

## Healthy People 2010 Operational Definition

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**28-18. Reduce the proportion of adults who have elevated hearing thresholds, or audiometric notches, in high frequencies (3, 4, or 6 kHz) in both ears, signifying noise-induced hearing loss.**

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| <b>National Data Source</b>                                | National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.  |
| <b>State Data Source</b>                                   | Not identified.  |
| <b>Healthy People 2000 Objective</b>                       | Not applicable.  |
| <b>Changes since the 2000 Publication</b>                  | Revised baseline (see Comments).<br>Revised baseline years (see Comments).<br>Revised target (see Comments).   |
| <b>Measure</b>   | Rate per 1,000 population (age adjusted – see Comments).   |
| <b>Baseline (Year)</b>                                     | 119.0 (1999-2002)  |
| <b>Target</b>  | 88.1   |
| <b>Target-Setting Method</b>                               | Better than the best racial/ethnic subgroup.<br><br>For a discussion of target-setting methods, see Part A, section 4.   |
| <b>Numerator</b>   | Number of persons aged 20 to 69 years who have an audiometric notch in both ears.  |
| <b>Denominator</b>   | Number of persons aged 20 to 69 years.   |
| <b>Population Targeted</b>                                 | U.S. civilian, noninstitutionalized population.  |
| <b>Questions Used To Obtain the National Baseline Data</b> | Not applicable.  |
| <b>Expected Periodicity</b>                                | Periodic.  |
| <b>Comments</b>  | An audiometric threshold notch is present when one or more of the thresholds at 3, 4, or 6 kHz exceeds the pure-tone average of the 0.5 and 1 kHz thresholds by 15 dB or more, and the 8 kHz threshold is at least 5 dB lower (better) than the highest threshold in the 3 to 6 kHz range. Bilateral |

(present in both ears) notches are used to signify probable noise-induced hearing loss (NIHL) if there is also a response indicating exposure to loud sounds or noise occupationally or in leisure activities.

The original baseline of 117.0 per 1,000 population was calculated using 2 years of NHANES data (1999-2000). The baseline was revised to 119.00 percent when data for the period 1999-2002 became available. The target of 78.3 per 1,000 population was adjusted to 88.1 to reflect the revised baseline using the original target-setting methodology.

Data (except those for education status) are age adjusted to the 2000 standard population using the age groups 20-39, 40-59, and 60-69. Data by education status are adjusted using the age groups 25-39, 40-59, and 60-69. For a discussion on age adjustment, see Part A, section 7.

This objective moved from developmental to measurable at the Healthy People 2010 Midcourse Review.

For some objectives, data do not meet the criteria for statistical reliability, data quality, or confidentiality and have been suppressed. Information on suppression of data for the major Healthy People 2010 data systems has been published in a *Healthy People Statistical Note*.<sup>1</sup>

See Part C for a description of NHANES and Appendix A for focus area contact information.

## References

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1. Klein, R.J.; Proctor, S.E.; Boudreault, M.A.; Turczyn, K.M. Healthy People 2010 Criteria for Data Suppression. *Statistical Notes* No. 24. Hyattsville, MD: National Center for Health Statistics. 2002.