

¹I Laird*, ²D McBride, ¹S Legg, ³P Dickinson, ³S McLaren, ⁴D Gardner. ¹Centre for Ergonomics, Occupational Safety and Health, Massey University, Palmerston North, NZ; ²Preventive and Social Medicine, Dunedin School of Medicine, University of Otago, Dunedin, NZ; ³Environmental Health Group, Institute of Food, Nutrition and Human Health, Massey University, Wellington, NZ; ⁴School of Psychology, Massey University, Albany, Auckland, NZ

Background This paper reports on the second part of a major study in New Zealand to identify effective strategies for the prevention of noise induced hearing loss (NIHL).

Aims/Objectives/Purpose The objective of the project was to evaluate existing work-related interventions to reduce NIHL, to identify critical factors in the development and implementation of such strategies, and to propose strategies/interventions where current interventions are considered ineffective. In addition, the research examined those aspects of workplace culture that affect decision-making around NIHL.

Methods A systematic review of the research literature was completed specifically focussing on the effectiveness of interventions in the prevention of NIHL. Data collection involved surveys of specific industry sectors with 'high, medium and low' risk of NIHL. In addition to area noise measurements and personal dosimetry, assessments of the organisation's conformance to current noise management standards and safety climate data were undertaken.

Results/Outcome Five key effective strategies were identified from the literature. As anticipated, area and personal noise exposures were found to vary considerably within the 'high risk' (agriculture, manufacturing and construction; range: LAeq 8 h 80–90 dB), 'moderate risk' (cafes and restaurants) and 'low risk' sectors (pre-schools; range LAeq 8 h 70–80 dB). Most enterprises surveyed did not conform to the specific requirements of the noise management standard (Code of Practice). Safety climate was not the major factor in noise management within the enterprises.

Significance/Contribution to the Field The research provided disappointing evidence on the implementation of noise management strategies in NZ businesses. As a consequence of the research, a comprehensive multi-level intervention strategy is proposed.