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Fit-testing, training, and timing—How long does it take to fit-test hearing protectors?

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Abstract

Hearing protector fit-testing is a Best Practice for hearing loss prevention programs and is gaining acceptance among US employers. Fit-testing quantifies hearing protector attenuation achieved by individual workers and ensures that workers properly fit and receive adequate protection from their protectors. Employers may be reluctant to conduct fit-testing because of expenses associated with worker time away from the job, personnel to administer the testing, and acquisition of a fit-test system. During field and laboratory studies conducted by the National Institute for Occupational Safety and Health (NIOSH), timing data for the fit-test process with the NIOSH HPD Well-Fit™ system were analyzed. For workers completely naive to fit-testing, the tests were completed within 15–20 minutes. Unoccluded test times were less than 4 minutes and occluded tests required less than 3 minutes. A significant learning effect was seen for the psychoacoustic method of adjustment used by HPD Well-Fit, explaining the shorter test times as subjects progressed through the unoccluded and occluded conditions. Most of the workers required about 5 minutes of training time. Test times and attenuations were tester-dependent, indicating the need to provide training to staff administering fit-tests in the workplace.

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