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제 목	청력 장애와 농업 손상간의 관련성 연구 Hearing Loss as a Risk Factor for Agricultural Injuries
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Background: Previous studies suggested that hearing impairment based on self-report might increase the risk of agricultural injuries. However, self-reported hearing measures may be subject to inaccuracy and subjective perception. We assessed the association of agricultural injuries with hearing loss and other hearing characteristics using measured hearing.

Methods: Study subjects were 150 farmers who participated in the Iowa Certified Safe Farm study. Injury information was collected by telephone interviews at 2-5 month intervals from September 1999 to October 2002. Hearing levels were measured annually using the pure tone audiometry from 1998 to 2002. Adjusted rate ratios of injuries were calculated using the multivariate Poisson regression model.

Results: Hearing loss in the better ear (RR=1.62), hearing asymmetry (RR=1.67), and fair/poor self-reported hearing (RR=1.96) were significantly associated with the risk of agricultural injuries. It is notable that self-reported hearing might be a stronger predictor of injuries than PTA. Exposure to noise elevated the risk of injuries in those farmers with hearing loss or hearing asymmetry. The occasional use of hearing protection was significantly associated with agricultural injuries.

Conclusions: This study adds substantial evidence that hearing loss acts as a risk for agricultural injuries. Prevention of hearing loss and noise exposure may be important in reducing the burden of agricultural injuries.