03 EVALUATION OF NOISE PRODUCING TOYS AND THE PRODUCT STANDARD CRITERIA

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Background A selection of commercially available imported toys was assessed for acoustic safety by testing to the voluntary toy safety Standard. The results were compared to allowable noise levels for adults in a working environment.

Aims/Objectives/Purpose The aim was to establish whether the revised toy Standard sets a voluntary acoustic level which offers sufficient hearing protection for children and identify changes to protect potential hearing damage in young children in future.

Methods A number of commercially available toys were obtained and tested for compliance with the acoustic provisions of the 2002 and 2010 V of the Australian/New Zealand Standard AS/NZS ISO 8124.1, with consideration as to how they might be played with or used.

Results/Outcome The examination revealed that many toys produced unacceptably high noise levels. It also highlighted that the revised Standard criteria exempted squeeze toys and rattles. No acoustical criteria were included for toys promoted as enhancing educational outcomes. No tolerance levels were included in the standard to account for interpretation of data and experimental error. This suggests a failure of the Standard to provide adequate hearing protection for young children. Amendments to the criteria have been recommended.

Significance/Contribution to the Field Children may play with noisy toys for extended periods, or hold toys closer to the ear than expected by suppliers, which may be considered to be 'reasonably foreseeable misuse', as defined in AS/NZS ISO 8124.1. Failure to address this issue now may result in increasing incidence of early hearing impairment in future, raising questions of fiscal, educational and social cost.

Conference topic Product safety

Conference theme Safety design and sustainability oral presentation