



AMERICAN
SPEECH-LANGUAGE-
HEARING
ASSOCIATION

AUDIOLOGY SURVEY 2010



Clinical Focus Patterns

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Executive Summary

The American Speech-Language-Hearing Association (ASHA) conducted a survey of audiologists in the fall of 2010. 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 report is based on responses from audiologists in schools, colleges and universities, hospitals, nonresidential health care facilities, and industry.

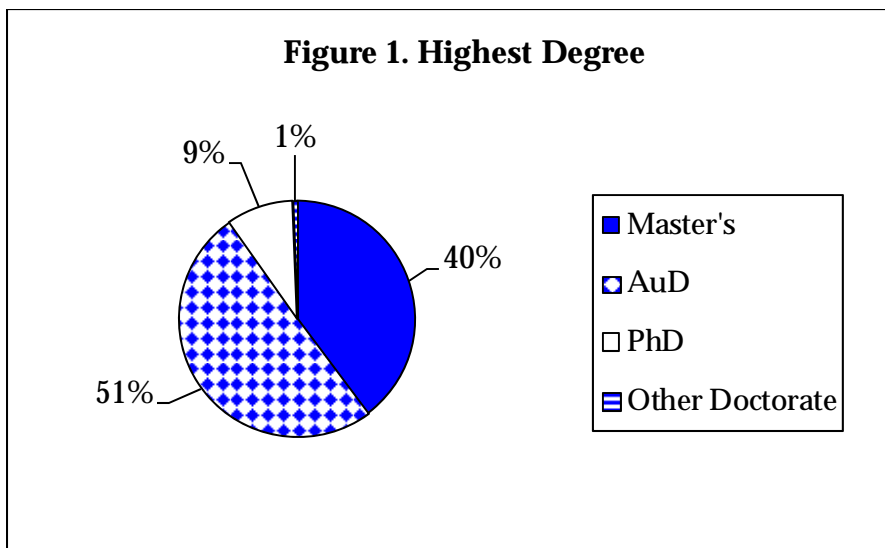
Highlights:

- ◆ 51% of respondents held an AuD, 40% a master's degree, and 9% a PhD.
- ◆ 83% were clinical service providers.
- ◆ 74% received an annual wage.
- ◆ The median number of years of experience was 17.
- ◆ 35% worked in a private practice.
- ◆ 47% maintained their CCC-A for portability in obtaining state licensure.
- ◆ The median number of state licenses held was 1.
- ◆ Three services were provided by more than 80% of the respondents: counseling (87%), fitting and orientation of hearing aids (82%), and fitting/dispensing of hearing aids (81%).
- ◆ 58% reported finding ASHA CE courses through e-mail distribution.
- ◆ 45% were very interested in CE information on hearing aid technology.
- ◆ 5% rated themselves very qualified to address cultural and linguistic influences on service delivery and outcomes.
- ◆ 27% used social networks to connect with audiology colleagues.

Who They Are

Highest Degree

Slightly more than half (51%) of the audiologists who responded to the 2010 Audiology Survey held an audiology doctorate (AuD) as their highest degree, 40% had a master's degree, and 9% had a PhD (see Figure 1).



n = 2,067

More than half of the audiologists with a master's (54%) or AuD degree (51%) worked in a nonresidential health care facility, but PhD holders were more likely to be employed in colleges and universities (45%) than in other types of facilities ($p = .000$).

Function

While most of the audiologists were clinical service providers (83%), the remainder worked as college or university faculty (6%), or administrators (6%), or performed some other function (5%).

Facility

Half worked in nonresidential health care facilities (50%), and more than one quarter worked in hospitals (27%). The remaining audiologists were employed in schools (11%), colleges or universities (9%), industry (3%), or some other facility (1%).

Population Setting

Half (50%) worked in a metropolitan/urban area, 36% worked in a suburban area, and 14% worked in a rural area.

Salary Basis

Nearly three fourths of the respondents received an annual wage (74%), and the rest were paid hourly (26%).

Years of Experience

The median (50th percentile) number of years of experience was 17, ranging from a low of 15 years in hospitals and nonresidential health care facilities to a high of 22 years in colleges and universities.

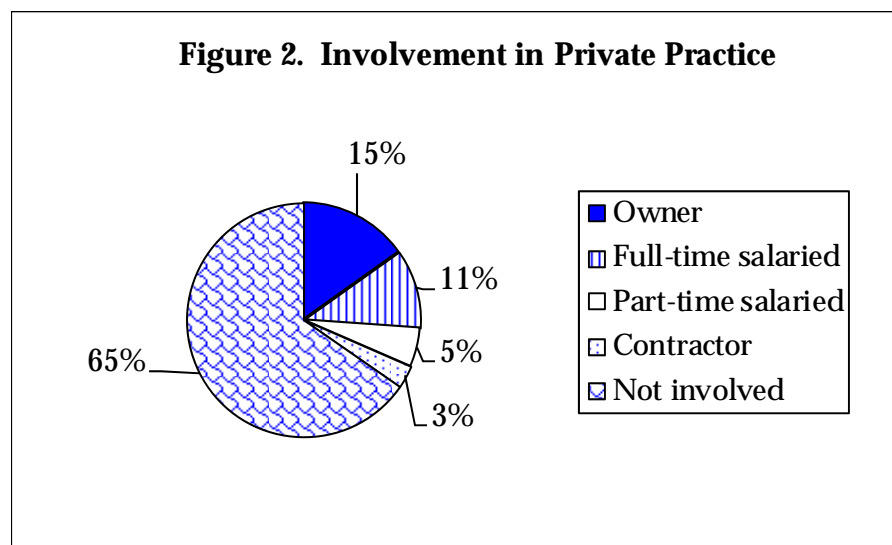
Professional Memberships

Most of the audiologists who responded to the survey belonged to other associations as well as to ASHA:

- 63% to the American Academy of Audiology (AAA)
- 8% to the American Auditory Society (AAS)
- 8% to the Educational Audiology Association (EAA)
- 7% to the Academy of Doctors of Audiology (ADA)
- 3% to the Association of VA Audiologists (AVAA)
- 2% to the National Hearing Conservation Association (NHCA)
- 2% to the Academy of Rehabilitative Audiology (ARA)
- 1% to the Military Audiology Association (MAA)

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/consultant (see Figure 2).



n = 1,999

Audiologists who worked in private practice (*n* = 693) were asked to describe the type of practice where they worked:

- 47% were self-employed in private practice
- 19% worked in a practice owned by other audiologists
- 33% worked in a practice owned by nonaudiologists

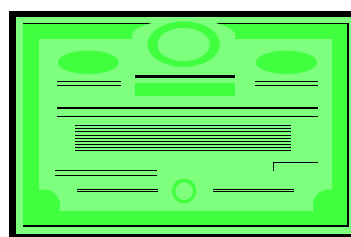
**Maintained
CCC-A**

More audiologists maintained their Certificate of Clinical Competence in Audiology (CCC-A) because of *portability for obtaining state licensure* (47%) than for any other reason. Additional reasons they selected were:

- 42% — commitment to remain current in the field
- 40% — required by their employer
- 37% — increased opportunities for student supervision
- 35% — valued being highly qualified/credentialed
- 30% — overall value of the credential
- 27% — required by third-party payers
- 26% — consumer recognition

Type of employment facility had a significant effect on each of the eight responses ($p = .000$):

- Audiologists in *schools* were more likely than those in other facilities to select a commitment to remaining current in the field (57%), the value in being highly qualified/credentialed (43%), and the overall value of the credential (40%).
- *College/university* audiologists were the most likely group to respond that it was required by their employer (63%) or increased opportunities for student supervision (53%).
- Audiologists who worked in *nonresidential health care facilities* were the most likely group to select required by third-party payers (37%) or consumer recognition (31%).
- Finally, *industrial* audiologists were the most likely group to select portability for obtaining state licensure (67%).



Licenses

The median number of state licenses held was one, but some audiologists did hold multiple licenses. Audiologists who held licenses in multiple states ($n = 270$) were asked their reasons. Most indicated that they had previously been employed in another state and retained that license (56%) or that they worked in multiple states (40%). Answers of providing telepractice services (2%) or other (10%) were rare. Neither of the reasons was affected by type of facility.

What They Say About

Audiologists were asked about service provision, ASHA resources, continuing education, extern site preceptor, cultural and linguistic diversity, and social networks.



Service Provision

From a list of eight types of services, clinical audiologists who worked full- or part-time identified *counseling on communication strategies/realistic expectations* as a service that they provided more frequently than any of the other services. This was the most frequently selected service in hospitals but not in the other facility types. In schools, *demonstration/ fitting/orientation of hearing assistive technology* was the service more audiologists selected than any other. In nonresidential health care facilities, *fitting and dispensing hearing aids* was most often selected. Lastly, in colleges and universities, there was a *tie* between *demonstration/ fitting/ orientation of hearing assistive technology* and *fitting and dispensing hearing aids* for the most selected service (see Table 1).

Speechreading was the least frequently selected service in every type of facility except schools, where *programming and fitting cochlear implants (CIs)* was selected least often.

Reading across rows in Table 1 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 19% of audiologists, it ranges from a low of 15% in hospitals and nonresidential health care facilities to 41% in schools ($p = .000$).

One service was more likely to be provided in *schools* than in other types of facilities and seven in *colleges and universities*. Audiologists in *hospitals* were the most likely group to state that they did not provide any of the eight services from the list.

Table 1. Services Provided (%)

Service	Total	School	Coll./ Univ.	Hos- pital	Nonres. HC
Auditory training ^{***}	18.6	41.1	26.7	15.2	15.2
Counseling on communication strategies/realistic expectations ^{**}	87.1	79.7	93.3	87.8	88.2
Demonstration/fitting/orientation of hearing assistive technology ^{**}	82.0	86.5	96.6	76.9	83.5
Fitting and dispensing hearing aids ^{***}	80.6	34.9	96.6	79.7	90.2
Programming and fitting cochlear implants (CIs) ^{***}	10.4	6.3	26.7	16.9	7.8
Speechreading ^{***}	3.6	9.9	17.2	1.7	2.9
Validation of treatment outcomes by self-questionnaires ^{***}	36.4	30.2	65.5	41.0	34.6
Verification of performance of hearing aids using real ear measures ^{***}	57.1	53.6	89.7	64.7	52.7
I do not provide any of the above services.*	5.8	5.7	0.0	8.5	4.7

Note. n = 1,650; HC = health care.

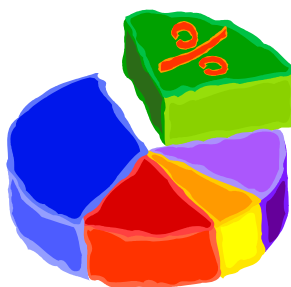
* p < .05, ** p < .01, *** p < .001



ASHA Resources

Respondents were asked to rate the value of each of five resources, using a scale between 1 (*not at all valuable*) and 5 (*very valuable*). They were also allowed to select not familiar as a response.

- Between 6% and 10% rated each of the resources as *very valuable*.
- Approximately the same proportion—between 5% and 9%—rated each resource as *not at all valuable*.
- On the other hand, at least one quarter of the audiologists were *unfamiliar* with each of the resources: 26% with ASHA’s *Audiology Connections*, 32% with ASHA’s *Access Audiology*, 38% with ASHA’s audiology consumer web pages, 46% with ASHA Special Interest Divisions 6 through 9, and 59% with professional consultation.



Response to only one of the resources was affected by facility type ($p = .000$).

- Audiologists in nonresidential health care facilities were most likely to be unfamiliar with *Special Interest Divisions 6 through 9* (52%); those in colleges and universities were least likely (29%).
- Respondents in colleges and universities were more likely (13%) than those in other facilities to rate the Divisions very valuable.
- Audiologists in industry were more likely (11%) than those in other types of facilities to rate the Divisions as not at all valuable.

Continuing Education (CE)

Regarding ways to find CE courses, more than one half of the audiologists selected *e-mail distribution* (58%), and nearly that many selected *direct mail* (47%). They also rely on recommendations from colleagues (34%), Internet searches (25%), print advertisements (25%), course searches on the ASHA website (25%), or flyers at conferences (18%).

The way audiologists find ASHA CE courses varies by type of facility for three of the strategies:

- Between 54% in schools and 38% in industry rely on direct mail ($p = .016$).
- Between 67% in colleges and universities and 54% in nonresidential health care facilities use e-mail distribution ($p = .001$).
- Between 47% in schools and 27% in colleges and universities rely on the recommendation of colleagues ($p = .000$).

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 14 CE topics:

- **Hearing aid technology**
 - More audiologists said they were very interested in this topic than in the other topics (45%).
 - The range was from 30% in college and universities and 32% in industry to 53% in nonresidential health care facilities ($p = .000$).
- **Reimbursement and coding**
 - 30% were very interested in reimbursement and coding.
 - The range was from 7% in schools to 39% in nonresidential health care facilities ($p = .000$).
- **Genetics of hearing loss**
 - 28% were very interested in this topic.
 - The range was from 22% in nonresidential health care facilities and 23% in industry to 35% in schools ($p = .000$).
- **Early hearing detection and intervention**
 - Early hearing detection and intervention was in fourth place, with 26% very interested in the topic.
 - The range was from 15% in industry to 44% in schools ($p = .000$).
- **Vestibular disorders and treatment**
 - 25% were very interested in this topic.

- The range was from 4% in schools and 11% in industry to 29% in hospitals and 31% in nonresidential health care facilities ($p = .000$).
- **Evidence-based practice**
 - Overall, 24% were very interested in this topic.
 - The range was from 20% in nonresidential health care facilities to 37% in colleges and universities ($p = .001$).
- **Audiology business practices and management**
 - Overall, 24% were very interested in this topic.
 - The range was from 6% in schools to 34% in nonresidential health care facilities ($p = .000$).
- **Auditory processing**
 - The last topic in which at least one fifth of the audiologists were interested was auditory processing (20%).
 - The range was from 11% in industry to 41% in schools ($p = .000$).
- **Fewer than 20% of the audiologists rated themselves as being very interested in the last six CE topics:**
 - 19% in educational audiology
 - 18% in cochlear implants
 - 15% in clinical education
 - 12% in supervision
 - 11% in industrial audiology and hearing conservation
 - 6% in multicultural issues

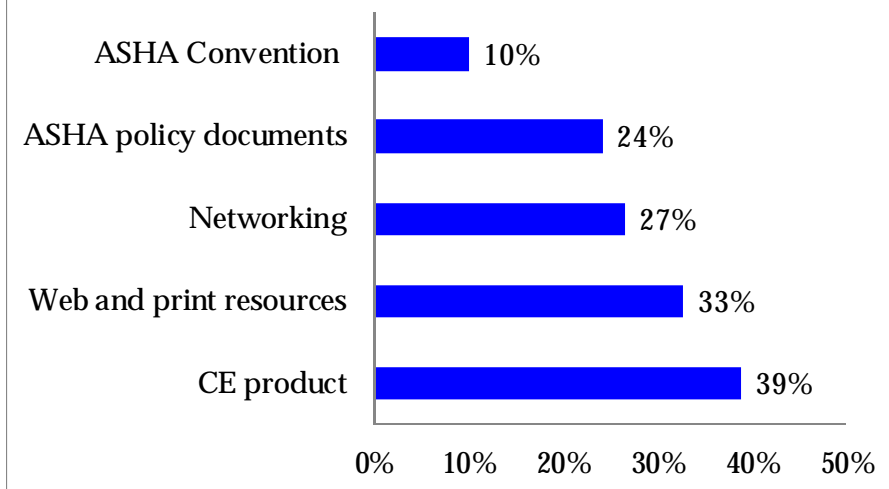
***Extern Site
Preceptor***

Most of the audiologists in the survey had not served as an extern site preceptor or supervisor for clinical doctoral students during the past 3 years. Of those who did, though, the median number of students they supervised annually was two, and the mean number was three ($n = 834$).

There were significant differences across types of facility. The mean number of students supervised annually was two in nonresidential health care facilities, three in industry, three in hospitals, five in schools, and nine in colleges and universities ($p = .000$).

Respondents were presented with a list of five resources and were asked to identify those that could help them serve as an extern site preceptor to clinical doctoral students. CE products or programs were selected more often than any other resource (39%; see Figure 3).

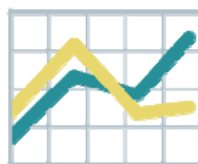
Figure 3. Preceptor Resources



n = 2,070

Type of facility made a significant difference in the audiologists' responses to four of the resources. Audiologists in industry were less likely than those in other facilities to select each of the four resources.

- 9%–10% of the audiologists in schools, hospitals, and nonresidential health care facilities selected *ASHA Convention session* compared with 3% in industry and 18% in colleges and universities (*p* = .001).
- 7% of the audiologists in industry selected *ASHA policy documents* compared with 22%–29% in the other facilities (*p* = .001).
- 13% of the audiologists in industry selected *Web and print resources* compared with 32%–36% in the remaining facilities (*p* = .005).
- 21% of the audiologists in industry, 36% in nonresidential health care facilities, 38% in colleges and universities, 43% in schools, and 45% in hospitals selected *CE products or programs* (*p* = .000).



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 address cultural and linguistic influences on service delivery and outcomes.

- Overall, 5% rated themselves as 5 (*very qualified*). The range was from 3% in industry and nonresidential health care facilities to 9% in colleges and universities.
- 20% rated themselves as 4 or 5. Ratings of 4 or 5 ranged from 11% in industry, 14% in nonresidential health care facilities, 24% in schools, 27% in hospitals, to 32% in colleges and universities ($p = .000$).



Social Networks

Most of the audiologists (64%) reported that they did not use social networks for any of four suggested activities. A few used them to find job opportunities (8%) or to promote their professional practices (8%), while 12% used them for finding information relevant to their professional practices and 27% to connect with audiology colleagues. The type of facility where they were employed had an effect on the audiologists' responses.

- Between 2% in schools and 13% in industry used social networks to *find job opportunities* ($p = .000$).
- Between 2% in schools and in colleges and universities and 14% in nonresidential health care facilities used social networks to *promote their professional practices* ($p = .000$).
- Between 9% in schools and in hospitals and 14% in nonresidential health care facilities used social networks to *find information relevant to their professional practices* ($p = .024$).
- Between 17% in schools and 41% in industry used social networks to *connect with audiology colleagues* ($p = .000$).
- 49% of audiologists in industry, 59% in nonresidential health care facilities, 69% in hospitals, 71% in colleges and universities, and 77% in schools did not use social networks for any of the four listed activities ($p = .000$).

Survey Notes and Method- ology

Response Rate

The Audiology Survey has been fielded in even-numbered years since 2004 to gather information of interest to the profession. Members, volunteer leaders, and staff rely on data from the survey to better understand the priorities and needs of audiologists.

A stratified random sample was used to select 4,000 ASHA-certified audiologists for this survey from a population of 7,986 audiologists. They were stratified on the basis of type of facility and private practice.

The survey was mailed in September 2010. 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, 13 had undeliverable addresses, 1 was deceased, 1 was retired, 2 were no longer employed in the field, and 1 was ineligible for other reasons, leaving 3,982 possible respondents. The actual number of respondents was 2,072, resulting in a 52.0% 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 reflect the actual distribution of audiologists in each type of facility within ASHA.

Audiology Survey Reports

Results from the 2010 Audiology Survey are reported in a series of reports:

- Annual Salaries
- Hourly Wages
- 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 on the ASHA website at

www.asha.org/research/memberdata/AudiologySurvey.htm

Suggested Citation

American Speech-Language-Hearing Association. (2010). *2010 Audiology Survey report: Clinical focus patterns*. Available from www.asha.org.

Supplemental Sources

www.asha.org/aud/ (Audiology Resources)

www.asha.org/certification/ (Certification)

www.asha.org/Practice/reimbursement/modules/ (ASHA's Coding Reimbursement and Advocacy Modules)

www.asha.org/academic/curriculum/ (Curriculum resource guides)

www.asha.org/practice/reimbursement/ (Billing and Reimbursement)

www.asha.org/ce/ (Continuing Education)

www.asha.org/aud/QI.htm (Quality Improvement)

Additional Information

For additional information regarding the 2010 Audiology Survey, please contact Pam Mason, Director of ASHA's Audiology Professional Practices, at 301-296-5790; e-mail: 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/aud/.

Thank You

Without the generous cooperation of the members who participate in our surveys, ASHA could not fulfill its mission to provide vital information about the professions and discipline to the Association membership and public. Thank you!