AMERICAN SPEECH-LANGUAGE-HEARING ASSOCIATION

AUDIOLOGY SURVEY 2008

Clinical Focus Patterns

Jeanette Janota, Surveys & Information Team
American Speech-Language-Hearing Association
2200 Research Boulevard
Rockville, MD 20850-3289
800-498-2071, ext. 8738
jjanota@asha.org

Contents

Executive Summary **1**

Who They Are **2**
- Highest Degree 2
- Function 2
- Facility 2
- Population Setting 2
- Salary Basis 2
- Years of Experience 3
- Professional Memberships 3
- Private Practice 3

What They Say About **4**
- Service Provision 4
- Patient Education Materials 6
- Continuing Education (CE) 7
- CE Credits 7
- Interest in CE Topics 8
- Extern Site Preceptor 9
- Cultural and Linguistic Diversity 10
- Ethics 10
- Social Networking Sites 10

Survey Notes and Methodology **11**
- Response Rate 11
- Other Reports 11

Electronic Copy **12**

Suggested Citation **12**

Supplemental Sources **12**

Thank You **12**

Additional Information **12**

Table
- Table 1: Services Provided (%) 5

Figures

Figure 1: Highest Degree 2
Figure 2: Involvement in Private Practice 3
Figure 3: Source of Patient Education Materials 7
Figure 4: Preceptor Resources 9

Executive Summary

In the fall of 2008, the American Speech-Language-Hearing Association (ASHA) conducted a survey of audiologists. This survey was designed to provide information about salaries, working conditions, and service delivery as well as to update and expand information gathered from previous Audiology and Omnibus Surveys.

The results are presented in a series of reports. This clinical focus patterns report is based on responses from audiologists in schools, colleges and universities, hospitals, nonresidential health care facilities, and industry.

Highlights:

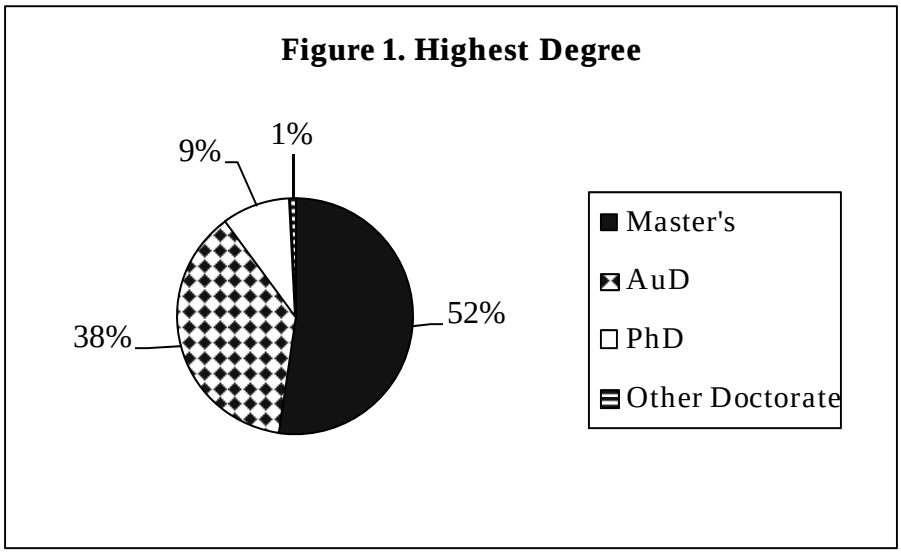
- 52% of respondents held a master's, 38% an AuD, and 9% a PhD.
- 85% were clinical service providers.
- 75% received an annual wage.
- The median number of years of experience was 18.
- 42% worked in a private practice.
- At least 80% provided three services: counseling (91%), fitting and orientation of hearing aids (84%), and fitting / dispensing of hearing aids (80%).
- Most used self-created patient education materials (68%).
- 75% obtained continuing education (CE) credits through manufacturer-sponsored programs.
- 48% were very interested in CE information on hearing aid technology.
- 15% rated themselves very qualified to provide services to multicultural populations.
- 58% said the ASHA Code of Ethics is very relevant to their work.
- Most audiologists did not have an account or profile on a social networking site.

Who They Are

Slightly more than half (52%) of the audiologists who responded to the 2008 Audiology Survey held a master's as their highest degree, 38% had an AuD, and 9% had a PhD (see Figure 1).

Highest Degree

Figure 1. Highest Degree



N = 6,626

More than half of the audiologists with a master's (56%) or AuD degree (60%) worked in a nonresidential health care facility, but PhD holders were more likely to be employed in colleges and universities (51%) than in other types of facilities (p = .000).

Function

Most of the audiologists were clinical service providers (85%), although a few were college or university faculty (7%), or administrators (6%), or performed some other function (3%).

Facility

Approximately half worked in nonresidential health care facilities (53%), and nearly one quarter worked in hospitals (23%). The remaining audiologists were employed in schools (11%), colleges or universities (10%), industry (1%), or some other facility (2%).

Population Setting

Nearly half (48%) worked in a metropolitan / urban area, 37% worked in a suburban area, and 15% worked in a rural area.

Salary Basis

Three fourths of the respondents received an annual wage (75%), and the rest were paid hourly (25%).

Years of Experience

The median (50th percentile) number of years of experience was 18, ranging from a low of 12 years in industry to a high of 22 years in colleges and universities.

Professional Memberships

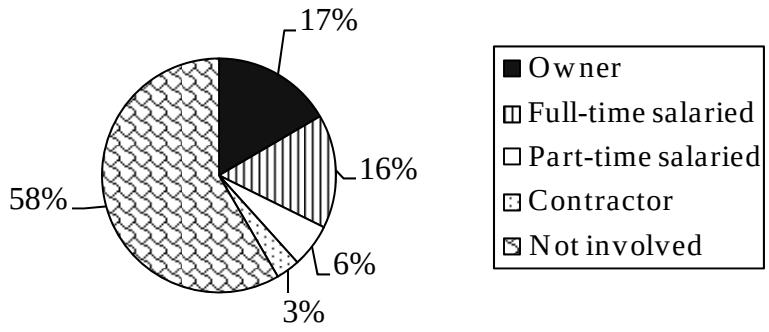
ASHA-certified audiologists belonged to other associations as well:

- 66% to the American Academy of Audiology (AAA)
- 45% to a state Speech-Language-Hearing Association
- 10% to the Educational Audiology Association (EAA)
- 7% to the Academy of Doctors of Audiology (ADA)
- 2% to the National Hearing Conservation Association (NHCA)
- 1% to the Military Audiology Association

Private Practice

Fewer than half of the audiologists were affiliated with a private practice as owner, full-time salaried employee, part-time salaried employee, or contractor (see Figure 2).

Figure 2. Involvement in Private Practice



N = 5,717

Audiologists who worked in private practice were asked to describe the type of practice where they worked:

- 43% were self-employed in private practice.
- 15% worked in a practice owned by other audiologists.
- 40% worked in a practice owned by nonaudiologists.

What They Say About

Audiologists were asked about service provision, patient education materials, continuing education, multicultural populations, ethics, and social networking sites.

Service Provision

Approximately 81% of the audiologists who responded to the survey were clinical service providers who worked full–time or part–time. From a list of 14 types of services, more audiologists identified *counseling on communication strategies/realistic expectations* than any of the other services. This was the most frequently selected service in every type of facility except schools, where *demonstration/fitting/orientation of hearing assistive technology* was the most commonly selected service (see Table 1).

Telepractice was the least frequently selected service in every type of facility except schools, where *vestibular rehabilitation* was selected least often.

Reading across rows shows that there are significant differences by type of facility in the rate at which each of the services is provided. For example, although auditory training, in general, is provided by 23% of audiologists, it ranges from a low of 18% in hospitals to 48% in schools.

Two of the services were more likely to be provided in *schools* than in other types of facilities, six in *colleges and universities*, and six in *nonresidential health care* facilities. Audiologists in *hospitals* were the most likely group to state that they did not provide any of the 14 services from the list.

Table 1. Services Provided (%)

Service	Total	School	Coll./ Univ.	Hos-pital	Nonres. HC
Auditory training*	22.7	48.3	19.8	17.7	19.6
Cerumen management*	40.6	12.4	29.8	33.1	49.6
Counseling on communication strategies / realistic expectations*	**91.4**	84.4	**92.6**	**91.2**	**93.2**
Demonstration / fitting / orientation of hearing assistive technology*	83.9	**87.5**	82.6	78.0	85.8
Fitting and dispensing hearing aids*	80.3	28.9	85.1	78.0	91.6
Hearing conservation / prevention*	57.5	55.9	54.9	51.5	60.6
Mapping of CI*	10.4	3.6	32.2	21.7	6.9
Speechreading*	5.6	13.8	20.5	3.2	4.2
Telepractice*	1.8	1.2	5.0	2.6	1.5
Validation of treatment outcomes by self questionnaires*	37.7	22.6	57.9	42.8	38.1
Verification of performance of CI*	12.1	22.9	27.3	20.4	6.5
Verification of performance of hearing aids using real ear measures*	55.3	47.1	75.2	63.3	53.4
Vestibular assessment*	36.8	1.2	19.7	42.5	43.2
Vestibular rehabilitation*	11.2	0.5	9.8	10.8	13.8
I do not provide any of the above services.*	1.8	1.9	0.0	4.0	1.0

Note. HC = health care; CIs = cochlear implants.
N = 5,379; * *p* = .000

Patient Education Materials

Most of the audiologists used *self-created patient education materials* (68%). Audiologists in different types of facilities selected this response at different rates.

- 73% in schools
- 72% in colleges and universities
- 74% in hospitals
- 65% in nonresidential health care facilities (p = .000).

Many used *purchased brochures* (62%). Again, this varied by facility.

- 41% in schools
- 50% in colleges and universities
- 55% in hospitals
- 70% in nonresidential health care facilities (p = .000).

Information downloaded from a Web site was the third most common type of patient education material (55%).

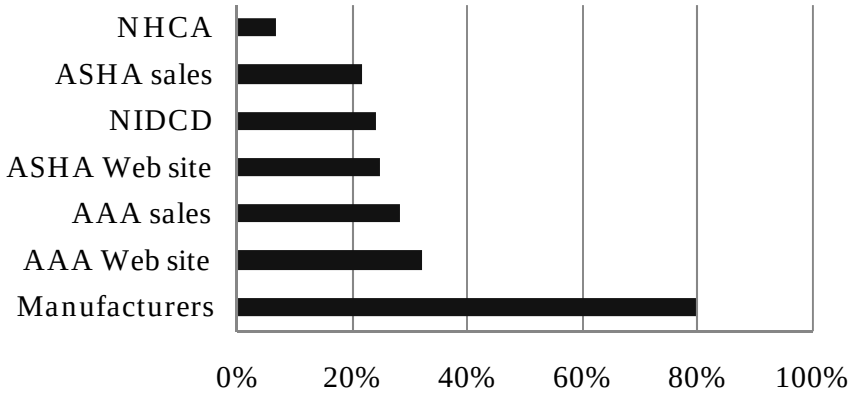
- 77% in schools
- 68% in colleges and universities
- 59% in hospitals
- 48% in nonresidential health care facilities (p = .000).

Purchased videos or DVDs were the least common type of materials (14%).

- 23% in schools
- 13% in colleges and universities
- 15% in hospitals
- 12% in nonresidential health care facilities (p = .000).

Audiologists were given a list of seven sources of patient education materials and asked which of those they used. By far, the most commonly used source was *manufacturers* (see Figure 3). National Hearing Conservation Association (NHCA) product sales were used by the smallest percentage of audiologists. The remaining five sources were relatively equal, being used as a source of patient education materials by 22% to 32% of audiologists.

Figure 3. Source of Patient Education Materials



Note. NIDCD = National Institute on Deafness and Other Communication Disorders.
N = 5,379

Continuing Education (CE)

More than one fourth of the audiologists selected *direct mail* (*40%*) or *e-mail distribution* (*32%*) as ways they find ASHA CE courses. The rest rely on recommendation from colleagues (24%), course searches on the ASHA Web site (23%), print advertisements (23%), internet searches (18%), or flyers at conferences (18%).

The most frequent way for audiologists to find ASHA CE courses varies by type of facility:

- 51% in schools relied on direct mail
- 43% in colleges and universities used e-mail distribution
- 39% in hospitals used e-mail distribution
- 39% in nonresidential health care facilities used direct mail
- 34% in industry used direct mail and flyers at conferences.

CE Credits

During the past 24 months, more audiologists obtained their CE credits through *manufacturer-sponsored CE* (*75%*) and *on site at state and local meetings* (*62%*) than from any of the other sources in a list:

- 43% on site at national conventions
- 41% online at no cost
- 25% online through professional organizations
- 14% journal self study
- 2% *Perspectives* self study.

For five of the items in the list, the way audiologists received their CE credits varied by the type of facility where they worked.

- *Manufacturer-sponsored CE* ranged from 49% in colleges and universities to 85% in nonresidential health care facilities (p = .000).
- *On site at national conventions* ranged from 35% in schools to 74% in colleges and universities (p = .000).
- *On site at state and local meetings* ranged from 58% in nonresidential health care facilities to 77% in schools (p = .000).
- The range for *online at no cost* was from 36% in colleges and universities to 50% in industry (p = .000).
- *Perspectives self study* varied between 0% in industry to 3% in schools (p = .001).

Interest in CE Topics

The audiologists were asked to use a 5-point scale (from *not at all interested* to *very interested*) to rate their interest in each of 13 CE topics.

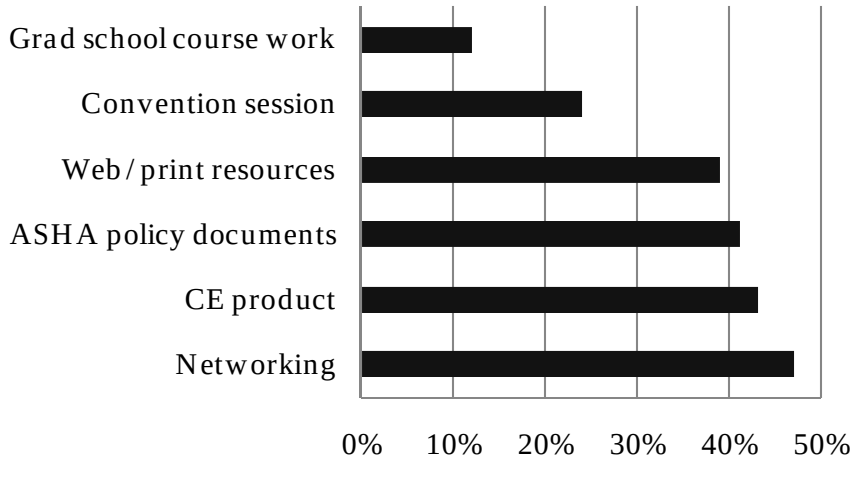
- **Hearing aid technology**
  - More audiologists said they were very interested in this topic than in the other topics (*48%*).
  - The greatest interest was in industry (68%), nonresidential health care facilities (60%), and hospitals (41%; p = .000).
- **Early hearing detection and intervention**
  - *28%* were very interested in early hearing detection and intervention.
  - The range was from 14% in industry to 46% in schools (p = .000).
- **Genetics of hearing loss**
  - *27%* were very interested in this topic.
  - The range was from 14% in industry to 35% in schools (p = .000).
- **Reimbursement and coding**
  - Reimbursement and coding was in fourth place, with *26%* very interested in the topic.
  - The range was from 5% in schools to 36% in nonresidential health care facilities (p = .000).
- **Audiology business practices and management**
  - Overall, *23%* were very interested in this topic.
  - The range was from 5% in schools to 29% in industry and 34% in nonresidential health care facilities (p = .000).

- **Evidence-based practice**
  - *21%* were very interested in this topic.
  - The range was from 17% in nonresidential health care facilities to 32% in colleges and universities (p = .000).
- **Audiology processing**
  - Overall, *20%* were very interested in this topic.
  - The range was from 0% in industry to 32% in colleges and universities and 39% in schools (p = .000).
- **Vestibular disorders and treatment**
  - The last topic in which at least 20% of the audiologists were interested was vestibular disorders and treatment (*20%*).
  - The range was from 2% in schools and 5% in industry to 22% in hospitals and 26% in nonresidential health care facilities (p = .000).
- **Fewer than 20% rated themselves as being very interested in the last five CE topics:**
  - 18% in educational audiology
  - 17% in cochlear implants
  - 17% in clinical education
  - 10% in industrial audiology and hearing conservation
  - 5% in multicultural issues.

Extern Site Preceptor

Participants were presented with a list of six resources, and they were asked to identify those that could help them serve as an extern site preceptor to graduate students.

Figure 4. Preceptor Resources



N = 6,652

The most often selected response was networking with other preceptors (47%), and the least frequently selected response was coursework in graduate school (12%; see Figure 4).

Cultural and Linguistic Diversity

The audiologists who received this survey used a 5-point scale (from *not at all qualified* to *very qualified*) to rate how qualified they were to provide services to multicultural populations.

- Overall, *15%* rated themselves as 5 (*very qualified*). The range was from 11% in schools and nonresidential health care facilities to 24% in hospitals.
- 43% rated themselves as 4 or 5. Ratings of 4 or 5 ranged from 36% in nonresidential health care facilities, 42% in schools, 47% in colleges and universities, 52% in industry, to 60% in hospitals ($p = .000$).

Ethics

The survey included three questions about ASHA's Code of Ethics.

- **How relevant is the Code to your work?**
  - *58%* said the Code was very relevant.
  - The range was from 39% in industry, 53% in schools, 58% in nonresidential health care facilities and hospitals, to 68% in colleges and universities ($p = .000$).
- **In general, how out of touch is the Code with workplace realities?**
  - *11%* selected not at all.
  - The range was from 4% in industry, 9% in schools, to 13% in hospitals ($p = .000$).
- **How thorough is the Code?**
  - *22%* said the Code was very thorough.
  - The range was from 17% in industry to 24% in nonresidential health care facilities ($p = .000$).

Social Networking Sites

Few audiologists had accounts or profiles on social networking sites such as Facebook, MySpace, or LinkedIn. The overall mean was *0.3* accounts, and the median was *0*.

Of the respondents who did have an account or profile, the mean number that they had was *1.5*, and the median was *1*.0. Audiologists in schools had the lowest average number (1.3) compared with audiologists in industry who had the highest average (1.8; $p = .023$).

Survey Notes and Method-ology

The 20-year-old ASHA Omnibus Survey has been retired, replaced by surveys specific to work settings and/or professions in order to better meet affiliates' needs. The 2008 Audiology Survey is one of the replacements and melds topics from both the Omnibus Surveys and previous Audiology Surveys.

Response Rate

A stratified random sample was used to select 4,000 ASHA-certified audiologists for this survey from a population of 6,652 audiologists. They were stratified on the basis of type of facility and private practice.

The survey was mailed in August 2008. Second and third mailings followed, at approximately 4-week intervals, to individuals who had not responded to earlier mailings.

Of the original 4,000 audiologists in the sample, 17 had undeliverable addresses, 1 was deceased, 5 were retired, 7 were no longer employed in the field, and 5 were ineligible for other reasons, leaving 3,965 possible respondents. The actual number of respondents was 2,181, resulting in a *55.0%* response rate.

Because facilities with fewer audiologists (such as schools) were oversampled and those with many (e.g., hospitals) were undersampled, *weighting* was used when presenting data to restore all groups to their actual proportion in the population of ASHA audiologists. The results presented in this report are the estimated values for the population of 6,652 from which the sample was drawn.

Other Reports

Results from the 2008 Audiology Survey are presented in a series of reports:

- Annual Salaries
- Hourly Salaries
- Clinical Focus Patterns
- Private Practice
- Survey Summary Report
- Survey Methodology, Respondent Demographics, and Glossary

Electronic Copy

An electronic copy of this report will be available for a limited time on the ASHA Web site at www.asha.org/about/membership-certification/member-data/2008AudiologySurvey.htm.

Suggested Citation

American Speech-Language-Hearing Association. (2008). *2008 Audiology Survey report: Clinical focus patterns.* Rockville, MD: Author.

Supplemental Sources

www.asha.org/NR/rdonlyres/2D8A0D87-AF5B-4AE7-800A-2E971C116835/0/TESAudiologicRehabilitationforAdults.pdf

www.asha.org/continuing_ed/coursearch/ (CE)

www.asha.org/about/publications/leader-online/b-line/ (Coding and reimbursement)

www.asha.org/members/aud/audrehab.htm (AR products)

www.asha.org/members/issues/reimbursement/coding/ar_reimbursement.htm (AR reimbursement and coding)

www.asha.org/about/leadership-projects/multicultural/

Thank You

ASHA would like to thank the audiologists who received the 2008 Audiology Survey and completed it. Reports like this one are possible only because people like **you** participated. If you find this information valuable, please accept the invitation to participate in other ASHA-sponsored surveys and focus groups. You are the experts, and we rely on you to provide data to share with your fellow members.

Additional Information

For additional information regarding the 2008 Audiology Survey, please contact Pam Mason, Director of ASHA's Audiology Professional Practices, at 301-296-5790; email: pmason@asha.org. To learn more about how the Association is working on behalf of ASHA-certified audiologists, members may visit ASHA's Web site at www.asha.org/members/aud/default.