

Theory-based health communication interventions to prevent NIHL

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Worldwide, the prevention of noise-induced hearing loss (NIHL) is a priority for occupational health research, policy and practice. Good quality studies of interventions promoting the use of hearing protection are needed according to Cochrane reviews. The purpose of this presentation is to describe the implementation and evaluation of theory-based health communication interventions to prevent NIHL through promoting the use of hearing protection among construction workers (operating engineers, carpenters, roofers, and laborers) and factory workers. The theoretical model most often applied to workers' hearing protection behavior is Pender's Health Promotion Model. Through testing of Pender's model, occupational health researchers derived the Predictors of Use of Hearing Protection Model (PUHPM) that has been used to determine significant predictors of use of hearing protection and to design effective interventions to promote use of hearing protection, thus reducing NIHL in workers. For example, health messages have been designed to increase self-efficacy and perceptions of benefits of using hearing protection while decreasing perceived barriers to use of hearing protection. Three completed intervention studies with workers in construction and manufacturing demonstrated that changes in theoretically-specified variables were associated with changes in use of hearing protection; therefore those were important variables to consider in a hearing loss prevention program. Specific health communication strategies such as tailoring to the individual's perceptions, attitudes, and behaviors and targeting to groups will be illustrated through case examples. Based on the findings from the completed studies, recommendations and implications for future research to reduce NIHL in the global workforce will be addressed.