

Healthy People 2010 Operational Definition

28-13. Increase the proportion of persons with hearing impairments who have ever used a hearing aid or assistive listening devices or who have cochlear implants.

28-13d. Adults aged 70 years and older with hearing loss who use assistive listening devices.

National Data Source	National Health Interview Survey (NHIS), CDC, NCHS; National Health and Nutrition Examination Survey (NHANES), CDC, NCHS.
State Data Source	Not identified.
Healthy People 2000 Objective	Not applicable.
Changes since the 2000 Publication	New subobjective (see Comments).
Measure	Rate per 1000 population (see Comments).
Baseline (Year)	100.0 (2005–2006)
Target	110.0
Target-Setting Method	10 percent improvement. For a discussion of target-setting methods, see Part A, section 4.
Numerator	Number of adults aged 70 years and older who report they have ever used assistive listening devices (ALDs), such as FM systems, closed-captioned television, or amplified telephone (or relay services).
Denominator	Number of adults aged 70 years and older with hearing loss in either ear, defined as the pure-tone average of thresholds at {1000, 2000, 3000, and 4000 Hz} greater than or equal to 35 dB.
Population Targeted	U.S. resident population.

Questions Used To Obtain the National Baseline Data

From the 2005–06 National Health and Nutrition Examination Survey:

- *Have you ever used assistive listening devices (ALDs), such as FM systems, closed-captioned television, or amplified telephone (or relay service)?*

Answer: Yes/No

Expected Periodicity

Periodic

Comments

A hearing aid is an electronic device that brings amplified sound to the ear, usually consisting of a microphone, amplifier, and receiver.

A cochlear implant is a medical device that bypasses damaged structures in the inner ear and directly stimulates the auditory nerve, allowing some deaf individuals to hear and to maintain or develop speech and language.

Assistive devices are technical tools and devices used to aid individuals who have communication disorders in performing actions, tasks, and activities. Examples include alphabet boards, text telephones (TT/TTY/TTD), and text-to-speech conversion software.

The numerator for objective 28-d, adults aged 70 years and older who report they have ever used assistive listening devices (ALDs), such as FM systems, closed-captioned television, or amplified telephone (or relay services) is obtained every two years from the National Health and Nutrition Examination Survey (NHANES) audiometric questionnaire, beginning with 2005–06.

The denominator, adults aged 70 years or older who testing as having hearing loss in either ear, is obtained from the 2005–06 National Health and Nutrition Examination Survey (NHANES).

Objective 28-13 moved from developmental to measurable during the Healthy People 2010 Midcourse review. Four subobjectives were created, each targeting different age groups and different methods of hearing assistance.

Subobjectives 28-13a and c focus on increasing the proportion of adults with hearing loss aged 20-69

and aged 70 and older who have ever used a hearing aid, respectively. Subobjective 28-13b targets persons of any age who are deaf or very hard of hearing who have new cochlear implants; 28-13d focuses on adults aged 70 years and older with hearing loss who use assistive listening devices.

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*.¹

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

References

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.