

Case study: Partnering for innovation – Delta Utility Services

The problem

Delta Utility Services identified hand, arm vibration as a health hazard to its employees who work in their civil and environmental businesses. These staff operate various types of machinery (including weed eaters) for up to eight hours a day for weeks at a time over the summer months. They also have staff in workshops operating grinders and hand tools who are impacted by hand, arm vibration issues. Long-term exposure to vibrating machinery can cause hand, arm vibration syndrome (HAVS) and results in a condition known as white finger. HAVS impacts blood flow to the hands and can cause numbness, loss of colour and loss of dexterity in the fingers.



Weed eating in Queenstown

While Delta was starting to look at investigating the health impacts of vibrating equipment, Jason Johnstone contacted the health and safety team. Jason had been medically discharged from his job at another organisation as a fitter/turner as a result of HAVS and had been developing a measurement device and software to monitor this hazard. He was keen to work alongside a business to test his equipment and Delta were keen to gather some data on this hazard - a perfect fit!

The solution

Delta helped Jason trial the device 'in the real world'. Staff provided valuable feedback about the robustness of the device for use in the field. They also helped him refine the app he had developed to make the data easier to interpret once collected. The Delta SWAT teams (action-oriented H&S Reps) could see the value of the data that could be collected. They were instrumental in trialling the device and thinking about ways the work could be done to eliminate the vibration hazard.

The main benefit of the partnership was having a NZ made tool to gather



Remote mowing

data. The data showed that the hazard needed to be addressed and resulted in new robotic mowers being purchased and used by the business. This eliminated the vibration hazard and also removed the workers from other hazards (such as wasps, working on slopes, sun exposure etc).

What we learned

The hardest thing about this innovation was accepting that (like all good things) it would take time. Delta had no investment in the technology so were happy to work alongside rather than lead the innovation. Although this was the hardest part of the project, it had a lot of benefits. The longer time frame allowed those involved in the project to 'stay in the problem' and resist grasping for solutions. It created space to understand the context of the problem and therefore pushed the team to better outcomes.

The key to success for this project was trusting that the solution to the problem was within the business. The partnership and innovation allowed data to be gathered but the solution to address the hazard was investigated and proposed by the workers who do the work. The role of those who support the workers (H&S personnel, managers etc) is to create the space for the workers to find the right solutions. This involves listening, giving time and accepting that we need to keep learning.