CALIFORNIA STATE SCIENCE FAIR
2011 PROJECT SUMMARY

Name(s)

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Project Number

31003

Project Title

Noise-Induced Hearing Loss: A Silent Crisis in Teens?

Abstract

Objectives/Goals

To determine the reasons for noise-induced loss in teenagers, as well as determining junior high students' knowledge and practice of safe hearing behavior. If the reasons are found, then the youth of America can be appropriately educated as to how to protect themselves from hearing damage.

Methods/Materials

A 20-item survey was administered to 116 junior high school students. The questionnaire was designed to determine use of personal listening devices (PLDs), awareness of hearing health and safe hearing practice, and the need for education in junior high school students. Some survey questions used in 2 previous studies looking at high school and college students were also included. Major materials used included pencils, paper, and computers.

Results

The response rate was 98%. Results indicated that subjects were aware that loud PLDs could cause hearing loss, but many chose not to follow guidelines that would help protect their hearing. Cross survey analysis indicated that there was a 136% increase in college students who set unsafe volume levels compared to junior high students.

Conclusions/Discussion

Many of the junior high school students questioned need further education to increase their knowledge of how to protect their ears from loud environmental noise. Also, many of the junior high subjects in the study are aware of the potential of hearing damage by PLD use at high volumes. However, they choose not to follow guidelines, thus putting themselves at risk for noise-induced hearing loss.

Summary Statement

My project is about junior high students' use, awareness, and practice of personal listening devices.

Help Received

Mother helped assemble board; Professor provided info from other surveys.