

DESCRIPTION OF PRESENTATION – 2018 NATS CONVENTION-LAS VEGAS

IMPORTANT RESULTS on PREVALANCE OF HEARING LOSS and
HEARING EXPOSURE STUDIES for VOICE TEACHERS -
BE INFORMED and PROTECT YOUR HEARING

by

Deanna McBroom, MM and Lucinda Halstead, MD

***NOTE:** As this information is of significant importance to all teachers of singing, we request that our presentation be considered for a general session at the Las Vegas convention – to reach the greatest number of teachers possible. If that is not available, a breakout session at a prominent time would be appreciated.*

This session will share the results of two important research studies involving Teachers of Singing. The goals of the session are: 1) to inform teachers of the factual evidence of the prevalence of hearing loss in teachers of singing and voice students, and 2) to describe the noise exposure in teachers of singing with data collected in the studio/classroom/rehearsal room with its risk to hearing, 3) to offer suggestions for the protection of the vital resource of hearing and for ways to manage hearing risks in the studio/classroom/rehearsal room and in one's personal life, based on information gleaned from presentations at the Performing Arts Medicine Association Symposia, and 4) most importantly, to open a dialogue on these issues and their impact on professional voice teachers.

Goal 1 will address the findings of our published research and open a discussion for prevention and protection. The abstract for our paper is provided below.

Prevalence of Hearing Loss in Teachers of Singing and Voice Students. Isaac MJ, McBroom DH, Nguyen SA, Halstead LA. J Voice. 2017 May; 31(3):379 e21-379.e32, PMID: 27839986.

Objectives. Singers and voice teachers are exposed to a range of noise levels during a normal working day. This study aimed to assess the hearing thresholds in a large sample of generally healthy professional voice teachers and voice students to determine the prevalence of hearing loss in this population.

Study Design. A cross-sectional study was carried out.

Methods. Voice teachers and vocal students had the option to volunteer for a hearing screening of six standard frequencies in a quiet room with the Shoebox audiometer (Clearwater Clinical Limited) and to fill out a brief survey. Data were analyzed for the prevalence and severity of hearing loss in teachers and students based on several parameters assessed in the surveys. All data were analyzed

using *Microsoft Excel* (Microsoft Corp.) and *SPSS Statistics Software* (IBM Corp.).

Results. A total of 158 participants were included: 58 self-identified as voice teachers, 106 as voice students, and 6 as both. The 6 participants who identified as both, were included in both categories for statistical purposes. Of the 158 participants, 36 had some level of hearing loss: 51.7% of voice teachers had hearing loss, and 7.5% of voice students had hearing loss. Several parameters of noise exposure were found to positively correlate with hearing loss and tinnitus ($P < 0.05$). Years as a voice teacher and age were both predictors of hearing loss ($P < 0.05$).

Conclusions. Hearing loss in a cohort of voice teachers appears to be more prevalent and severe than previously thought. There is a significant association between years teaching and hearing loss. Raising awareness in this population may prompt teachers and students to adopt strategies to protect their hearing.

Our second study is ongoing, to be completed in Fall 2017. It is entitled “Noise Exposure in Singing Teachers”. This study seeks to quantify the amount and duration of noise exposure experienced by voice teachers in their daily professional lives. To date, our research demonstrates that voice teachers are exposed to dangerous levels of noise when they are teaching in selected settings in the studio, rehearsal, and performance venues. Measures that could be taken to reduce their level of exposure and prevent long-term hearing damage will be suggested.

Additionally, strategies for hearing protection gleaned from attending lectures on hearing protection strategies in musicians at the Performing Arts Medicine Symposia will be shared. Given the importance of this topic to every voice professional, we will allow time for a question-and-answer session to allow teachers to address concerns related to this topic.

Session Abstract:

Get the results of research studies on the Prevalence of Hearing Loss in voice teachers, affecting over 50% of voice teachers, and Hearing Exposure for voice teachers in studios, classrooms, and rehearsals, Data for the first study was collected at a state and a regional NATS meeting in 2016 and a May 2017 article published in *Journal of Voice*; data collection for the second study was done in 2016-2017. Learn the facts about your hearing risks, how to identify hearing loss, and how to take protective measure in your studios and rehearsals to preserve optimal hearing and prevent overexposure. Voice teacher/Singing Voice Specialist Deanna McBroom and ENT surgeon Lucinda Halstead will share the results of their research and offer suggestions/lead a discussion on how to prevent further hearing loss and effectively manage hearing issues in your work and personal life.