Understanding hearing loss

While many Forum members understood the general issues around hearing loss, a number said they had difficulty getting some people in their organisations to comprehend the long-term damage that excessive noise can cause. Here are two organisations which found ways to work around this.

"Noise is one of the risks that is not identified on site and is often forgotten. We found further education was needed to help all workers understand the damage that longer term excessive noise exposure can have to their hearing. One way we did this was to send out a noise induced hearing loss audio clip¹ (from the Health and Safety Executive in the UK) to all our contractors – it takes just four minutes and is such a simple way of showing damage to hearing over time."

Tracy Gorry, Manager of Health and Safety, Wellington Water



"It's important to put yourself in the workers' shoes – get out into the workplace with your people and get a good idea of the noise levels they're exposed to. Balance the use of fixed position noise monitors with individual noise exposure to fully assess the noise risk. One example I've used previously to raise awareness of noise risks, is to ask leaders to wear non-attenuated hearing protection through part of a meeting to simulate the impact of hearing loss. The same could be done at a toolbox talk for team members who might not fully appreciate the risk of noise."

Snane Lewis, National HSE Manager, Electrix



Testing – employees and on site

A number of Forum members reported that while they performed baseline hearing tests on employees on arrival into their organisation, in many cases these were never followed up or checked regularly. These organisations are changing that.

"We're going to formalise health hygiene monitoring processes including regular personal and static noise sampling to measure the levels of noise our people are exposed to, particularly excessive noise levels – 85dBA and above over 8 hours."

Tracy Gorry, Manager of Health and Safety, Wellington Water



"We introduced internal and external tests to check high noise levels. We were surprised to find that actually the machinery itself was quiet, but there were loud peaks in the noise. This helped us to identify solutions, rather than just assuming the entire work site had excessive noise during the 8-hour work day. We also got our staff involved by discussing the test results at toolbox talks and asking for their feedback."

Tracy Richardson, HSE Manager NZ, Bridgestone



1/3

of hearing loss is **preventable**

Safety by design

Ultimately the best way to eliminate the risk of noise-induced hearing loss is to remove the noise at source – such as choosing the quietest equipment for the job when designing new plant or equipment.

"Watercare has a deliberate design goal to ensure that all new plant and equipment has a noise output below 85dBA. We ask these questions in the design risk assessment:

- a. Can the noise be eliminated?
- b. If not can the noise be isolated at source?
- c. If not can the workers be isolated from the noise?
- d. PPE is only to be prescribed in conjunction with higher level controls it is not acceptable as a single control.

Recently we ensured we factored noise into the design of a new blower room. Previously the old blower room was extremely loud – now you can have a whispered conversation in the new room."

Emma Simm, Health and Safety Business Partner, Watercare



Where new plant or design is not an option, other solutions may be possible.

"We perform a task of chipping out concrete bowls which involves a metal chisel striking a bowl producing a high level of noise. In addition to reducing exposure time and provision of maximum level hearing protection we have taken further steps to address the source of noise through noise mitigation baffles. The baffles are magnetised so are placed on the internal ceiling of the concrete bowl in the immediate area above and to each side of the person completing the chipping. A number of tests were completed to determine their effect and it was shown that the highest peaks were up to 5dB lower with the baffles in place."

Kyle Earnshaw, H&S Advisor, Allied Concrete



Thank you to Forum members for sharing their initiatives to manage the risk of noise in their organisations. Thank you to the National Foundation for the Deaf for their support with this work.





WHAT'S YOUR NOISE PROBLEM?

At a glance – what we've learnt.

At our May 2018 Summit we launched the CEO *What's your noise problem?* and the *Monitoring What Matters Health and Noise* guide to help you assess noise-related risks in your business. We can now report back on some strategies that are working for Forum members to reduce their noise problem.

"Noise is one of the risks that is not identified on site and is often forgotten. We found further education was needed to help all workers understand the damage that longer term excessive noise exposure can have to their hearing."

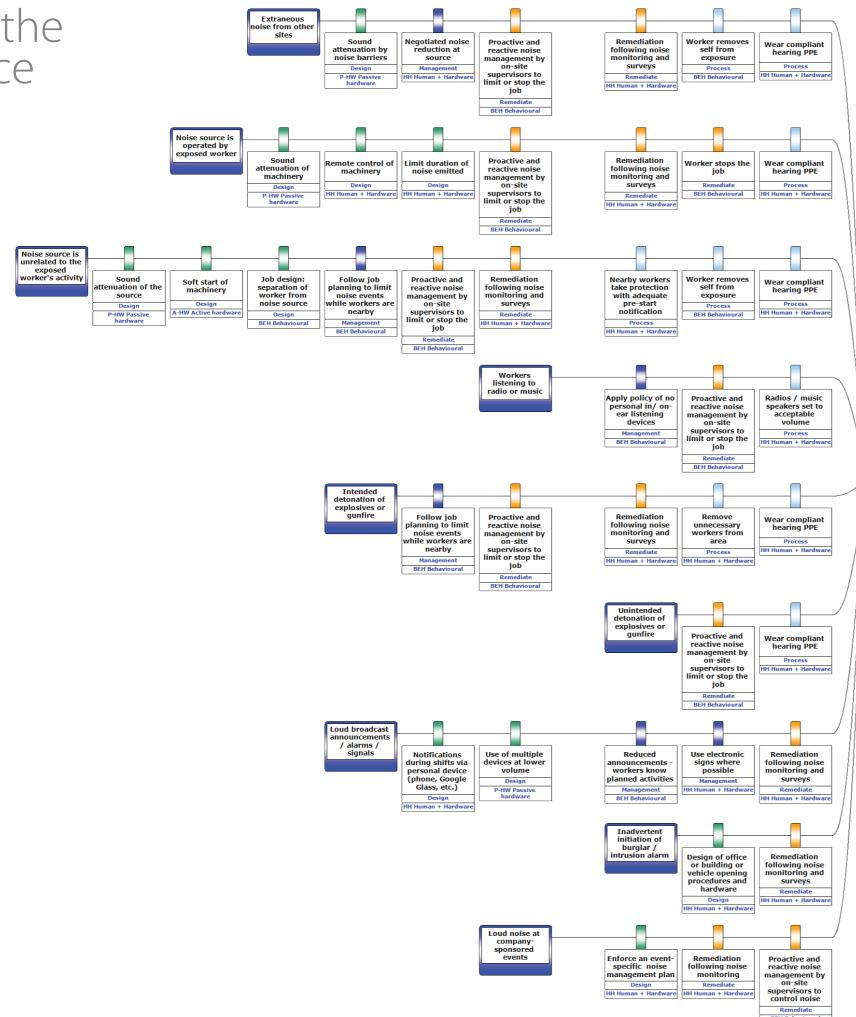
1 www.hse.gov.uk/noise/audio/noise-induced-hearing-loss.mp3

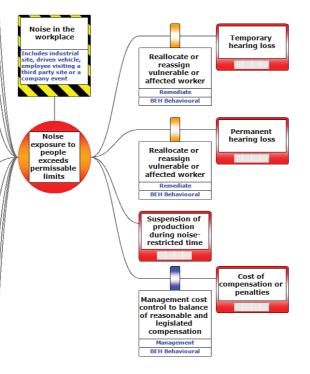
www.zeroharm.org.nz

October 2018

Noise in the workplace

Example bow tie





Please note this is an example bow tie developed to spark a conversation about managing the risk of exposure to high noise levels. It should be used as a guide only to develop your own bow tie or risk model to manage this health risk. Thank you to CGE Risk for developing this example for Forum members during our noise and bow tie sessions in August 2018.