



SLP HEALTH CARE SURVEY 2009



Survey Methodology, Respondent Demographics, and Glossary

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Executive Summary

The American Speech-Language-Hearing Association (ASHA) conducted a survey of speech-language pathologists (SLPs) in the spring of 2009. The survey was designed to provide information about health care–based service delivery and to update and expand information gathered during previous Omnibus and SLP Health Care Surveys. The results are presented in a series of reports.

This report is based on responses from SLPs in six types of health care facilities: general medical hospitals, rehabilitation (rehab) hospitals, pediatric hospitals, skilled nursing facilities (SNFs), home health agencies and clients' homes, and outpatient clinics and offices.

Highlights:

- ◆ 55% response rate
- ◆ 29% employed in outpatient clinics and offices
- ◆ 85%–92% employed as clinical service providers
- ◆ 64% worked full-time
- ◆ 52 SLPs held doctoral degrees
- ◆ Mean number of years of experience: 17
- ◆ Mean age: 44
- ◆ 80% in SNFs received an hourly wage
- ◆ 24% owned a private practice
- ◆ 3% were Hispanic/Latino
- ◆ 1% were multiracial
- ◆ 44% worked in suburban areas
- ◆ 95% were female

Survey Methodology

Sample Design

The survey was mailed on March 9, 2009, to a random sample of 4,000 ASHA-certified SLPs who were employed in health care settings in the United States. Individuals who returned their surveys were removed from second (April 13) and third (May 5) mailings. Each mailing consisted of a personalized cover letter or invitation, a numbered survey, and a #10 postage-paid business return envelope inserted into a #11 window envelope with an ASHA return address. Metered postage was at the full, first-class rate. In addition, a reminder postcard was mailed to all sample members on March 17.

Response Rate

Of the original 4,000 SLPs in the sample, 220 were ineligible. The number of respondents was 2,064, resulting in a 54.6% response rate.

Table 1. Calculation of Response Rate	
Disposition	Number
Original (gross) sample size	4,000
No longer employed in the field	18
Bad addresses	22
Retired	11
Ineligible for other reasons	169
Net sample size	3,780
Number of respondents	2,064
$2,064 / 3,780 = 54.6\%$	

Experimental Design

All surveys had 43 questions on 25.5" × 11" paper folded to 8.5" × 11" and printed two columns per page. Font was Arial 11. The final page contained a message about the ASHA Web site and the 2009 health care conference and a link to the health care page, as well as a thank-you note and contact information should respondents have questions. A methodological experiment was designed into the survey to test whether issuing an invitation rather than enclosing a standard cover letter would have an effect on response rate.

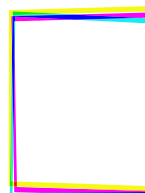


Table 2 shows that the invitation had a negative effect on response rate. There were 1,115 respondents in the control group who received standard cover letters and 940 in the experimental group who received invitations. An additional 9 respondents removed the ID numbers from their surveys, making it impossible to determine their experimental condition.

Table 2. Response Rate by Experimental Condition		
Disposition	Letter	Invitation
Original (gross) sample size	2,000	2,000
No longer employed in the field	14	4
Retired	7	4
Ineligible for other reasons	121	70
Unknown	9	
Net sample size	1,858	1,922
Refused	13	2
Number of respondents	1,115	940
Response rate	60.0%	48.9%

$z = 6.85, p < .00000$

Data Entry

In order to ensure the highest quality data reasonably possible, each of the 2,064 completed surveys was checked, and erroneous responses were corrected or deleted by the ASHA staff member with primary responsibility for the survey. The forms were then sent to an outside firm for two-pass (key and verify) data entry. This process was completed by June 8, 2009.



Demo- graphics

Not only is it typically the case that some individuals who receive a survey do not complete it (unit nonresponse), it is likewise true that some who return theirs do not answer every question (item nonresponse) and thus do not qualify for inclusion in portions of a report. They may be excluded from analyses because they did not answer a question at all or because their answer disqualified them (such as stating that they were employed part-time when a particular analysis was limited to full-time employees). For example, among the 2,064 respondents, only 1,926 were included in reporting on their primary employment facility because they

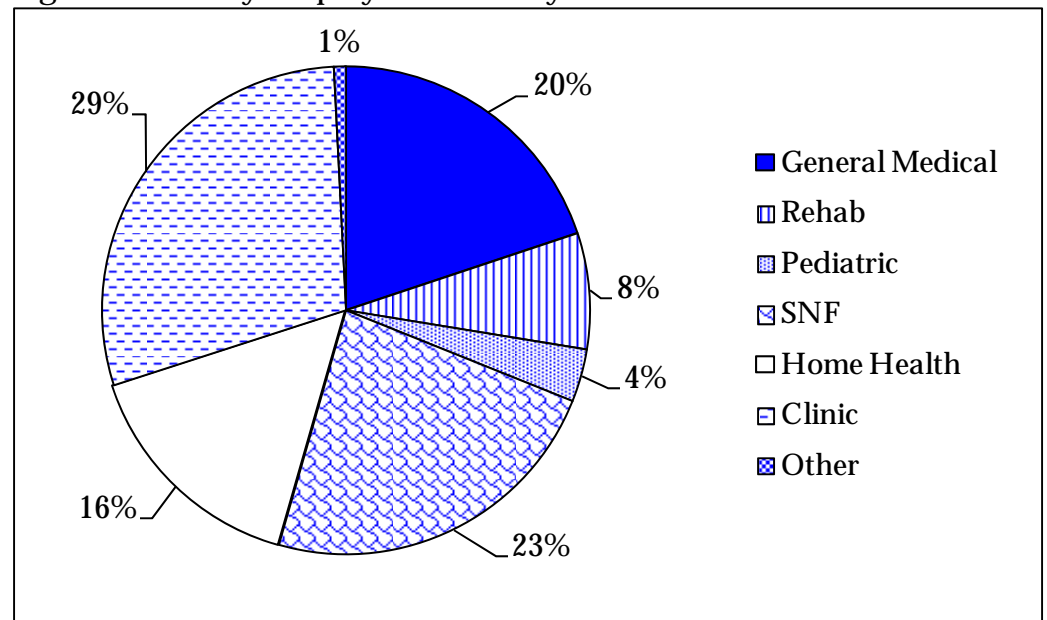
- ◆ indicated that they had ASHA certification in speech-language pathology (CCC-SLP);
- ◆ indicated that they were employed full-time or part-time;
- ◆ identified the type of employment facility where they were employed.

As is our practice, we do not report data for categories with fewer than 25 respondents.

Primary Employment Facility

As shown in Figure 1, clinics (29%), SNFs (23%), and general medical hospitals (20%) were the facilities where most of the respondents worked.

Figure 1. Primary Employment Facility



n = 1,926

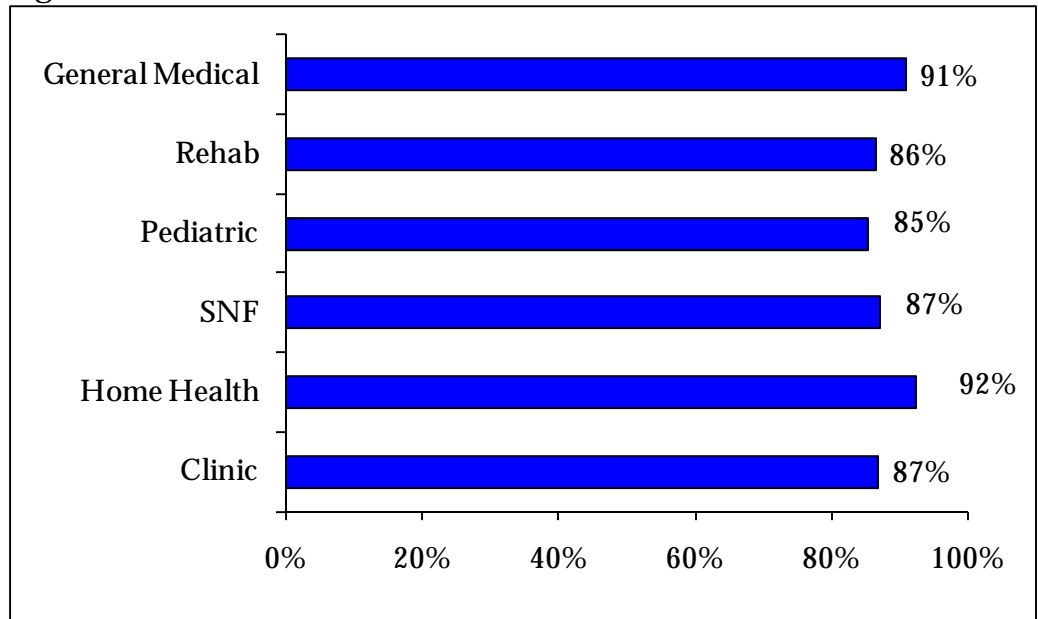
***Excluding
“Other”***

The 15 individuals who reported working in an “other” type of facility have been included in the 2009 Health Care Reports only as part of the total, not as a separate category of facility, because of the ambiguous nature of this small group of individuals. Also included in the total are 21 respondents who were employed full- or part-time but did not answer the question about their type of facility.

***Primary
Employment
Function***

The vast majority of respondents in all types of facilities were clinical service providers (see Figure 2). The highest proportion was in home health agencies and clients’ homes (92%) and the lowest in pediatric hospitals (85%).

Figure 2. Clinical Service Providers



n = 1,903

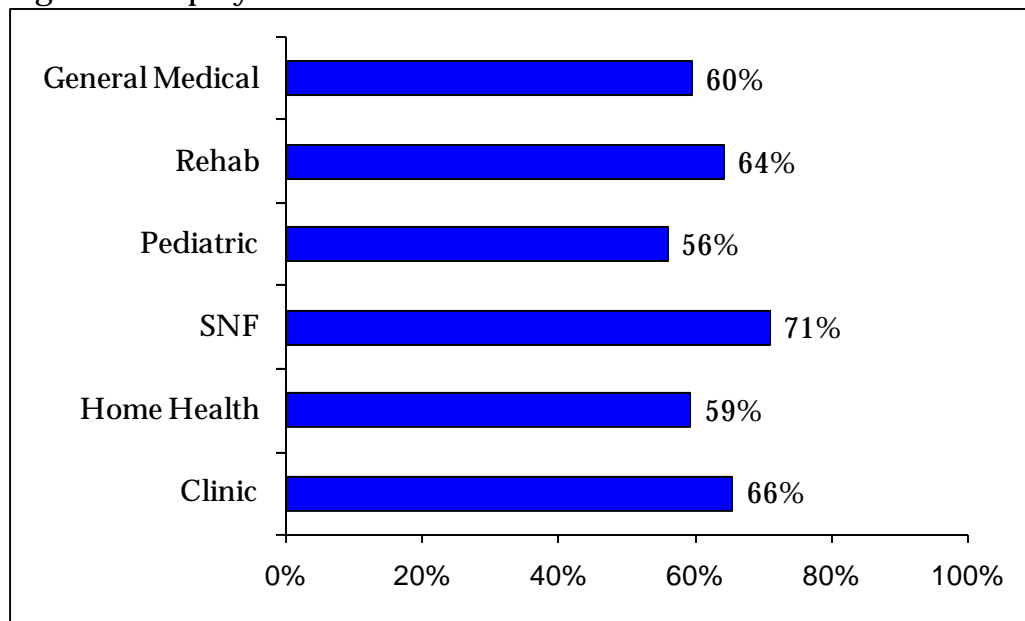
Rehab hospitals (14%) had a greater percentage of administrators or supervisors than did the other facilities (data not shown in any figure).



Employment Status

Of the SLPs in the survey who were employed, 64% worked *full-time* and 36% worked part-time. More SLPs worked full-time in SNFs, outpatient clinics or offices, and rehab hospitals than in other types of facilities ($p = .003$; see Figure 3).

Figure 3. Employed Full-Time



$n = 1,911$

Highest Degree

As a group, only 2% ($n = 52$) of the SLPs reported having received a doctoral degree, ranging from a low of <1% in rehab hospitals to a high of 4% in outpatient clinics or offices ($p = .022$).



Years of Experience

The median number of years of experience was 15, and the mean was 17. The relationship between years of experience and type of facility was not significant ($p = .108$).

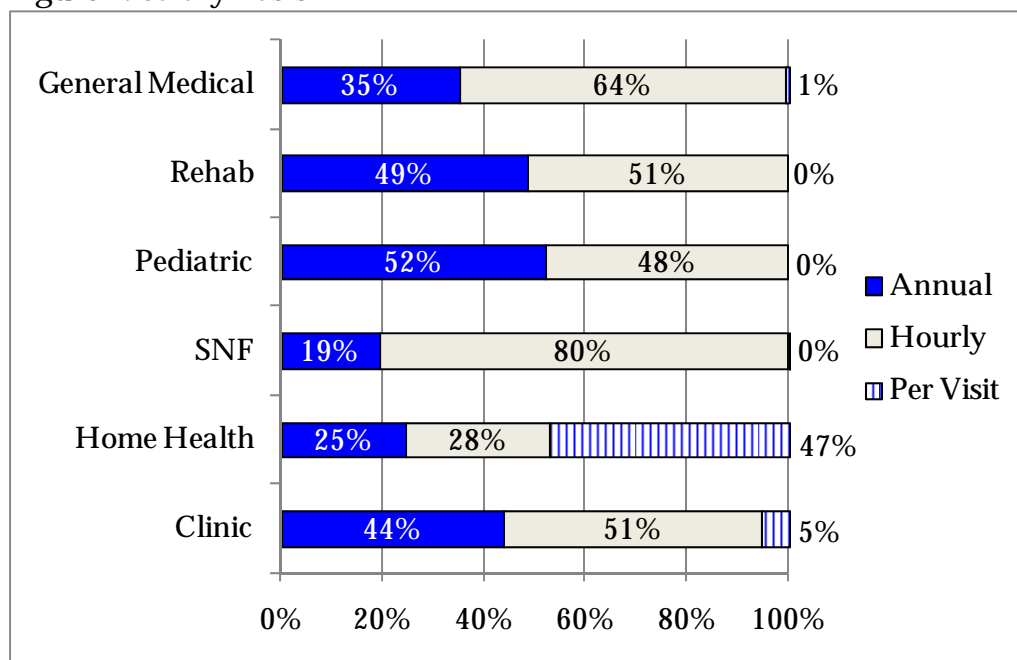
Age

The median age of the SLPs who participated in the survey was 42, and their mean age was 44. The relationship between age and type of facility was not significant ($p = .149$).

Salary Basis

Individuals in pediatric and rehab hospitals were more likely than those in other types of facilities to be paid an annual wage. More than half of the SLPs in SNFs, general medical hospitals, rehab hospitals, and offices and clinics received an hourly wage. SLPs in home health agencies and clients' homes were more likely than those in any other group to receive a per visit wage ($p = .000$; see Figure 4).

Figure 4. Salary Basis



$n = 1,886$

Private Practice

Nearly one quarter (24%) of the respondents said that they were either owner or co-owner of a private practice. Only 7% of the SLPs in rehab hospitals, 9% in SNFs, 10% in general medical hospitals, and 13% in pediatric hospitals were owners, compared with 43% of SLPs in home health agencies and clients' homes and 47% in outpatient clinics or offices ($p = .000$).

Ethnicity and Race

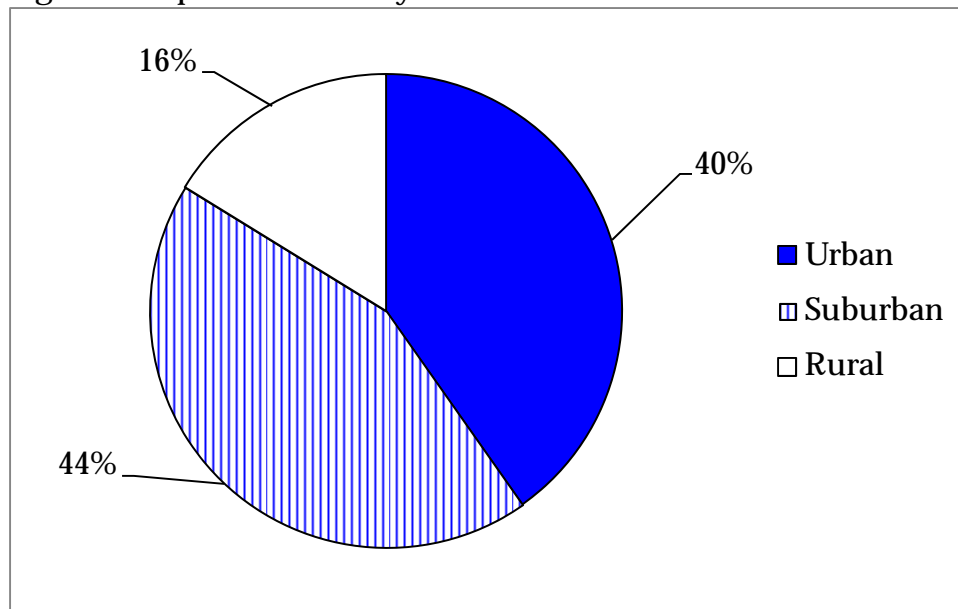
The overall percentage of Hispanics or Latinos responding to the survey was 3%, ranging from a low of less than 2% in general medical hospitals to 10% in pediatric hospitals ($p = .005$).

Of SLPs who reported their race, 1% were multiracial and 96% were White.

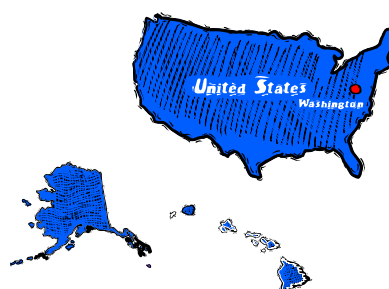
Population Density

Most SLPs worked in either cities or suburbs, with a few in rural areas (see Figure 5). SLPs in general medical hospitals (48%), rehab hospitals (49%), and pediatric hospitals (75%) were more likely to work in metropolitan or urban areas than in less populated ones. However, SLPs in SNFs (47%), home health agencies or clients' homes (48%), and outpatient clinics or offices (48%) were most likely found in suburban areas. The range in rural settings was from 3% of SLPs in pediatric hospitals to 24% in SNFs ($p = .000$).

Figure 5. Population Density



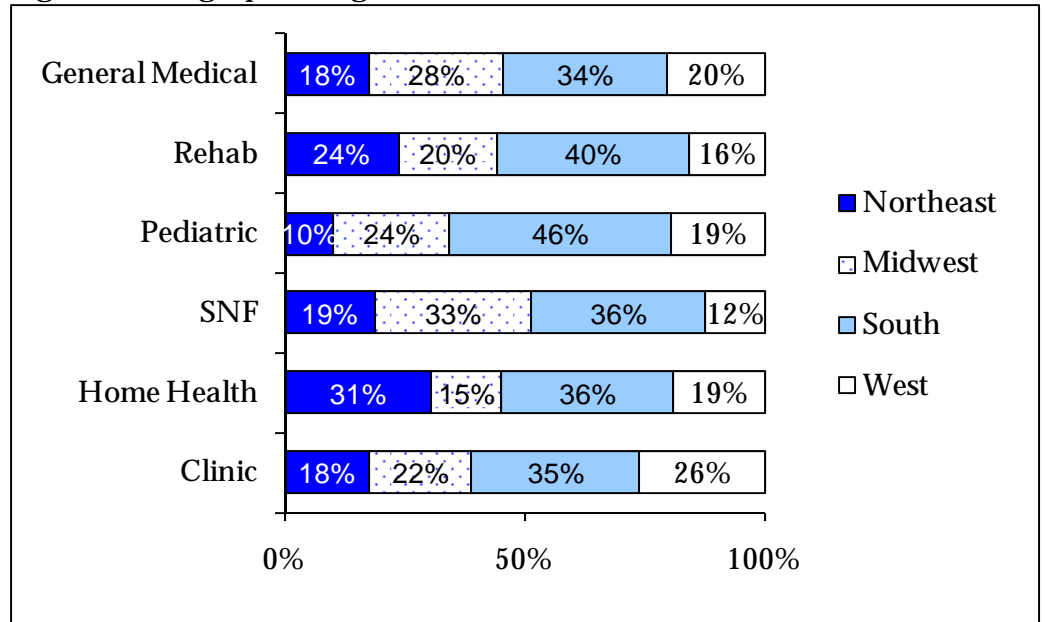
$n = 1,920$



Geographic Distribution

More than one third (36%) of the SLPs worked in the South, and one quarter (25%) in the Midwest, with 20% in the Northeast and 19% in the West. In each of the six types of facilities, more SLPs worked in the South than in other geographic areas ($p = .000$; see Figure 6). State by state listings for each of the geographic areas can be found on page 12.

Figure 6. Geographic Region

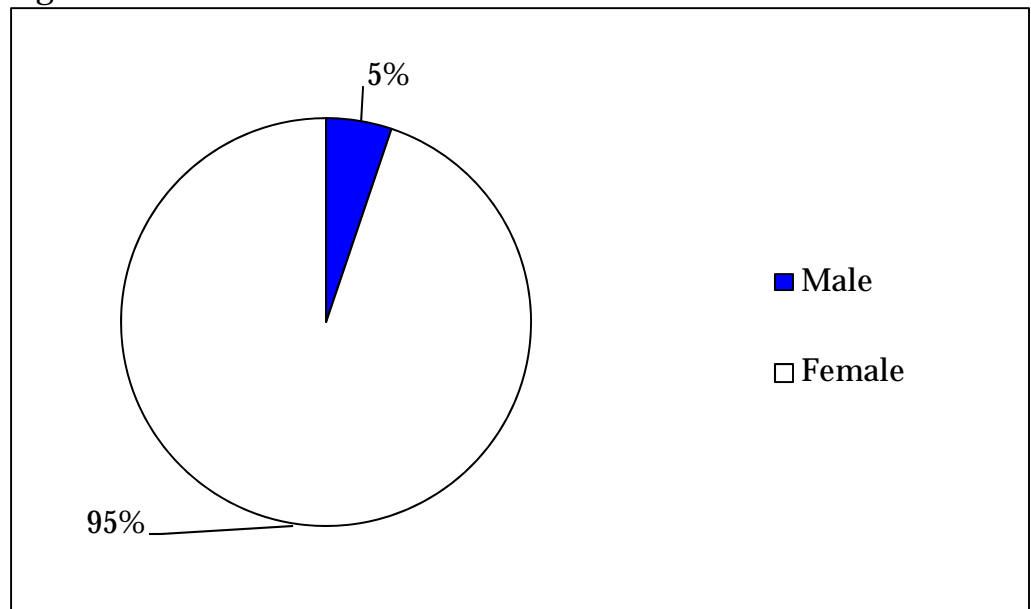


n = 1,902

Sex

Only 5% of the respondents were male (see Figure 7). Gender distribution was not significantly different across facilities ($p = .094$).

Figure 7. Sex



n = 2,059

Glossary

A glossary of terms used in the 2009 Health Care Survey Reports is included below.

Types of Facilities

Facility: General medical hospital
 Rehabilitation hospital
 Pediatric hospital
 Skilled nursing facility (SNF)
 Home health agency or client’s home
 Outpatient clinic or office
 Other

Respondents self-identified their primary employment facility from the list above. Individuals from the “other” category are included when total responses are discussed, but they are not presented as a separate type of facility because their numbers were small ($n = 15$) and because of the uncertain nature of the category.

Stratified Random Sample

A sample of 4,000 ASHA-certified SLPs employed in health care settings was selected to participate in this survey. They were stratified by type of *facility* and by *private practice*. A proportional random sample (15%) was drawn from each facility from among SLPs who did *not* work in private practice. Disproportional stratified random sampling (ranging from 25% to 51%) was used to draw a sample of SLPs who *did* work in private practice, oversampling small groups like pediatric hospitals (see Table 3).

Table 3. Sampling Design			
Facility	PrivPrac	Population	Sample
General Medical Hospital	No	4,759	732
	Yes	351	88
Rehab Hospital	No	2,475	381
	Yes	114	46
Pediatric Hospital	No	940	144
	Yes	55	28
SNF	No	4,792	737
	Yes	253	76
Home Health/Client’s Home	No	2,563	394
	Yes	905	226
Outpatient Clinic/Office	No	4,301	662
	Yes	1,945	486
<i>Total</i>		<i>23,453</i>	<i>4,000</i>

Response Rate

The response rate was calculated using the following equation:

$$RR = \frac{(C + P)}{S - (Ret + I)}$$

- where
- RR = Response rate
 - C = Number of completed surveys
 - P = Number of partial surveys
 - S = Sample size
 - Ret = Ineligible because of retirement
 - I = Ineligible for other reasons (e.g., does not work in health care, no longer in the field, on leave of absence)

$$RR = \frac{2,064}{4,000 - (11 + 209)} = 54.6\%$$

Types of Averages

- Mean:** Add the total of all the values and divide by *n* (the number of items).
- Median:** Arrange the values in order, from lowest to highest. Select the value in the middle position.
- Mode:** The value that occurs more often than any other value
- Example:** Sample data set
 1, 1, 7, 34, 88
 Mean: $(1 + 1 + 7 + 34 + 88) / 5 = 26.2$
 Median: 7
 Mode: 1

The statistic that is reported as the “average” in the 2009 Health Care Survey is the median (middle) statistic unless otherwise noted. Median statistics are presented because they are more stable and less sensitive to extreme values than are means.

Regions of the Country

Northeast

- ◆ Middle Atlantic
 - New Jersey
 - New York
 - Pennsylvania
- ◆ New England
 - Connecticut
 - Maine
 - Massachusetts
 - New Hampshire
 - Rhode Island
 - Vermont

South

- ◆ East South Central
 - Alabama
 - Kentucky
 - Mississippi
 - Tennessee
- ◆ South Atlantic
 - Delaware
 - District of Columbia
 - Florida
 - Georgia
 - Maryland
 - North Carolina
 - South Carolina
 - Virginia
 - West Virginia
- ◆ West South Central
 - Arkansas
 - Louisiana
 - Oklahoma
 - Texas

Midwest

- ◆ East North Central
 - Illinois
 - Indiana
 - Michigan
 - Ohio
 - Wisconsin
- ◆ West North Central
 - Iowa
 - Kansas
 - Minnesota
 - Missouri
 - Nebraska
 - North Dakota
 - South Dakota

West

- ◆ Mountain
 - Arizona
 - Colorado
 - Idaho
 - Montana
 - Nevada
 - New Mexico
 - Utah
 - Wyoming
- ◆ Pacific
 - Alaska
 - California
 - Hawaii
 - Oregon
 - Washington

Other Reports

Results from the 2009 Health Care Survey are presented in a series of reports:

- Survey Methodology, Respondent Demographics, and Glossary
- Survey Summary Report: Number and Type of Responses
- Caseload Characteristics
- Private Practice Owners
- Workforce and Work Conditions
- Annual Salary Report
- Hourly and Per Visit Wage Report

These reports are located at

www.asha.org/research/memberdata/HealthcareSurvey09.htm

Suggested Citation

American Speech-Language-Hearing Association. (2009). *ASHA SLP Health Care Survey 2009: Survey methodology, respondent demographics, and glossary*. Rockville, MD: Author.

Supplemental Sources

Agresti, A., & Finlay, B. (1986). *Statistical methods for the social sciences* (2nd ed.). San Francisco: Dellen.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method* (3rd ed.). New York: Wiley.

Additional Information

For additional information regarding the 2009 SLP Health Care Survey, please contact Amy Hasselkus, Associate Director of Health Care Services, at 800-498-2071, ext. 5686, ahasselkus@asha.org, or Janet Brown, Director of Health Care Services, at ext. 5679, jbrown@asha.org. To learn more about resources for ASHA members working in health care, visit ASHA's Web site at www.asha.org/members/slp/healthcare.

