# Snapshot of deaf and hard of hearing people, postsecondary attendance and unemployment

For Lee Perselay, Disability Counsel, U.S. Senate HELP Committee

Compiled by Charles Reilly & Sen Qi, Gallaudet Research Institute, October 2011 Contact: Charles.reilly@gallaudet.edu

The sources given herein have not been evaluated for quality.

### Questions addressed:

- 1. What is the best estimate of the number of individuals who are deaf or hard of hearing?
- 2. What is the unemployment rate for deaf and hard of hearing individuals?
- 3. Impact of Higher Education on Employment Rate

# 1. What is the best estimate of the number of individuals who are deaf or hard of hearing?

A Brief Summary of Estimates for the Size of the Deaf Populationin the USA Based on Available Federal Data and Published Research:

- About 2 to 4 of every 1,000 people in the United States are "functionally deaf," though more than half became deaf relatively late in life; fewer than 1 out of every 1,000 people in the United States became deaf before 18 years of age.
- However, if people with a **severe** hearing impairment are included with those who are deaf, then the number is 4 to 10 times higher. That is, anywhere from 9 to 22 out of every 1,000 people have a severe hearing impairment or are deaf. Again, at least half of these people reported their hearing loss after 64 years of age.
- Finally, if everyone who has any kind of "trouble" with their hearing is included then anywhere from 37 to 140 out of every 1,000 people in the United States have some kind of hearing loss, with a large share being at least 65 years old.

SOURCE: From Gallaudet Research Institute's independent analysis of available federal statistics on hearing impairment, Ross Mitchell, 2005. See <a href="http://research.gallaudet.edu/Demographics/deaf-US.php">http://research.gallaudet.edu/Demographics/deaf-US.php</a>

### From federal sources:

"Across all age groups, in the United States, approximately 1,000,000 people (0.38% of the population, or 3.8 per 1,000) over 5 years of age are "functionally

deaf;" more than half are over 65 years of age." From the Survey of Income and Program participation (SIPP), <a href="http://www.census.gov/sipp/">http://www.census.gov/sipp/</a>

Across all age groups, approximately 600,000 people in the United States (0.22% of the population, or 2.2 per 1,000) are "deaf;" more than half are over 65 years of age. About 6,000,000 people (2.2%) report having "a lot of trouble" hearing with, again, more than half over 65 years of age. Over 28,000,000 people (10%) report having "a little trouble" hearing with just less than a third over 65 years of age, but more than half over 45 years of age. Altogether, more than 35,000,000 people (13%) report some degree of hearing trouble. Again, we emphasize that these estimates are based upon self-reported (or informant-reported) hearing trouble and not on independent audiometric measurements.

From the National Health Interview Survey (NHIS), <a href="http://www.cdc.gov/nchs/nhis.htm">http://www.cdc.gov/nchs/nhis.htm</a>. Numbers based on independent analysis By Gallaudet Research Institute of NHIS findings, 1997-2003.

Also, see Mitchell, R. E. (2006). "How many deaf people are there in the United States? Estimates from the Survey of Income and Program Participation." Journal of Deaf Studies & Deaf Education, 11(1), 112-119.

## 2. What is the unemployment rate for deaf and hard of hearing individuals?

Selected statistics related to the post-secondary education attendance and employment of deaf and hard of hearing people.

Unemployment rate (16 years and over), August 2011:

Persons with a disability -- 16.1%;

Persons with no disability -- 8.8%

SOURCE: http://www.bls.gov/news.release/empsit.t06.htm

http://www.bls.gov/cps/cpsdisability.htm

Blanchfield BB, Feldman JJ, Dunbar JL, Gardner EN. 2001.

• Of the U.S. population, 18.7% did not graduate from high school in contrast to 44.4% of individuals with a severe to profound hearing loss.

- 18- to 44-year-old age group hearing population 82% were in the labor force, persons with a severe to profound hearing loss - 58% were in the labor force
- 45- to 64-year-old age group hearing population 73% of the hearing population was in the labor force, deaf and hard of hearing population -46% were in the labor force
- College graduation 12.8% of the hearing population graduated from college whereas 5.1% of the deaf or hard-of-hearing population graduated.
- Post-college education—9.2% of the hearing population had some post-college education with only 4.8% of the deaf or hard-of-hearing population having any post-college education
- Family income comparisons for the U.S. population and population of severely to profoundly deaf or hard-of-hearing individuals.
  - Hearing families 26% earned between \$10,000 and \$24,999 annually, deaf or hard-of-hearing families 28% earned incomes in the same range.
  - Hearing families- 29% earned \$50,000 or more, deaf or hard-of-hearing families 14% had incomes in the same range.

SOURCE: Blanchfield BB, Feldman JJ, Dunbar JL, Gardner EN. The severely to profoundly hearing-impaired population in the United States: Prevalence estimates and demographics. Journal of the American Academy of Audiology 2001;12:183-189.

McNeil (2000) reported employment rates for 1992-1997 for the general U.S. population and the population of people who have "difficulty hearing" and people with "severe difficulty hearing."

- General U.S. population, employment rates ranged from about 75% to 78% during these 5 years.
- The group who had "difficulty" hearing, employment ranged from about 62% to 65%.
- The group with "severe hearing problems," employment rates were 48% to 59%.

SOURCE: McNeil, J.M. Employment, earnings, and disability: 1991/92, 1993/94, 1994/95 and 1997 data from the Survey of Income and Program Participation. 2000. Presented at the 75th Annual Conference of the Western Economic Association International, Vancouver, British Columbia.

From Netsign News (Video, no references):

"Unemployment of deaf people exceeds 60%"

#### SOURCE:

http://www.netsignnews.com/Opinion\_-\_Discussion/Unemployment\_Rates\_I
n The Deaf Community.php

### Allen (1994):

Another important social factor impacting the needs for postsecondary educational services for deaf and hard-of-hearing students pertains to the changing nature of the United States workforce. The current job outlook is one where more jobs are opening up, but these jobs require higher levels of English literacy and numeracy than those in the past, and the higher paying jobs among the emerging service industries require greater amounts of face-to-face interactions with coworkers and clients in the workplace (Silvestri & Lukasiewicz, 1989). These higher paying jobs from service industries have not traditionally been open to deaf individuals (Schildroth, Rawlings, & Allen, 1991)."

SOURCE: "Who are the deaf and hard-of-hearing students leaving high school and entering postsecondary education?" Thomas E. Allen, Gallaudet University, 1994 Paper submitted to Pelavin Research Institute as part of the project, A Comprehensive Evaluation of the Postsecondary Educational Opportunities for Students who are Deaf or Hard of Hearing, funded by the U.S. Office of Special Education and Rehabilitative Services.

Also see Allen, T; Lam, K; Rawling, B; and A. Schildroth (1994). Young Deaf Adults and the Transition from High School to Postsecondary Careers. Gallaudet Research Institute Occasional Paper 94-1, Gallaudet University. (Available as hard copy from GRI, Gallaudet.)

### 3. Impact of Higher Education on Unemployment Rate

Impact of Higher Education on Employment Rate- general population

In 2010, for people 25 years and over: Unemployment rate: Persons with bachelor's degree -- 5.4%; Persons with high school diploma only -- 10.3%

SOURCE: http://www.bls.gov/emp/ep\_chart\_001.htm

Impact of Higher Education on Employment Rate- Deaf and hard of hearing

Schley S, Walter GG, Weathers RR 2nd, Hemmeter J, Hennessey JC, Burkhauser RV 2011.

The authors report that earning a degree from NTID on employment are considerable. Below are direct quotes from their article.

"Graduates report earnings at rates substantially higher than nongraduates (withdrawals or rejects). At age 30, approximately 85% of graduates (both bachelor and associate) report having earnings from work. For nongraduates (withdrawals and rejects), about 75% report earnings at age 30. By age 50, 74% of bachelor and 72% of associate graduates reported earnings, whereas only 61% of withdrawals and 62% of rejected students reported earnings. Remarkably, of those who were admitted but who chose to not attend (referred to as "lost accepts" in figures), only 53% were employed at the age of 50".

"The analysis that follows is based only on the earnings of individuals who reported some income during the years covered by the study and does not factor in zero dollars for individuals not reporting earnings". (Note: this analysis is based on earnings from people who report some income during the study years and does not include zero dollars for people who did not report earnings)

"For alumni, the effects of college graduation on increasing earning power is dramatic. In 2005 dollars, between the ages of 25 and 50, bachelor's graduates will earn, on average, approximately \$15,000 per year more than students rejected for admission and \$12,000 more than those who attend but withdraw without a degree. Associate degree graduates will earn about \$7,000 less per year than bachelor graduates but approximately \$8,000 more per year more than students who were denied admission and \$5,000 more than students who withdrew without a degree. These differences demonstrate that not only are graduates employed at higher rates but they also earn significantly more than individuals who withdrew or were denied admission to NTID".

"In percentage terms, the incremental benefit on earnings of completing college is significant when compared to nongraduates. On average, between the ages of 25 and 50, bachelor's graduates earned 66% more, and sub-bachelor's graduates 34% more than individuals who were denied admission. Subjects who dropout of college without completing a degree report earnings that differ only slightly (18%) from students who were denied admission and thus never attended NTID. These data present further evidence of the importance of completing a college degree. If a student attends college and

drops out without a degree, the economic impact of attendance is minimal in terms of increased earning".

SOURCE: Schley S, Walter GG, Weathers RR 2nd, Hemmeter J, Hennessey JC, Burkhauser RV. Effect of postsecondary education on the economic status of persons who are deaf or hard of hearing. Journal of Deaf Studies and Deaf Education, 2011 Fall;16(4):524-36. Epub 2011 Feb 2.

FOR COPY: http://www.ncbi.nlm.nih.gov/pubmed/21289030

Walter GG, Clarcq JR, Thompson WS. 2001.

- Study estimated deaf people who graduate with a baccalaureate degree will earn about 68% more over their working lives than students who attended but withdraw without a degree.
- Students who graduate with a sub-baccalaureate degree will earn 29% more than those who withdraw. Consistent with national estimates for the general U.S. population.
- College graduation also reduces dependence on federal subsidies including SSI and SSDI.

SOURCE: Walter GG, Clarcq JR, Thompson WS. Effect of degree attainment on improving the economic status of individuals who are deaf. JADARA 2001;35(3):30-46.

### Addition-January 2013

Blanchfield, Feldman, Dunbar and Gardner (2001)- related to Deaf employment that listed statistics regarding Deaf education and employment (high school and college graduation rates and unemployment rates). Brought to our attention by Janine Pezzino, Rutgers School of Nursing.