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A person with narrow vision has a restricted horizon; a person with wide vision has plentiful opportunities

# From reactionary to proactive management: The risk posed by whole body vibration in a landfill environment

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Landfill operations present a unique and high-risk environment for Whole Body Vibration (WBV). Heavy plant operators—particularly those manoeuvring compactors, excavators across waste—are frequently exposed to high levels of vibration. These are particularly prominent in the side-to-side plane due to the inherent instability of uneven waste surfaces and repetitive operational patterns. This presentation explores the lessons learned over time from a multi-year program dedicated to understanding and mitigating WBV risk, aligning with the conference theme of learning from the past to lead in the present.

The evolution of our approach reflects a transition from reactive compliance to proactive, data-driven health management. Initially, risk was viewed through a narrow lens of equipment age and occurrences of injury but exposure assessments revealed that technical specifications alone were insufficient predictors of operator exposure. Through consistent assessments, three critical aspects emerged: the mechanical condition of the seating systems, specific operator training, and the systematic management of health outcomes through early intervention.

The outcome from these interventions led to slow change in vibration levels and a downward trend in reported musculoskeletal discomfort such as back pain. Key findings highlight that even new machinery can fail to protect operators if seat suspension is not used correctly or operation of the machines exceeds the capability this engineering control can provide.

This session outlines the roadmap we followed in applying the hierarchy of controls to an "invisible" hazard. The takeaway is clear: to ensure we protect the future of worker health, we must move beyond assessments as a snapshot in time and embrace an approach that integrates engineering controls with empowered workers through training along with ongoing health surveillance. By treating all hazards as dynamic rather than static, we can significantly elevate the standard of long-term occupational health.