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The National Institute for Occupational Safety and Health (NIOSH) Home



Occupational Hearing Loss (OHL) Worker Surveillance Data

CDC – NIOSH Data and Statistics Gateway – Dataset SD-1003-2019-0 Occupational Hearing Loss (OHL) Worker Surveillance Data

NIOSH DATASET SD-1003-2019-0

DECEMBER 2019

"Trends in Worker Hearing Loss by Industry Sector, 1981-2010"

The dataset analyzed in our published article, along with the article reference, abstract and description of data collection efforts, are available below.

Reference

Masterson EA, Deddens JA Themann CL, Bertke S, Calvert GA. (2015). Trends in worker hearing loss by industry sector, 1981–2010. American Journal of Industrial Medicine, 58: 392-401.

Abstract

Background: The purpose of this study was to estimate the incidence and prevalence of hearing loss for noise-exposed U.S. workers by industry sector and 5-year time period, covering 30 years.

Methods: Audiograms for 1.8 million workers from 1981-2010 were examined. Incidence and prevalence were estimated by industry sector and time period. The adjusted risk of incident hearing loss within each time period and industry sector as compared with a reference time period was also estimated.

Results: The adjusted risk for incident hearing loss decreased over time when all industry sectors were combined. However, the risk remained high for workers in Healthcare and Social Assistance, and the prevalence was consistently high for Mining and Construction workers.

Conclusions: While progress has been made in reducing the risk of incident hearing loss within most industry sectors, additional efforts are needed within Mining, Construction and Healthcare and Social Assistance.

Download Data

- o Data Dictionary Trends in Worker Hearing Loss by Industry Sector, 1981-2010 Dataset 🔼 .pdf
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- Trends in Worker Hearing Loss by Industry Sector, 1981-2010 Dataset SAS format

Data Collection Methods

De-identified audiometric data for male and female workers were collected from audiometric testing service providers and others. NIOSH recruited these data providers to participate in the OHL Surveillance Project at conferences, via letter and email, and over the phone.

In most or all cases, the audiograms were from workers who were exposed to hazardous noise levels on the job (≥85 dBA) and were tested to comply with government regulations or safety recommendations. The dataset for this paper included audiograms for the years 1981 through 2010. The industry for each audiogram was coded by either the data provider or NIOSH using the North American Industry Classification System (NAICS). A more detailed description of the study and data exclusions can be found in the published article.

Acknowledgement when Publishing Dataset Analyses

When a publication makes use of this dataset, acknowledgement of the development of the dataset should be attributed to the NIOSH Occupational Hearing Loss Surveillance Program, Division of Field Studies and Engineering.

Contact

For further information, please contact Liz Masterson at OHLSurveillance@cdc.gov or (513) 841-4291.

Related Links

Trends in Worker Hearing Loss by Industry Sector, 1981-2010
NIOSH Topic: Occupational Hearing Loss (OHL) Surveillance
North American Industry Classification System (NAICS)

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