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PREVENTING NOISE INDUCED HEARING LOSS IN FARMERS AND AGRICULTURAL WORKERS IN RURAL AMERICA

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Preventing Noise Induced Hearing Loss in Farmers and Agricultural Workers in Rural America

Synopsis:

According to the National Institute of Deafness and other Communication Disorders (NIDCD, 2010), more than 20 million Americans (all ages) are exposed to hazardous sound (noise) levels on a regular basis, without the use of hearing protection devices (HPD). This study seeks to determine the percentage of farmers and agricultural workers in rural South Carolina who are directly affected by this phenomenon, and those who take proactive measures to protect their hearing from noise exposure.

Preventing Noise Induced Hearing Loss in Farmers and Agricultural Workers in Rural America

According to the National Institute of Deafness and other Communication Disorders (NIDCD), more than 30 million Americans (all ages) are exposed to hazardous sound (noise) levels on a regular basis. Historically, noise exposure has been considered an occupational hazard to the hearing health of farmers and other agricultural workers. Prolonged exposure to noise can result in Noise Induced Hearing Loss (NIHL). NIHL may cause temporary damage, permanent damage or acoustic trauma. This research study has two phases. Phase I assesses the percentage of farmer's/ farm workers that use hearing protection while operating farming machinery. Phase II will assess the noise levels of farming machinery: 1) during operation and determine if the noise levels exceed OSHA standards for excessive noise exposure and hearing levels of farmer's/ farm workers before (establish baseline) and 2) immediately after utilizing farming equipment to determine if a hearing temporary threshold shift occurs. Preliminary results from Phase I revealed that 11% of participants used hearing protection while none of them participated in a hearing conservation program to learn about the adverse effects of NIHL.