining the effects of work on health and the effects of health on work and that two-way relationship. So, definitely, if people are interested to find out more, we'll provide some of those links available in our blog post. Now, a scary statistic you just mentioned before that people are more likely to die from a work-related health scenario than from acute harm or injury. Do you have more information about the burden that New Zealand has had from these work-related health scenarios?

(C) Yeah, so WorkSafe recently revised its work-related health estimates to take into account new international research and other information to inform decisions to improve worker health. What makes up that 750 to 900 work-related health deaths a year are mainly caused by cancer, which makes up about half of the work-related health deaths, chronic obstructive pulmonary disease or COPD, which makes up about 200 deaths and these could be attributed to exposure to vapours, dust, gases and fumes. Ischemic heart disease makes up about 80 of those deaths from exposure to low job control and second-hand smoke, and asbestosis accounts for 30 deaths per year, obviously from exposure to asbestos. Furthermore, in addition to the 750 to 900 people or workers who die per year from work-related health disease, there's an estimated 5,000 to 6,000 hospitalisations each year due to work-related ill-health. A third of these are caused by cancer. Think of non-melanoma skin cancer or lung cancer, but the majority or two thirds are caused by non-cancer, so that's made up of COPD, ischemic heart disease, asthma, depressive episode and on a small scale, anxiety disorder. Yeah, I did mention that a worker is 15 times more likely to die from a work-related disease than from a workplace accident, and this figure can vary also within sectors. For instance, a typical construction worker is more than 20 times more likely to die. So, you mentioned the burden of harm, and to estimate the burden of harm, WorkSafe has applied a statistical measure of the quality and length of life lost to injuries, illnesses, using work-related health estimates and burden of harm estimates. So, this measure is called a disability adjusted life year or DALY. So, this measure of DALY's loss puts a value to the burden of harm from work-related ill-health and injury.

(R) Could you please explain what a DALY is?

(C) So, for those who don't know what a DALY is, the DALY is expressed as a number of years lost due to ill-health, disability or early death, so therefore, one

DALY can be thought of as one lost year of healthy life lost by virtue of being in states of poor health or disability or even premature death. So, our figures show that acute injuries, including fatalities, account for just 11% of the annual work-related DALYs lost. Therefore, the remaining 89% of the burden is attributed to ill-health. We have calculated that 50,000 work-related DALYs are lost annually and this translates into a social cost of at least $2 billion each year.

(R) And that underpins why WorkSafe New Zealand came into existence from that Pike River tragedy, that all the effort is to prevent injury and harm to people and not have that effect years down the track, and that's a challenge, I think, for all of us in the hygiene space and the health space, is getting the workers to appreciate it. It may not feel like that little bit of exposure is making a difference as an individual exposure, but collectively and accumulatively, there's a huge impact on society. Now, you mentioned a lot of potential health hazards there when we talk about different cancers and asbestos and heart disease. But are there any key hazards that WorkSafe New Zealand is actually focusing on to really address this impact for your country?

(C) Yeah, Mark. So, based on the burden of harm estimates I've just mentioned, at the end of 2019, we began developing a three-year action plan for work-related health with a focus on the three priority task areas, which is based on carcinogens and airborne risks which account for 16% and 14% of the burden of harm respectively. However, because of the overlap that most occupational cancers are caused by airborne risks, together, they make up the largest burden of harm at 30%. Musculoskeletal is second highest at 27% and mental ill-health is third highest with 17% of the burden of harm.

(R) So, there's a lot of things that you guys are going to be focusing on in the next three years, but I just wanted to find out a bit more about that HASANZ register. I know it's something I've heard mentioned and quoted a few times in my travels

here in Australia, but can you explain what that actually is in a bit more detail, and how that is actually going to impact and help workplaces?

(C) Yeah, so, in response to the Independent Taskforce on Workplace Health and Safety, following the Pike River disaster, HASANZ was set up. The Taskforce identified a specific issue with the quality, capability and capacity of the New Zealand health and safety professions. The Taskforce found that many companies were receiving advice from people without qualifications or capability, which undermines trust in the industry. As a result, the Health and Safety Association of New Zealand was established at the end of 2014 with the help of WorkSafe. HASANZ developed a national online register of verified workplace health and safety professionals. Independent consultant and in-house professionals, generalists and specialists who meet the required competency standards of a HASANZ member association can list on the register. So, some examples of the HASANZ member's associations include the New Zealand Occupational Hygiene Society, New Zealand Occupational Health Nurses' Association, New Zealand Institute of Safety Management etcetera.

(R) I quite like the concept of a location to find a whole range of health and safety professionals, because it can be quite confusing if you don't know what you're looking for. So, I think that's actually a really good concept. Now, you mentioned before that there's obviously this WorkSafe New Zealand focus to improve occupational health capability and occupational hygiene capabilities. But what are some of those key things that are actually being done? It's great to say we want to do these things, but what are those steps that are being undertaken?

(C) Yeah, there's a few things that WorkSafe has done. Just to list a few of them; WorkSafe carried out a horizon scan of the occupational hygiene workforce in 2018. Findings from that report included at the time there were about 83 total members of the New Zealand Occupational Hygiene Society with 30% of the

members being full or fellow members, 22% technician level and 48% associate. So, comparing those numbers to other countries per capita, New Zealand had fewer total members than the UK, Australia and the US. We had about half the number of fully qualified occupational hygienists compared with Australia and Canada for which we had data for, and certainly fewer certified occupational hygienists per capita than these countries. The report also identified a few issues. First, the occupational hygiene workforce in New Zealand faced issues of critical mass. So, this means that there are insufficient number of people and resources not only to deliver services but also to educate and train the next generation and maintain professional standards. Second, there were general capacity and capability issues. A lack of pathways for education, training and work experience restricted the development of early career occupational hygienists or those interested in becoming hygienists. There are also overall shortages of appropriately trained and experienced people to carry out technical tasks and assessment and monitoring relating to specific hazards and a lack of appropriate networks of supervision and mentoring for the technical workforce. Third and finally, there are information and access barriers. Overall, there is poor understanding of the role of occupational hygienists and of responsibilities regarding hazard assessment and exposure monitoring.

(R) “The report identified some gaps in occupational health and hygiene capabilities in New Zealand. What was done to address them?

So, the things to address these issues and improve occupational hygiene capability in New Zealand was HASANZ as I just mentioned. HASANZ released a scholarship program back in September 2018, so they raised about a quarter of a million dollars for a two-year program and received over a hundred applicants and ended up appointing 19 scholarships. In 2019, this scholarship program continued and HASANZ supported diplomas for practitioners and postgrads. However, in the future, they'll also be supporting applied research and focusing on vulnerable areas

such as Maori and Pasifika people. Going back to the horizon scan report I just mentioned, there was a successful case to the Intervention Advisory Committee to fund a three-year project for HASANZ and the New Zealand Occ Hygiene Society to build occupational hygiene capacity and capability. So, this funding is supporting a project undertaken by HASANZ and the NZOHS to increase numbers of qualified occ hygienists and to build awareness and technical skills in occ hygiene. So, from the report to June 2019, the number of qualified occupational hygienists in New Zealand had increased from 25 to 32. So, to meet parity with Australia on a per capita basis, this would require at least 45. Additional module-based courses in occupational hygiene topics had been run, so these are the OHTA courses that some might be familiar with. And progress has been made on a collaboration with an Australian university to run a master's program in occupational hygiene through some New Zealand universities.

(R) That's the education and training side covered to train new occupational hygienists and build up capacity in the future. But what was done for the existing professionals?

In 2017, WorkSafe held workshops around the country aimed at providers of exposure monitoring services. Included in these presentations to occupational hygienists were the legal duties as per the Health and Safety at Work Act and the General Risk Workplace Management regulations. Competency expectations were discussed as well and what was also expected in occupational hygiene reports. In an ongoing project from 2018, we decided to do a stocktake to identify all individual companies that provided occupational hygiene or exposure monitoring services and engage with these providers one-on-one. The one-on-one engagements compared with the group workshop allowed us to communicate directly and more effectively our expectations, have an actual conversation with a consultant, and achieve better outcomes. As a result, we've seen some people take

on more training in mentorship and we've seen some bow out of the occupational hygiene industry. The outcome is that down the track, we'll get more well-trained and skilled occupational hygienists in New Zealand. We've also been stepping up in our external engagements with presentations on various topics such as health risk management and accelerated silicosis. We've also been providing inputs in our guidance material for businesses on a range of things like welding fume, vibration, exposure monitoring and health monitoring. Internally, we've been providing our inspectors with work-related health training through workshops, developing health risk management practice guides and silica assessment tool, also providing ongoing technical support.

(R) So, to say you guys have been busy is a bit of an understatement, I think. That's actually a lot of stuff that's actually going on there, which is great, obviously highlighted by the impacts of not having these capabilities. Now, I know WorkSafe New Zealand also has a strategic plan for work-related health, a 2016 to 2026 plan. Are there any key things you'd like to highlight from this particular document?

(C) Yeah, it starts off with the vision that we have which is everyone who goes to work comes home healthy and safe. So, ultimately, this means fewer people experiencing work-related ill-health. That's our target. This explains the outcomes needed by 2026 if we are to achieve this. Improved awareness, attitudes and behaviours around work-related health and through these, better management of work-related health risks and reduced exposures to health hazards. There are three strategic themes in the plan. The first is industry leadership, so it includes things like increasing awareness, encouraging participation and learning with the PCBUs and workers, partnering with others to enable collaboration across industry, government and society, health by design by educating and encouraging upstream PCBUs to eliminate or minimise risks at the source, workforce development through improving work-related health risks through the education system which affects the supply and demand of health and safety professionals. The second

strategic theme in the plan is regulatory effectiveness. These include improving our organisational capability, provide better guidance and educational resources, use research and intelligence to capture, analyse and report work-related health data and prioritise the work-related health risks and regulatory tools and frameworks. And thirdly, step change; we want to implement a series of targeted intervention programs designed to prioritise work-related health risks. For example, the first targeted program was on airborne risks and that was our Clean Air program. The second targeted program was on managing noise risks at work. And another example was a project looking at reducing the burden of harm in the three areas as mentioned before, so that's respiratory disease and cancer, musculoskeletal and mental harm.

(R) So, as an occupational hygienist working for WorkSafe New Zealand ... and you've covered a lot of things that's going on ... what does your day look like? How do you personally support all these objectives?

(C) Yeah, in the Work-Related Health team at WorkSafe, occupational hygiene is 100% of what we do. We're all occupational hygienists and we employ the identification, evaluation, control, review and communication of work-related health hazards and risks every day. We've had some input in one way or another in all of the things I have just mentioned today. But to sum up the day-to-day stuff, things we do include things such as external engagements through conferences, seminars, workshops, presentations and overall being active in the work-related health community such as being on this podcast. There will be various work-related health initiatives and projects we'll also be involved in as well. Every year, we review the workplace exposure standards and biological exposure indices. We provide subject matter expert advice and provide training for inspectors in work-related health. We also provide subject matter expert advice for other departments within WorkSafe, for example, guidance and education materials, investigations

and prosecutions such as the first work-related health prosecution under the Health and Safety at Work Act.

(R) So, you are one busy hygienist over there in New Zealand with the rest of your team there, so it's really exciting to actually hear all the things that have come out of unfortunately a tragedy, that there's a lot of fantastic initiatives that are happening. But to try to sum it all up in one or two key takeaway points for our listeners in New Zealand and maybe people from other countries that you've taken this process, what would that be?

(C) Health is just as important as safety, if not more and New Zealand workers are 15 times more likely to die from work-related disease than from a workplace accident.

(R) That's the challenge of all health-related areas. I know speaking for myself as an occupational hygienist and others, that's that challenge of that education and communication that it does make a difference and it has a bigger impact on people's lives than what they probably give it credit for. So, thank you so much for coming on. But for those that do want more information, because I'm sure that there are people out there, where can people go and get that?

(C) First of all, thank you Mark for having me on your podcast. For people who want more information, head to our WorkSafe website which is worksafe.govt.nz.

(R) And if people want to get in contact with yourself directly, how would be the best way to do that?

(C) Easiest is probably to look me up on LinkedIn. I'm pretty active on there, so yeah, just flick me a message.

(R) Thank you so much for your time today, Kerry.

(C) Thank you, Mark. It's been a pleasure.

(R) Well, thanks for listening, everyone. You can get into contact with the show by sending an email to scienceofsafetyanz@mmm.com if you have any questions, topic suggestions or guests you think would be great to get in the studio, or if you need any help in your workplace around the appropriate selection and use of PPE, 3M are certainly here to help. You can also visit our website 3m.com.au/sospodcasts for further resources on what we've been speaking about today with Kerry, as well as the transcript and information and all the episodes we have recorded so far. Be sure to subscribe, rate, review and share through Apple Podcasts, Spotify, Google Podcasts or wherever you get this podcast from. And as Randy Pausch said, "Experience is what you get when you didn't get what you wanted." Thanks for listening and have a safe day.