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A Descriptive Analysis of University Music Performance Teachers' Sound-level Exposures During a Typical Day of Teaching, Performing, and Rehearsing.

#### Abstract

The purpose of this study was to describe sound-level exposures of university music performance teachers. Using personal dosimeters, sound-level exposures were measured across two work days. The primary research question was “Do university music performance teachers experience sound levels that result in dose percentages that meet or exceed standards recommended by the National Institute for Occupational Safety and Health (NIOSH) or the Occupational Safety and Health Administration (OSHA) in group and individual teaching environments during typical work days?” Over the time of a career, sound-level exposure that exceeds recommendations places a person at risk for noise-induced hearing loss (NIHL).

Thirty-seven university music performance teachers wore Cirrus Research doseBadge dosimeters. Dosimeters were placed on a shoulder in a manner that would not interfere with performance on their instruments during teaching. Additionally, the effects of other variables on sound-level averages were examined, including, teaching specialization, type of teaching activity, number of students or participants in teaching activity, and performance level(s) of participants in a teaching activity.

Thirteen music performance teachers (35%) experienced sound levels that resulted in dose percentages exceeding standards recommended by NIOSH

for single days measured. Two-day averages showed that 12 music performance teachers (32%) experienced sound levels that resulted in dose percentages exceeding standards recommended by NIOSH. Five music performance teachers (14%) experienced sound levels that resulted in dose percentages exceeding standards recommended by OSHA for single days measured. Two-day averages showed that 2 (5%) music performance teachers experienced sound levels that resulted in dose percentages exceeding standards recommended by OSHA.