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**ABSTRACT**

Data contained in the report were collected by the Annual Survey of Hearing Impaired Children and Youth on 25,363 hearing impaired children enrolled in participating special education programs during the 1968-69 school year. Data describe the following characteristics of such children: additional handicapping conditions, age at onset of hearing loss, audiometric findings on hearing threshold levels, age, and sex. Seventy-nine schools and 63 special classes participated in the survey. The students for whom data are presented represent about one half of the total number of hearing impaired students receiving special educational services. In addition to presenting detailed statistical tables, qualifications and limitations of the data are pointed out. (LJ)



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NUMBER 3

**DATA FROM THE  
ANNUAL SURVEY OF HEARING  
IMPAIRED CHILDREN AND YOUTH;**

**ADDITIONAL HANDICAPPING CONDITIONS,  
AGE AT ONSET OF HEARING LOSS,  
AND OTHER CHARACTERISTICS OF  
HEARING IMPAIRED STUDENTS.**

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Additional handicapping conditions, age at onset of hearing loss, hearing threshold levels, age and sex distributions for approximately 25,000 hearing impaired students enrolled in participating special educational programs for the hearing impaired during the 1968-69 school year.

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We also would like to extend our appreciation to the National Advisory Committee whose continued assistance has helped to guide the staff. Their collective and individual direction has been invaluable. The members of the Committee are listed below.

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Brenda Rawlings  
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Washington, D.C.  
June 1970

# **Additional Handicapping Conditions, Age at Onset of Hearing Loss, And Other Characteristics of Hearing Impaired Students, United States: 1968-69**

Brenda Rawlings and Augustine Gentile

## **INTRODUCTION**

This report contains data collected by the Annual Survey of Hearing Impaired Children and Youth on approximately 25,000 hearing impaired children enrolled in special education programs in the United States during the 1968-69 school year. During the first year of data collection, information on a variety of the characteristics of these hearing impaired children was obtained. The characteristics described in this report include additional handicapping conditions, age at onset of hearing loss, audiometric findings (better ear averages), age and sex. Data on other characteristics will be given in later publications.

The Annual Survey of Hearing Impaired Children and Youth is a continuing program which began operations in May, 1968. The program is aimed at collecting and disseminating information regarding characteristics of hearing impaired children and youth. The Office of Demographic Studies of Gallaudet College conducts the Survey. The major share of funding for the project is provided by the Division of Research, Bureau of Education for the Handicapped, Office of Education, Department of Health, Education and Welfare.

In consideration of the available resources and the different methods that will be required to obtain data on the hearing impaired population, the universe

of hearing impaired children and youth has been divided into three groups:

- GROUP A** - Hearing impaired individuals who are receiving special educational attention related to a loss of hearing.
- GROUP B** - Individuals identified as having a hearing loss but who are not receiving any special educational services.
- GROUP C** - Individuals in the general population who in fact are hearing impaired but have not been diagnosed as having a hearing loss.

Currently, the major emphasis is on collecting data on the hearing impaired population in Group A. Developmental work is under way for obtaining information relative to individuals included in Groups B and C. Further details about the Annual Survey Program may be found in Appendix I.

## **METHODOLOGY AND SOURCES OF THE DATA**

During the 1968-69 school year, data collection efforts were directed towards the hearing impaired population enrolled in special educational programs. A total of 101 institutions identified in the *American*



*Annals of the Deaf*<sup>1</sup> as "Schools for the Deaf" were asked to participate in the Annual Survey. In addition, a sample of about 15 percent of the "Classes" listed in the *Annals* was chosen in a manner to provide representation regarding geographical factors, size of programs, and public and private institutions. Appendix IV gives a list of the educational programs currently participating in the Annual Survey. The programs that participated during the 1968-69 school year, from which the data in this report were obtained, also are specified in the Appendix.

As seen in Table A, 75 percent of the institutions asked to join the Survey participated in the program. The total number of individual records received during the first year of data collection was 25,363. This figure represents 80 percent of the total enrollment of those institutions invited to participate, (see Table B). Included in the enrollment figures for classes in Table B are 2,727 students enrolled in itinerant programs. Except for periods of special instruction provided by visiting teachers, these children generally attend schools for normal hearing children. Records for children in itinerant programs were not specifically requested during the 1968-69 school year. However, when submitted they were processed and included in the data. Most of these records (about 80 percent) were obtained from two states, Pennsylvania and the District of Columbia. The remaining 20 percent came from programs scattered throughout the United States. Currently, the Survey is collecting data on all special educational programs, including itinerant programs.

Descriptive literature and letters requesting participation in the Annual Survey were mailed in August 1968. The institutions were asked to return a questionnaire indicating their willingness to participate and the number of Survey forms they would require for their student population. Follow-up letters were sent and phone calls were made throughout the school year to institutions which responded negatively and to those from which no response was obtained.

Some of the reasons given for not participating in the Survey included: (1) unavailability of staff at the institution to complete the forms and insufficient funds to allocate to the project in order to hire someone to complete the forms; (2) the type of

**TABLE A:** Participation in the Annual Survey of Hearing Impaired Children and Youth, by Institution: 1968-69 school year

Type of Institution	Total asked to join survey	Institutions that returned completed data forms	
		Number	Percent
All institutions	189	142	75.1
Schools	101	79	78.2
Classes	88	63	71.6

**TABLE B:** Participation in the Annual Survey of Hearing Impaired Children and Youth, by Enrollment: 1968-69 school year

Type of Institution	Enrollment in those asked to join survey	Enrollment in Institutions that returned completed data forms	
		Number	Percent
All institutions	31,706	25,363	80.0
Schools	22,376	17,372	77.6
Classes	9,330 <sup>1</sup>	7,991 <sup>1</sup>	85.6

<sup>1</sup>Includes 2,727 students enrolled in itinerant programs

information requested on the form was not available; and (3) doubts about the merits and objectives of the Annual Survey. Many of the programs that were unable to participate in the 1968-69 Survey are participating in the 1969-70 Survey.

Processing of the data was begun as the forms were returned to the Survey Office. The forms were first edited for clerical errors or information which required clarification. Where necessary the reporting source was contacted regarding the information in question. The data on the forms were then coded and transferred to computer tape. This latter aspect of

<sup>1</sup> *Directory of Services for the Deaf in the United States: American Annals of the Deaf*, 1968 Edition, Powrie V. Doctor, Editor.

processing was performed by the Data Processing Laboratory of Gallaudet College.

The form used to collect the data on students was developed from the experience gained during a two year Pilot Study. The items included on the form were selected on the basis of recommendations made by the National Advisory Committee to the Survey and by persons in the field. The major criteria for item selection were availability of the data and the potential utility of the data. In order to keep the time required to prepare the forms within reasonable limits, it was decided not to attempt to obtain data on all useful items every year. Therefore, data on topics not covered during the 1968-69 school year will be collected in subsequent Surveys. The form used for the 1968-69 school year may be found in Appendix II. Instructions and definitions for completing the forms are given in Appendix III.

#### QUALIFICATIONS AND LIMITATIONS OF THE DATA

In order to interpret and to use correctly the information presented in this report, it is important to take into consideration some general qualifications and limitations of these data. First of all, it must be remembered that these data do not represent the entire population of hearing impaired children enrolled in special educational programs. The 25,363 students for whom data are presented here represent about one-half of the total students receiving special educational services during the 1968-69 school year. Further, during the survey period about 50 percent of the hearing impaired students in special educational programs were enrolled in day classes and itinerant programs. In this report only 30 percent of the students were from these types of programs. The remaining 70 percent represent students enrolled in schools (primarily residential) for the hearing impaired. The differential effect that this lack of representation has on the variables which are reported here will be discussed in a later section.

Another important limitation of these data is the high proportion of records that did not contain information for some of the variables. Table C shows the percentage of records for which information for particular items was not reported or was not usable.

Information on age and sex was submitted for most students. When the information for these items was missing, it was obtained by correspondence with the reporting source. In a few cases it was necessary to estimate the age and determine the sex of the student utilizing other information on the records,

e.g., the number of years in school and the name of the student.

Data on better ear averages shown in this report were determined by averaging the puretone threshold levels, for the better ear, at the frequencies of 500, 1000, and 2000 cycles per second. Table C shows that this information was not available for about 30 percent of the students. Of this number only about 6 percent of the forms actually did not report any audiological results. The remaining 24 percent contained audiological information, but did not give results for one or more of the three frequencies used to compute the better ear average.

Information on additional handicapping conditions was not reported for about 17 percent of the students and the age at onset of hearing loss was not available for about 18 percent.

Currently, data collection activities have been expanded so that publication of data from future years will be more representative of the entire hearing impaired population. Further, the reporting sources are adjusting their record systems so that there will be fewer records with missing information.

#### DISCUSSION OF THE DATA

Frequency distributions for the 25,363 students enrolled in participating special educational programs for the hearing impaired are presented in a series of

TABLE C: Percentage of records for which data for selected items were not reported or were not usable

Item	Percent of Records for which data were not reported or were not usable
Age <sup>1</sup>	0.0
Sex <sup>1</sup>	0.0
Better ear average <sup>2</sup>	30.0
Additional handicapping conditions	16.7
Age at onset of hearing loss	18.2

<sup>1</sup> Data for these items were edited.

<sup>2</sup> Only 6 percent of the records did not report some audiological results.

detailed tables in the following section of this report. Some comments about the characteristics reported on and some highlights of these data are discussed here.

#### Age and Sex

The age and sex distribution of the students for whom data were obtained appears in several of the detailed tables. The most detailed distribution by age is given in Table 1.

Of the 25,363 records collected, 55 percent were for male students and 45 percent were for females. This distribution is similar to the sex ratios for hearing impaired students in special educational programs previously reported in other studies.

Age, as used in this report, is the chronological age of the student as of December 31, 1968. As seen in Table D, the age distribution was similar for both sexes. The group with the largest percentage of students (31.4 percent) was the 10-13 year age group. Due to the composition of the participating institutions, the proportion of students under six years of age (11.4 percent) is probably understated in these data. When preschool programs are fully represented in the Survey, the proportion of students of preschool age will be higher.

#### Better Ear Averages

Distributions of the hearing threshold levels of the students (better ear averages) are shown in several tables. The most detailed distribution given in this report appears in Table 1. As previously stated, the better ear averages were determined from averaging puretone thresholds for the speech range (500, 1000, and 2000 Hz) in the better ear. Better ear averages are given in decibels according to the ISO<sup>1</sup> standard. For

the purposes of this report, audiological data reported in ASA<sup>2</sup> standards were converted to the ISO standard by adding ten decibels to the ASA average. In all, data were available to compute better ear averages for 17,733 students. The data had to be converted from the ASA standard to the ISO standard for about 19 percent of these students. The standard used was not reported for about 7 percent of the 17,733 students. The better ear averages for these students are treated in this report as though they were based on measurements obtained by the ISO standard.

In the detailed tables presenting better ear averages you will note the category "Unable to Compute". This refers to approximately 24 percent of the students for whom better ear averages could not be determined due to the omission of results for one or more of the frequencies used to compute the averages. In some detailed tables this category has been combined with the "Not Reported" category; i.e., those students (about 6%) for whom no audiological information at all was supplied.

Table E presents the number and percentage distribution for selected hearing threshold levels of the 17,733 students for whom better ear average data were available. It will be noted that 74 percent of the students had threshold levels at 65 decibels (ISO) and above.

<sup>1</sup> International Organization for Standardization.

<sup>2</sup> American Standards Association.

TABLE D: Number and percent distribution, by age and sex, of students enrolled in participating special educational programs for the hearing impaired: United States, 1968-69 school year

Age	Both Sexes		Males		Females	
	Number	Percent	Number	Percent	Number	Percent
All ages	25,363	100.0	13,878	100.0	11,485	100.0
Under 6 years	2,893	11.4	1,526	11.0	1,367	11.9
6-9 years	6,505	25.6	3,543	25.5	2,962	25.8
10-13 years	7,952	31.4	4,345	31.3	3,607	31.4
14-17 years	6,339	25.0	3,507	25.3	2,832	24.7
18 and over	1,674	6.6	957	6.9	717	6.2

TABLE E: Number and percent distribution, by hearing threshold levels, of students enrolled in participating special educational programs for the hearing impaired: United States, 1968-69 school year

Hearing Threshold Levels in Decibels (ISO) <sup>1</sup>	Number of Students <sup>2</sup>	Percent
All dB levels	17,733	100.0
Under 10 dB	232	1.3
10-39 dB	1,748	9.9
40-64 dB	2,618	14.8
65-84 dB	4,332	24.4
85 dB & Above	8,803	49.6

<sup>1</sup> Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

<sup>2</sup> Excludes those for whom data were not reported or the data were not usable.

The table also shows that there were 232 reported cases of students with better ear averages under 10 decibels. Most of these are students with a severe hearing loss in the worse ear. The records for these students show that almost 90 percent were enrolled in itinerant programs.

If it may be assumed that children in classes and itinerant programs will generally have less severe hearing losses than the population in residential and day schools, the proportions shown in the table will change when the data are more representative of the total hearing impaired student population.

#### Additional Handicapping Conditions

Data describing the handicaps the students had in addition to impaired hearing are shown in Tables 2,3,4, and 5. The tables showing these additional handicapping conditions give the number of times a particular condition was reported. For some students more than one "additional handicapping condition" was reported. If a particular child had both a "Severe Visual" problem and "Emotional Problems", his

condition would be counted in both categories. As an example, in Table 2 the total column for a specific condition, such as Cleft Lip or Palate indicates the number of different students reported to have the condition. Whereas, the column showing the total number of all additional handicapping conditions (8,871) is the total conditions reported for the 6,445 students (See Table F) who had one or more handicapping conditions besides their impaired hearing.

Also shown in Tables 2,3,4, and 5 are the rates of occurrence of additional handicapping conditions for particular groups in the hearing impaired population. These are expressed as the total number of conditions per 1,000 students in a specified age, sex, hearing threshold level and age at onset group. These computations are based on all students (including those reported as having no additional handicapping conditions) for whom information was received. Excluded from the computations are the 4,233 students for whom no data was obtained for this item.

Table F indicates the number and percent of hearing impaired students who had either no additional handicaps, one additional handicap or two or more additional handicaps. The data indicate that 57.9

TABLE F: Number and percent of hearing impaired students with additional handicapping conditions enrolled in participating special educational programs: United States 1968-69 school year

Number of additional handicapping conditions reported	Number	Percent
Total students	25,363	100.0
No additional handicapping conditions	14,685	57.9
One additional handicapping condition	4,620	18.2
Two or more additional handicapping conditions	1,825	7.2
Not reported	4,233	16.7

percent of the students had no additional handicaps, 18.2 percent were reported to have one additional handicap, and 7.2 percent had two or more additional handicaps. Information was not reported for 16.7 percent of the students. If the students for whom data were not reported are excluded from these computations, the percentages would be as follows:

No additional handicapping conditions—69.5 percent  
One additional handicapping condition—21.9 percent  
Two or more additional handicaps — 8.6 percent

Table G shows the number of times a specific additional handicap was reported as the only additional handicap and the number of times the condition was reported in combination with other additional handicaps. Also presented in this table are the rates of occurrence of additional handicaps per 1,000 hearing impaired students. These rates are based on

the 21,130 students for whom data were obtained for this item.

The questionnaire item regarding additional handicapping conditions (See Appendix II) provided "check boxes" for reporting selected conditions and provided space to write in other conditions. Of the "write-in" conditions, "heart disorders" occurred most frequently (186 times). In addition, a variety of other conditions were reported 1,444 times. It should be noted that "write-in" conditions tend to be under reported more frequently than conditions for which a "check box" is provided.

It should be noted further that reported cases of "Emotional Problems" and "Behavioral Problems" are frequently based on subjective judgements, whereas the diagnosis for the other types of handicapping conditions are usually based on physiological, psychometric and other evidence.

TABLE G: Number and rate of additional handicapping conditions among hearing impaired students enrolled in participating special educational programs: United States, 1968-69 school year

Additional Handicapping Conditions	Total Number of Reported Conditions	Number of Conditions per 1000 Students <sup>1</sup>	Number of times condition reported as the only additional handicap	Number of times condition reported in combination with other handicapping conditions
Total	9,871	419.8	4,620	4,251
Cleft lip or palate	153	7.2	95	58
Severe visual	883	41.8	458	425
Mental retardation	1,700	80.5	1,004	696
Emotional problems	1,403	66.4	563	840
Behavioral problems	1,225	68.0	475	750
Perceptual motor disorders	1,169	55.3	544	625
Cerebral palsy	708	33.5	414	294
Heart disorders	186	8.8	100	86
Other	1,444	68.3	967	477

<sup>1</sup> Includes 14,885 students who had no additional handicapping conditions but excludes 4,232 students for whom this information was not reported.

### Age at Onset of Hearing Loss

Tables 6, 7, and 8 present the age at onset of hearing loss for students in the participating programs. The directions for the item "Age at Onset of Hearing Loss" asked for the age at which the child lost his hearing. A general problem in collecting data on this topic is that in many cases the age at onset is not known, therefore some respondents report the age at which the loss was discovered.

Table H gives a summary of the reported ages at onset for the students included in this Survey. Age at onset was reported as "at birth" for 60.2 percent of all students; for 13.9 percent of the students the onset was reported as occurring between birth and under three years of age; for 5.6 percent the onset was reported as between 3 and 6 years of age; onset occurred at 7 years and later for 2.1 percent; and the onset was not reported for 18.2 percent of the students. When the 4,604 students for whom no data were available are omitted from the computations, the percentage distribution for these age at onset categories are as follows:

Onset at birth . . . . .	73.6 percent
Onset under 3 years . .	17.0 percent
Onset 3 - 6 years . . . .	6.8 percent
Onset 7 years or over . .	2.6 percent

### SUMMARY

Selected characteristics of 25,363 students enrolled in special educational programs for the hearing impaired have been presented. The characteristics for which data were given are age, sex, hearing threshold levels, additional handicapping conditions, and age at onset of hearing loss. The methodology and sources of the data have been described. A list of the participating programs is given in Appendix IV. It was noted that records were obtained for about 80 percent of the students enrolled in the institutions that were invited to participate in the program.

Qualifications and limitations of the data were discussed. It was particularly stressed that the data are not representative of all hearing impaired students. Seventy percent of students for whom data were given were from schools (primarily residential) and the remaining 30 percent were for students in day class programs. At present, in the United States, about 50 percent of the hearing impaired students are enroll-

TABLE H: Number and percent distribution, by age at onset of hearing loss, for students enrolled in participating special educational programs for the hearing impaired: United States, 1968-69 school year

Age at Onset of Hearing Loss	Number	Percent
Total students	25,363	100.0
Onset at birth	15,275	60.2
Under 3 years	3,534	13.9
3-6 years	1,417	5.6
7 years and over	533	2.1
Unknown or not reported	4,604	18.2

Finally, it must be reiterated and kept in mind that the foregoing discussion and the data in this report are based on the characteristics of approximately 25,000 hearing impaired students for whom the office received records and does not purport to represent the entire hearing impaired population.

ed in school programs and 50 percent in day class programs. Another important limitation of the data results from the high proportion of records that did not contain data for some items. Current data collection activities are designed to obtain more representative coverage of the hearing impaired population and to obtain more complete information for students in the Survey. Until these problems can be resolved, the data in this report apply only to the 25,000 students who participated in the Survey for the 1968-69 school year.

This report represents a beginning effort to describe the universe of hearing impaired children and youth in the United States. The utility of the data will be determined by administrators, teachers, and researchers who provide services to the hearing impaired.

Our appreciation again is extended to all the participating educational programs.

## **LIST OF DETAILED TABLES**

**TABLE 1:** Number of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired, by Age and Sex, According to Hearing Threshold Levels: United States, 1968-69 School Year.

**TABLE 2:** Number of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired, by Age and Sex, According to Additional Handicapping Conditions: United States, 1968-69 School Year.

**TABLE 3:** Number of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired, by Hearing Threshold Levels and Sex, According to Additional Handicapping Conditions: United States, 1968-69 School Year.

**TABLE 4:** Number of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired, by Age and Hearing Threshold Levels, According to Additional Handicapping Conditions: United States, 1968-69 School Year.

**TABLE 5:** Number of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired, by Age At Onset of Hearing Loss and Sex, According to Additional Handicapping Conditions: United States, 1968-69 School Year.

**TABLE 6:** Number of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired, by Age and Sex, According to Age At Onset of Hearing Loss: United States, 1968-69 School Year.

**TABLE 7:** Number of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired, by Hearing Threshold Levels and Sex, According to Age At Onset of Hearing Loss: United States, 1968-69 School Year.

**TABLE 8:** Number of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired, by Hearing Threshold Levels and Age, According to Age At Onset of Hearing Loss: United States, 1968-69 School Year.

TABLE 1: NUMBER OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED, BY AGE AND SEX, ACCORDING TO HEARING THRESHOLD LEVELS: UNITED STATES, 1968-69 SCHOOL YEAR

Age and Sex	Total Number Students	BETTER EAR AVERAGES (in Decibels ISO) <sup>1</sup>														Unable to Compute	Data Not Reported
		Under 16	16 to 24	25 to 39	40 to 54	55 to 69	60 to 84	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 98	99 and Above			
Both Sexes--All Ages	25,363	232	540	1,208	1,353	549	716	886	1,051	1,117	1,278	1,308	3,110	4,385	6,050	1,580	
Under 3 yrs.	114	-	-	4	3	2	1	3	2	3	1	1	5	5	68	16	
3 yrs.	515	-	5	1	5	6	2	11	13	22	18	24	44	63	246	55	
4 yrs.	1,413	-	4	14	30	18	22	39	56	62	75	72	145	195	589	92	
5 yrs.	851	3	13	26	44	16	17	21	29	36	38	37	84	127	302	58	
6 yrs.	1,224	21	24	82	79	28	33	41	41	39	49	41	122	210	320	94	
7 yrs.	1,413	17	43	103	110	20	37	42	52	47	59	64	166	226	342	85	
8 yrs.	1,895	22	51	106	97	43	48	55	54	64	59	76	196	346	365	111	
9 yrs.	2,173	21	53	136	131	51	55	83	91	113	124	175	272	327	451	150	
10 yrs.	2,489	16	60	125	127	58	78	88	125	143	122	132	303	398	521	203	
11 yrs.	1,829	16	47	112	119	37	68	71	69	81	106	95	233	317	364	95	
12 yrs.	1,845	30	44	122	99	50	83	56	78	69	88	101	212	323	392	111	
13 yrs.	1,778	14	50	83	111	48	41	55	69	74	87	106	232	306	371	111	
14 yrs.	1,696	26	40	77	99	34	48	59	61	82	78	95	211	310	390	89	
15 yrs.	1,647	14	30	69	82	35	52	73	80	73	94	90	253	291	309	92	
16 yrs.	1,862	18	32	64	87	36	59	63	91	81	105	82	215	315	335	74	
17 yrs.	1,332	8	34	40	62	33	57	51	61	63	72	84	159	266	284	60	
18 yrs.	883	8	4	23	36	13	28	25	41	53	44	44	136	195	216	50	
19 yrs.	537	3	4	8	13	18	11	32	26	21	31	27	92	113	119	23	
20 yrs. and Over	244	-	2	3	8	6	6	13	12	11	18	12	31	53	58	11	

<sup>1</sup> Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.



TABLE 1 (Continued): NUMBER OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED, BY AGE AND SEX, ACCORDING TO HEARING THRESHOLD LEVELS: UNITED STATES, 1988-89 SCHOOL YEAR

Age and Sex	Total Number Students	BETTER EAR AVERAGES (in Decibels ISO) <sup>1</sup>														Unable to Compute	Data not Reported
		Under 10	10 to 24	25 to 39	40 to 49	50 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 and Above			
Males All Ages	13,878	132	311	689	601	330	416	509	589	635	703	713	1,699	2,272	3,195	884	
Under 3 yrs.	60	—	—	—	1	1	—	2	1	—	1	—	4	4	41	11	
3 yrs.	252	—	3	—	3	3	1	6	7	8	11	10	22	32	114	32	
4 yrs.	739	—	3	8	13	13	10	17	23	33	41	37	81	110	301	49	
5 yrs.	469	2	7	16	33	7	10	13	19	20	19	13	43	57	172	38	
6 yrs.	647	12	15	41	46	14	16	26	21	27	27	24	57	105	166	50	
7 yrs.	813	9	22	60	69	10	20	26	31	24	33	35	100	128	199	47	
8 yrs.	893	7	32	67	51	26	31	30	27	34	29	39	97	174	184	65	
9 yrs.	1,190	12	31	82	78	34	31	41	53	56	63	65	161	160	251	72	
10 yrs.	1,350	9	28	77	75	32	43	43	74	82	66	65	169	217	259	108	
11 yrs.	1,038	9	34	63	67	27	42	43	37	47	62	48	134	172	198	55	
12 yrs.	988	15	24	68	61	32	37	35	47	41	50	54	109	161	200	62	
13 yrs.	873	5	22	53	68	29	21	30	33	49	61	72	117	155	195	63	
14 yrs.	938	16	23	47	64	23	26	30	39	50	37	63	113	158	194	51	
15 yrs.	903	8	19	39	51	18	23	45	50	39	53	56	140	140	165	57	
16 yrs.	918	15	20	29	56	18	36	40	48	43	54	50	100	163	194	43	
17 yrs.	752	4	21	22	41	21	37	33	33	36	43	41	88	146	148	38	
18 yrs.	497	8	3	12	20	8	20	14	21	23	24	22	75	108	118	23	
19 yrs.	328	3	3	3	10	12	7	20	19	12	17	14	60	56	68	18	
20 yrs. and Over	140	—	1	2	—	1	3	12	8	9	12	7	20	28	30	4	

<sup>1</sup> Average hearing threshold in better ear; computed at 500, 1000, 2000 cycles per second.

TABLE 1 (Continued): NUMBER OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED, BY AGE AND SEX, ACCORDING TO HEARING THRESHOLD LEVELS: UNITED STATES, 1968-69 SCHOOL YEAR

Age and Sex	Total Number Students	BETTER EAR AVERAGES (in Decibels ISO) <sup>1</sup>														
		Under 10	10 to 24	25 to 39	40 to 54	55 to 69	70 to 84	85 to 99	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 and Above	Unable to Compute	Data Not Reported
Females All Ages	11,485	100	229	519	552	219	300	377	462	482	575	595	1,411	2,113	2,855	696
Under 3 yrs.	43	-	-	4	2	1	1	1	1	3	-	1	1	1	27	5
3 yrs.	263	-	2	1	2	3	1	5	6	14	7	14	22	31	132	23
4 yrs.	674	-	1	6	17	5	12	22	33	29	34	53	64	85	288	43
5 yrs.	382	1	6	10	11	9	7	8	10	16	19	24	41	70	130	20
6 yrs.	577	9	9	41	33	14	17	15	20	12	22	17	65	105	154	44
7 yrs.	600	8	21	43	41	10	17	16	21	23	26	29	66	98	143	38
8 yrs.	802	15	19	41	48	17	17	25	27	30	30	37	99	172	181	46
9 yrs.	983	9	22	54	53	17	24	42	38	57	51	50	111	167	200	78
10 yrs.	1,149	7	32	48	52	26	35	42	51	61	56	57	134	181	262	95
11 yrs.	794	7	13	49	52	10	26	28	32	34	44	49	99	145	166	40
12 yrs.	859	15	20	54	48	18	26	21	31	28	38	47	103	162	199	49
13 yrs.	805	9	26	40	43	20	20	25	36	26	36	34	115	150	176	43
14 yrs.	762	9	17	30	35	11	20	29	22	32	41	32	98	152	196	38
15 yrs.	744	8	11	30	41	17	29	28	30	34	41	34	113	151	144	35
16 yrs.	746	3	12	35	32	16	14	28	45	38	51	42	106	152	141	31
17 yrs.	580	2	13	18	21	12	20	18	28	25	29	43	71	120	138	22
18 yrs.	396	-	1	11	16	5	8	11	20	10	20	22	60	87	98	27
19 yrs.	217	-	1	3	3	4	4	12	7	9	14	13	32	57	51	7
20 yrs. and Over	104	-	1	1	4	4	2	1	4	2	8	5	11	27	29	7

<sup>1</sup> Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

TABLE 2: NUMBER OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED, BY AGE AND SEX, ACCORDING TO ADDITIONAL HANDICAPPING CONDITIONS: UNITED STATES, 1982-83 SCHOOL YEAR

Age and Sex	Total Number Students <sup>1</sup>	Total Number of Conditions Per 1,000 Students <sup>1</sup>	Total Number of Handicapping Conditions	ADDITIONAL HANDICAPPING CONDITIONS								
				Cleft Lip or Palate	Severe Visual	Mental Retardation	Emotional Problems	Behavioral Problems	Perceptual Motor Disorders	Cerebral Palsy	Heart Disorders	Other
Both Sexes-All Ages	21,130	419.8	8,871	153	883	1,700	1,403	1,225	1,169	708	186	1,444
Under 3 years	99	292.9	29	1	3	1	5	2	9	1	1	6
3 - 5 years	2,251	359.4	819	8	115	22	131	110	114	55	72	142
6 - 9 years	5,377	438.2	2,356	58	225	372	377	355	410	149	53	357
10 - 13 years	6,615	465.0	3,076	50	314	591	485	440	432	258	35	471
14 - 17 years	5,387	402.8	2,169	33	180	558	346	282	182	187	22	379
18 years and Over	1,401	308.4	432	3	46	118	59	36	22	58	3	89
Males-All Ages	11,567	467.6	5,409	86	477	967	849	862	741	444	92	891
Under 3 years	59	322.0	19	-	3	-	4	1	6	-	-	5
3 - 5 years	1,177	409.5	482	6	53	38	83	76	72	33	34	88
6 - 9 years	2,923	491.0	1,406	35	119	224	229	235	251	88	23	202
10 - 13 years	3,617	522.3	1,889	25	183	321	296	316	273	161	18	296
14 - 17 years	2,988	447.9	1,338	18	94	313	205	207	121	122	14	241
18 years and Over	802	345.4	277	2	25	71	32	27	18	40	3	59
Females-All Ages	9,563	362.0	3,462	67	406	733	554	363	428	264	94	553
Under 3 years	40	250.0	10	1	-	1	1	1	3	1	1	1
3 - 5 years	1,074	304.5	327	3	62	24	48	34	42	22	38	54
6 - 9 years	2,454	387.1	950	23	100	148	148	120	159	51	30	155
10 - 13 years	2,998	395.8	1,187	25	131	270	189	124	159	97	17	175
14 - 17 years	2,398	347.4	833	14	84	245	141	79	81	65	8	138
18 years and Over	599	258.8	155	1	21	45	27	9	4	18	-	30

<sup>1</sup>Includes 14,885 students who had no additional handicapping conditions but excludes 4,233 students for whom this information was not reported.

TABLE 3: NUMBER OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED, BY HEARING THRESHOLD LEVELS AND SEX, ACCORDING TO ADDITIONAL HANDICAPPING CONDITIONS: UNITED STATES, 1968-69 SCHOOL YEAR

Better Ear Average (in Decibels 150) <sup>1</sup> and Sex	Total Number Students <sup>2</sup>	Total Number of Conditions Per 1,000 Students <sup>2</sup>	Total Number of Handi- capping Conditions	ADDITIONAL HANDICAPPING CONDITIONS								
				Cleft Lip or Palate	Severe Visual	Mental Retardation	Emotional Problems	Behavioral Problems	Perceptual Motor Disorders	Cerebral Palsy	Heart Disorders	Other
Both Sexes-All Levels	21,130	419.8	8,871	153	883	1,760	1,403	1,225	1,169	708	186	1,444
Under 25	687	334.3	223	16	25	51	42	13	30	8	2	36
25-39	1,007	375.4	378	26	32	106	72	35	36	17	6	46
40-54	1,171	496.2	571	25	44	134	110	59	71	37	6	95
55-64	1,074	463.7	498	7	44	91	77	61	75	58	11	74
65-74	1,676	460.0	771	7	67	130	140	112	117	84	11	103
75-84	2,035	461.9	940	11	88	159	140	122	118	122	25	155
85 and Above	7,332	385.7	2,828	24	284	499	476	434	385	220	65	492
Not Available	6,168	430.0	2,652	37	299	530	397	389	337	162	58	443
Males-All Levels	11,567	467.6	5,409	86	517	967	849	862	741	444	92	891
Under 25	379	353.6	134	8	13	28	28	10	21	4	2	20
25-39	570	398.2	227	14	18	55	42	27	23	9	4	35
40-54	702	527.1	370	16	25	84	65	42	45	30	3	60
55-64	642	493.8	317	5	23	55	49	43	47	39	5	51
65-74	952	525.2	500	2	40	73	95	86	73	73	7	68
75-84	1,133	547.2	620	6	49	101	92	89	84	83	12	104
85 and Above	3,925	423.2	1,661	11	147	265	248	308	242	121	32	287
Not Available	3,264	484.1	1,580	24	162	366	230	257	206	102	27	266
Females-All Levels	9,563	362.0	3,462	67	406	733	554	363	428	264	94	553
Under 25	288	309.0	89	8	12	23	14	3	9	4	-	16
25-39	437	345.5	151	12	14	51	50	8	13	8	4	11
40-54	483	448.9	211	9	19	50	45	17	28	7	3	35
55-64	432	419.0	181	2	21	38	28	14	28	19	8	23
65-74	724	374.3	271	5	27	57	45	28	44	28	4	35
75-84	902	364.8	320	5	39	77	48	33	34	39	13	51
85 and Above	3,407	342.5	1,167	13	137	234	177	128	143	93	33	205
Not Available	2,904	389.1	1,072	13	137	224	167	132	131	80	31	177

<sup>1</sup> Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

<sup>2</sup> Includes 14,895 students who had no additional handicapping conditions but excludes 4,233 students for whom this information was not reported.

TABLE 4: NUMBER OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED, BY AGE AND HEARING THRESHOLD LEVELS, ACCORDING TO ADDITIONAL HANDICAPPING CONDITIONS: UNITED STATES, 1968-69 SCHOOL YEAR

Better Ear Averages in Decibels (ISO) <sup>1</sup> and Age	Total Number Students <sup>2</sup>	Total Number of Conditions Per 1,000 Students <sup>2</sup>	Total Number of Handicapping Conditions	ADDITIONAL HANDICAPPING CONDITIONS								
				Cleft Lip or Palate	Severe Visual	Mental Retardation	Emotional Problems	Behavioral Problems	Perceptual Motor Disorders	Cerebral Palsy	Heart Disorders	Other
All Ages--All Levels	21,130	419.8	8,871	153	883	1,700	1,403	1,225	1,169	708	186	1,444
Under 30	1,174	511.9	601	42	57	157	114	48	66	25	10	82
40 - 64	2,245	480.6	1,079	32	88	225	187	120	146	95	17	169
65 - 84	3,711	461.1	1,711	18	155	289	280	234	235	206	36	258
85 and Above	7,332	385.7	2,828	24	294	499	425	434	385	220	65	492
Not Available	6,168	430.1	2,652	37	299	530	397	389	337	162	58	443
Under 5 years--All Levels	2,350	358.6	838	9	118	33	136	112	123	56	73	148
Under 30	66	590.9	39	1	4	1	6	3	14	3	1	6
40 - 64	125	408.0	51	2	8	4	6	4	8	1	6	12
65 - 84	368	288.0	106	1	9	3	18	17	21	8	5	20
85 and Above	685	287.6	197	1	24	13	37	25	22	17	20	38
Not Available	1,106	402.4	445	4	73	42	69	63	58	27	37	72
6 - 9 years--All Levels	5,377	438.2	2,358	58	225	372	377	365	410	149	53	357
Under 30	577	315.4	182	19	13	39	34	19	24	7	4	23
40 - 64	636	470.1	299	14	23	57	49	33	52	20	6	45
65 - 84	850	494.1	420	6	40	58	71	64	82	31	12	58
85 and Above	1,757	401.3	705	6	67	96	93	116	134	50	22	121
Not Available	1,557	481.7	750	13	82	124	130	123	118	41	9	110
10 - 13 years--All Levels	8,815	485.0	3,076	50	314	591	485	440	432	258	35	471
Under 30	600	408.3	245	14	26	73	53	20	19	5	3	32
40 - 64	776	496.1	385	8	28	85	68	46	51	35	1	63
65 - 84	1,183	542.7	642	6	61	96	106	96	94	77	7	87
85 and Above	2,279	425.2	969	10	105	154	145	156	151	85	15	148
Not Available	1,777	489.9	835	12	94	183	111	122	117	56	9	131
14 - 17 years--All Levels	5,387	402.8	2,169	33	180	558	348	282	182	187	22	379
Under 30	386	310.9	120	8	12	38	20	6	9	9	2	16
40 - 64	586	483.2	289	6	23	70	54	32	31	29	3	41
65 - 84	1,038	436.0	452	4	37	117	71	51	34	87	7	64
85 and Above	2,824	394.8	798	7	71	188	130	121	71	53	7	151
Not Available	1,352	376.5	508	8	37	145	71	72	37	29	3	107
18 years and over--All Levels	1,401	308.4	432	3	46	118	69	36	22	56	3	89
Under 30	45	333.3	15	-	2	8	1	-	-	1	-	5
40 - 64	122	450.8	65	2	8	8	10	5	4	10	1	8
65 - 84	271	325.8	81	1	8	17	12	8	4	23	1	19
85 and Above	587	288.2	158	-	17	48	20	16	7	15	1	34
Not Available	378	300.5	113	-	13	36	16	9	7	8	-	23

<sup>1</sup> Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

<sup>2</sup> Includes 14,686 students who had no additional handicapping conditions but excludes 4,233 students for whom this information was not reported.

TABLE 5: NUMBER OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED, BY AGE AT ONSET OF HEARING LOSS AND SEX, ACCORDING TO ADDITIONAL HANDICAPPING CONDITIONS: UNITED STATES, 1968-69 SCHOOL YEAR.

Age at Onset of Hearing Loss and Sex	Total Number Students <sup>1</sup>	Total Number of Conditions Per 1,000 Students <sup>1</sup>	Total Number of Handicapping Conditions	ADDITIONAL HANDICAPPING CONDITIONS								
				Cleft Lip or Palate	Severe Visual	Mental Retardation	Emotional Problems	Behavioral Problems	Perceptual Motor Disorders	Cerebral Palsy	Heart Disorders	Other
Both Sexes--All Onsets	21,130	419.8	8,871	153	883	1,700	1,403	1,225	1,169	708	186	1,444
At Birth	15,049	436.2	5,692	94	591	973	850	801	783	545	145	909
Under 1 year	872	457.6	399	4	30	83	65	70	55	19	4	69
1 year	1,226	332.8	408	6	28	89	69	59	50	15	6	86
2 years	203	313.5	280	4	25	70	42	34	31	12	2	60
3 years	450	344.4	155	1	14	29	28	25	21	8	1	28
4-6 years	780	298.7	233	10	29	44	51	29	22	8	1	39
7 years and Over	473	289.6	137	2	32	29	29	12	8	2	3	21
Unknown	3,387	462.7	1,567	32	134	383	270	195	199	99	23	232
Males--All Onsets	11,567	467.6	5,409	86	477	967	849	862	741	444	92	891
At Birth	7,064	491.6	3,473	54	305	563	520	554	498	347	74	558
Under 1 year	514	521.4	268	2	22	47	45	56	39	8	1	48
1 year	676	352.1	238	3	11	52	39	38	28	10	3	54
2 years	482	356.8	172	2	14	40	27	26	19	9	1	34
3 years	260	403.8	105	1	10	13	21	23	15	4	1	17
4-6 years	443	298.0	132	5	15	23	26	20	13	6	1	23
7 years and Over	285	339.8	90	1	21	19	18	10	5	1	2	13
Unknown	1,863	499.7	931	18	79	210	153	135	124	59	9	144
Females--All Onsets	9,563	362.0	3,462	57	406	733	554	363	428	264	94	553
At Birth	5,985	370.8	2,219	40	286	410	330	247	285	198	72	351
Under 1 year	358	365.9	131	2	8	36	20	14	18	11	3	21
1 year	550	308.1	170	3	17	37	30	21	22	5	3	32
2 years	411	262.8	108	2	11	30	15	8	12	3	1	26
3 years	190	263.2	50	-	4	16	7	2	6	4	-	11
4-6 years	337	298.7	101	5	14	21	25	9	8	2	-	16
7 years and Over	208	226.0	47	1	17	10	10	2	3	1	1	8
Unknown	1,524	417.3	836	14	55	173	117	60	75	40	14	88

<sup>1</sup> Includes 14,885 students who had no additional handicapping conditions but excludes 4,233 students for whom this information was not recorded.

TABLE 6: NUMBER OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED, BY AGE AND SEX, ACCORDING TO AGE AT ONSET OF HEARING LOSS: UNITED STATES 1968-69 SCHOOL YEAR

Age and Sex	Total Enrolled Students	AGE AT ONSET OF HEARING LOSS							
		Onset at Birth	Under 1 Year	1 Year	2 Years	3 Years	4-8 Years	7 Years and Over	Unknown
Both Sexes--All Ages	25,363	15,275	1,047	1,421	1,066	532	885	533	4,604
Under 3 years	114	91	6	6	2	-	-	-	9
3-5 years	2,779	2,180	106	93	56	18	28	-	298
6-8 years	6,505	3,889	255	346	293	119	242	67	1,274
10-13 years	7,952	4,668	320	426	327	167	289	195	1,560
14-17 years	6,339	3,521	271	418	283	165	260	212	1,209
18 years and Over	1,674	926	89	132	105	63	66	39	254
Males--All Ages	13,878	8,274	615	780	579	302	509	300	2,519
Under 3 years	66	50	5	4	2	-	-	-	5
3-5 years	1,460	1,134	59	50	35	13	14	-	155
6-8 years	3,543	2,091	151	196	158	76	146	43	582
10-13 years	4,345	2,559	187	231	170	86	150	108	854
14-17 years	3,507	1,910	159	213	159	92	159	128	687
18 years and Over	957	530	54	68	55	35	40	21	136
Females--All Ages	11,485	7,001	432	641	487	230	376	233	2,085
Under 3 years	48	41	1	2	-	-	-	-	4
3-5 years	1,319	1,046	47	43	21	5	14	-	143
6-8 years	2,962	1,798	104	150	135	43	96	44	592
10-13 years	3,607	2,109	133	195	157	81	139	81	706
14-17 years	2,832	1,611	112	205	124	73	101	84	622
18 years and Over	717	393	35	48	50	28	26	18	118

TABLE 7: NUMBER OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED, BY HEARING THRESHOLD LEVELS AND SEX, ACCORDING TO AGE AT ONSET OF HEARING LOSS: UNITED STATES, 1968-69 SCHOOL YEAR

Better Ear Averages in Decibels (ISO) <sup>1</sup> and Sex	Total Number Students	AGE AT ONSET OF HEARING LOSS							
		Onset at Birth	Under 1 Year	1 Year	2 Years	3 Years	4-6 Years	7 Years and Over	Unknown
<b>Both Sexes--All Levels</b>	25,363	15,275	1,047	1,421	1,066	532	885	533	4,604
Under 25	772	188	3	15	10	15	103	117	321
25-39	1,208	377	8	15	16	27	143	141	481
40-54	1,353	702	25	28	32	26	107	55	378
55-64	1,285	775	21	44	58	40	43	23	261
65-74	1,937	1,198	17	89	95	47	58	15	378
75-84	2,355	1,596	74	129	119	58	51	15	353
85 and Above	8,803	5,799	460	586	386	174	148	42	1,208
Not Available	1,630	4,840	399	515	350	145	232	125	1,224
<b>Males--All Levels</b>	13,578	8,274	615	780	579	302	509	300	2,519
Under 25	443	107	2	9	5	9	60	66	185
25-39	669	212	6	6	8	20	80	85	272
40-54	801	429	16	17	18	18	66	27	210
55-64	746	470	11	28	35	24	21	12	145
65-74	1,098	648	37	53	58	24	39	9	230
75-84	1,338	870	46	73	71	35	29	10	204
85 and Above	4,684	3,091	264	304	191	97	80	25	632
Not Available	4,079	2,447	233	290	193	75	134	66	641
<b>Females--All Levels</b>	11,485	7,001	432	641	487	230	376	233	2,085
Under 25	329	61	1	6	5	6	43	51	136
25-39	519	165	2	9	8	7	63	56	209
40-54	552	273	9	11	14	8	41	20	168
55-64	518	305	10	16	23	16	22	11	116
65-74	839	550	20	36	37	23	19	6	142
75-84	1,057	726	28	56	48	23	22	5	145
85 and Above	4,119	2,708	196	282	195	77	68	17	576
Not Available	3,551	2,193	166	275	157	70	98	59	583

<sup>1</sup> Average hearing threshold in better ear computed at 500, 1,000, 2,000 cycles per second.



TABLE 8: NUMBER OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED, BY HEARING THRESHOLD LEVELS AND AGE, ACCORDING TO AGE AT ONSET OF HEARING LOSS: UNITED STATES, 1968-69 SCHOOL YEAR

Better Ear Averages in Decibels (ISO) <sup>1</sup> and Age	Total Number Students	AGE AT ONSET OF HEARING LOSS							
		Onset at Birth	Under 1 Year	1 Year	2 Years	3 Years	4-6 Years	7 Years and Over	Unknown
All Ages--All Levels	25,363	15,275	1,047	1,421	1,066	532	685	533	4,604
Under 30	1,980	565	11	30	26	42	248	258	802
40 - 64	2,618	1,477	48	72	90	66	150	78	639
65 - 84	4,332	2,794	131	218	214	105	109	56	731
85 and Above	8,803	5,799	460	586	366	174	148	42	1,208
Not Available	7,630	4,640	399	515	350	145	232	125	1,224
Under 9 Years--All Levels	2,893	2,771	112	89	58	18	28	-	307
Under 30	70	27	4	-	1	2	12	-	24
40 - 64	166	138	-	4	5	2	6	-	13
65 - 84	429	354	9	12	8	-	4	-	42
85 and Above	802	667	27	25	16	8	2	-	57
Not Available	1,426	1,087	72	58	28	6	4	-	171
9-9 Years--All Levels	8,506	3,989	255	346	253	119	242	87	1,274
Under 30	681	178	1	10	11	13	96	61	313
40 - 64	732	421	12	14	19	21	48	8	189
65 - 84	1,013	704	32	41	61	17	17	3	148
85 and Above	2,161	1,436	122	150	93	29	23	4	302
Not Available	1,918	1,150	88	131	119	39	58	11	327
10-13 Years--All Levels	7,952	4,688	320	426	327	167	289	195	1,564
Under 30	729	223	2	13	8	18	87	106	273
40 - 64	900	511	13	23	31	17	48	25	232
65 - 84	1,391	875	34	68	81	30	35	6	751
85 and Above	2,767	1,784	140	170	121	57	48	11	416
Not Available	2,175	1,265	131	151	86	45	73	48	386
14-17 Years--All Levels	6,338	3,621	271	416	283	166	260	212	1,208
Under 30	448	122	1	7	5	6	50	82	178
40 - 64	684	332	16	27	30	21	37	43	178
65 - 84	1,192	672	45	71	68	48	44	13	242
85 and Above	2,321	1,499	130	181	104	53	52	20	336
Not Available	1,833	836	79	132	85	39	71	54	277
18 Years & Over--All Levels	1,874	928	89	132	105	63	66	39	254
Under 30	51	17	3	-	1	3	1	10	17
40 - 64	136	77	5	4	6	6	11	2	27
65 - 84	307	179	11	25	15	12	9	8	48
85 and Above	702	401	41	60	52	27	19	7	95
Not Available	478	252	20	43	32	18	26	12	88

<sup>1</sup> Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

## **APPENDICES**

- Appendix I - Description of The Annual Survey of Hearing Impaired Children and Youth**
- Appendix II - Data Collection Form Used In The Annual Survey for the 1968-69 School Year**
- Appendix III - Instructions for Completing the Annual Survey Form**
- Appendix IV - Programs Participating in the Annual Survey of Hearing Impaired Children and Youth**

## APPENDIX I

# The Annual Survey of Hearing Impaired Children and Youth

### BACKGROUND AND POLICIES

The Annual Survey of Hearing Impaired Children and Youth began its activities in May, 1968. The program was established as a permanent organization to collect, process and disseminate data on hearing impaired individuals through college age in the United States. Two preceding years of pilot and developmental work in a five state area determined its operational feasibility and crystallized its methodology. The Division of Research, Bureau of Education for the Handicapped, Office of Education, Department of Health, Education and Welfare initiated the Annual Survey and provides the major share of its funding. The program is conducted by the Office of Demographic Studies of Gallaudet College.

The long range goal of the Annual Survey is to collect data on the entire hearing impaired population through college age in the United States. For operational reasons the hearing impaired population has been divided into three groups:

- GROUP A — Hearing impaired individuals who are receiving special educational services related to their hearing loss.
- GROUP B — Individuals who have been diagnosed as being hearing impaired but who are not receiving any special educational services.
- GROUP C — Individuals in the general population who, in fact, are hearing impaired but their hearing loss has not been diagnosed at a given point in time.

Some of the major policies and principles that guide the operations and activities of the Annual Survey are given here. First, it is of paramount importance that participating institutions be assured that the data collected will be held in strictest confidence. Only staff members of the Office of Demographic Studies will have access to the records and then only for the purpose of preparing statistical summaries and for analyses of the data. Individual student identification may be established by code numbers assigned and known only by the reporting

institution. Each school will receive data on its own students, but no information permitting identification of any individual student or school will be published or made available for any purpose. Independent researchers will have access only to summary statistics and will not know the identity of the schools from which the data were compiled.

The accuracy and quality of all data collected are of fundamental concern and importance to the Annual Survey. This program expends a substantial part of its resources in data evaluation procedures to enhance the reliability and validity of collected data and to describe any of its limitations. Towards this goal, the necessity of developing standard measuring instruments arises. During the first year of the program, our efforts were directed towards the area of academic achievement testing. As a first step in a long range plan of achievement test validation, it was decided to conduct a national achievement testing program. Approximately 12,000 Stanford Achievement Tests were administered to students in schools and classes for the hearing impaired during the 1968-69 school year. Achievement test scores for hearing impaired students based on the results of that national program were published and distributed in the Fall of 1969. Detailed information on the methodology and findings of the achievement testing program can be found in the Annual Survey publication entitled *Academic Achievement Test Performance of Students in Schools and Classes for the Hearing Impaired: United States, Spring 1969*.

Finally, but also of great importance, is the fact that policies and direction of the Annual Survey are determined by a committee representing all areas of services to hearing impaired individuals. The committee is formally called the National Advisory Committee to the Annual Survey of Hearing Impaired Children and Youth. Its membership has broad width and depth in technical and executive expertise. In addition, a full range of consultants are called upon for advice and direction as special situations occur. Suggestions and comments also come from discussions with teachers, audiologists, psychologists and other professionals who work directly with hearing

impaired individuals. To be effective, the program must assist these persons in solving problems with which they struggle day after day.

## **DATA COLLECTION**

In consideration of the resources available to the program and the different methodological procedures required to collect data on the various components of the target population, at the present time full scale data collection activities are directed at hearing impaired students enrolled in special educational programs (referred to earlier as Group A). Concurrently, pilot studies and other activities are in progress to develop and improve the methodology for collecting data on the other segments of the hearing impaired population.

During the first year of operation, records were sought from all schools and approximately fifteen percent of the day class programs for the hearing impaired. As a result of these efforts, records were obtained on slightly more than 25,000 hearing impaired students. During the 1969-70 school year, the Annual Survey is extending its coverage of reporting sources. Efforts are being made to reach students in all special classes for the hearing impaired as well as in all the schools. Base-line information similar to that collected during the 1968-69 school year (See Appendix II) is being obtained for all new students. In addition to the types of data collected during the first year, specific details regarding educational services students are receiving and information about the history of the hearing impairment are being collected on all students.

Present projections are that the Survey will obtain record forms on 35,000 students by the termination of the 1969-70 school year.

## **PUBLICATION OF THE DATA AND PROGRAM SERVICES**

The program rapidly is accumulating a large volume of statistical data. The processing and dissemination of this data holds wide implications and

potential benefits for educational, audiological, medical, psychological and other services to the hearing impaired. Towards the goal of fully utilizing the data, the program will make data available to independent investigators for research purposes. Masters' theses, doctoral dissertations, institutional level research programs, private studies, etc., are solicited. The Annual Survey also plans to produce at least six major publications per year not including those that may be prepared by independent researchers using data collected by this program.

Each participating school or program will receive distributions of the characteristics of their own students. The participating programs also may obtain a set of punch cards containing the information submitted on each of their students. Further, the Annual Survey office is available to provide consultation services to particular schools or school systems that are concerned with gathering and processing data on their students.

Participation in the Survey has led many of the institutions to examine their current forms and record keeping procedures. This led to requests that the Survey develop a uniform record form to keep student information for use in schools and classes throughout the country. A draft of such a form has been developed and comments on its contents and utility have been solicited from various types of school programs. A finalized record form may be available for use on an experimental basis in the 1970-71 school year.

The initial success of the Annual Survey can be measured only in terms of the levels of participation and interest expressed by many individuals. The ultimate success will be measured not in terms of volume of data that will be collected and published, but in terms of its contributions to improving educational and other opportunities for hearing impaired children and youth. In this regard, it appears that progress is being made. For the first time a vast body of statistical information is becoming available for research and planning purposes.

## APPENDIX II

### ANNUAL CENSUS OF HEARING IMPAIRED CHILDREN 1968-69 School Year

GALLAUDET COLLEGE  
WASHINGTON, D.C.

FORM ACHIC-1

#### I. GENERAL INFORMATION

- A. 1. Name \_\_\_\_\_ Date of Birth \_\_\_\_\_ Sex ☐ M ☐ F  
(Last) (First) (Middle) (Mo., Day, Yr.)
2. Address \_\_\_\_\_  
(Number and Street) (City) (County) (State & ZIP Code)
3. Present School \_\_\_\_\_  
(Name)
4. Location \_\_\_\_\_  
(Number and Street) (City) (County) (State & ZIP Code)
5. Probable Age At Onset of Hearing Loss: ☐ At Birth \_\_\_\_\_ Years of Age
- C. Additional Handicapping Conditions: (Check all educationally significant handicapping conditions.)
- ☐ None ☐ Severe Visual ☐ Emotional Problems ☐ Perceptual-Motor Disorders  
☐ Cleft Lip or Palate ☐ Mental Retardation ☐ Behavioral Problems ☐ Cerebral Palsy  
☐ Other (describe) \_\_\_\_\_

#### II. EDUCATIONAL HISTORY

- A. 1. Student Now Attends:
- ☐ Regular Classes Only ☐ Regular Classes Plus Special Training Number of hours special training per week \_\_\_\_\_ ☐ Fulltime Classes for Hearing Impaired ☐ School for the Deaf ☐ Public ☐ Residential Student ☐ Private ☐ Day Student
- ☐ Other (describe) \_\_\_\_\_
2. Total Full Years Attended This School Since Age Six \_\_\_\_\_
- B. Attendance at Other Schools Since Age Six: (Mark all that apply) If None Check Here ☐
- Regular Classes Only \_\_\_\_\_ Years Regular Classes Plus Special Training \_\_\_\_\_ Years Fulltime Classes for Hearing Impaired \_\_\_\_\_ Years Schools for the Deaf \_\_\_\_\_ Years Other \_\_\_\_\_ Years
- C. Formal Education Prior to Age Six: If None Check Here ☐ If Unknown Check Here ☐
1. Age Started \_\_\_\_\_
2. Type (describe) \_\_\_\_\_

#### III. ACHIEVEMENT AND INTELLIGENCE TESTS

##### A. Most Recent Achievement Test

Description of Test			Grade Scores		
Name	Form No.	Level	Reading Level	Battery Median	Date Tested
_____	_____	_____	_____	_____	_____ (Month, Yr.)

##### B. Most Recent Intelligence Test

Description of Test		I.Q. Scores		
Name	Form	Verbal	Nonverbal	Date Tested
_____	_____	_____	_____	_____ (Month, Yr.)

#### IV. RECOMMENDED EDUCATIONAL TRAINING

- A. If facilities were available, would you recommend a different kind of educational training for the student than he presently is receiving? ☐ Yes ☐ No
- B. If Yes, what type of program would you recommend?
- ☐ Special School for Hearing Impaired ☐ Regular Classes Plus Special Training  
☐ Special Program for Multiple Handicapped ☐ Regular Classes  
☐ Fulltime Classes for Hearing Impaired ☐ Other (specify) \_\_\_\_\_

##### FOR OFFICE USE:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00
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## V. AUDIOLOGICAL FINDINGS

A. Standard Used for Testing: ☐ ISO ☐ ASA

B. Air Conduction

	RIGHT EAR								LEFT EAR							
Frequency	125	250	500	1000	2000	4000	6000	8000	125	250	500	1000	2000	4000	6000	8000
Hearing Level																
For Office Use																

C. Unaided Speech Threshold

Test Used: ☐ SAT ☐ SRT ☐ Not Tested

Right	Left	Right	Left
<input type="checkbox"/> 0-15 dB	<input type="checkbox"/>	<input type="checkbox"/> 45-59 dB	<input type="checkbox"/>
<input type="checkbox"/> 16-29 dB	<input type="checkbox"/>	<input type="checkbox"/> 60-79 dB	<input type="checkbox"/>
<input type="checkbox"/> 30-44 dB	<input type="checkbox"/>	<input type="checkbox"/> 80 dB & Over	<input type="checkbox"/>

D. Examiner Identification

Name of Clinic or Place Conducting Audiological Examination

Date

Address

(Number and Street)

(City)

(State & ZIP Code)

Profession of Examiner: ☐ Audiologist ☐ Otologist ☐ Other M.D.

Other (specify)

## VI. HEARING AID USE

A. Does Student Use a Personal Aid? ☐ Yes ☐ No

If Yes, Is Aid: ☐ Monaural ☐ Binaural

B. Speech Awareness Threshold With Aid is \_\_\_\_\_ dB.

C. Speech Reception Threshold With Aid is \_\_\_\_\_ dB

## VII. ABILITY TO COMMUNICATE

A. Receptive

1. If student uses a personal hearing aid, indicate ability to hear and understand both with and without a hearing aid. If student does not use a hearing aid, only record ability to hear and understand without a hearing aid.

With Hearing Aid

Without Hearing Aid

- |  |                          |
|--|--------------------------|
| <input type="checkbox"/> Can hear and understand most speech   | <input type="checkbox"/> |
| <input type="checkbox"/> Can hear and understand some speech   | <input type="checkbox"/> |
| <input type="checkbox"/> Cannot hear and understand any speech | <input type="checkbox"/> |

2. Listening Ability: ☐ Good ☐ Fair ☐ None

3. Reading Ability: ☐ Good ☐ Fair ☐ None

B. Expressive

1. Speaking Ability: ☐ Others can understand most of his speech  
☐ Others can understand only a little of his speech  
☐ Others cannot understand his speech

2. Methods Used to Communicate to Others: (Check all that apply)

☐ Speech ☐ Writing ☐ Manual Alphabet ☐ Sign Language ☐ Gestures

Other (describe)

FOR OFFICE USE:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80

## APPENDIX III

### INSTRUCTIONS FOR COMPLETING THE REPORTING FORM OF THE ANNUAL SURVEY OF HEARING IMPAIRED CHILDREN 1968-69 SCHOOL YEAR

A separate form is to be completed for each hearing impaired student enrolled in your program as of October 1, 1968. It is important that all forms be completed as uniformly as possible both within and between schools. Therefore, all of the following instructions and notes should be read through before the forms are prepared and then referred to whenever necessary while completing the forms. If there are any questions regarding the completion of the forms, the Survey office will be most eager to answer them.

Most parts of the form can be completed by anyone designated by the school administrators but it should be noted that in Section IV - *Recommended Educational Training* and Section VII - *Ability to Communicate*, the questions are of a subjective nature and would best be completed by persons in the school most familiar with the student's abilities.

Please try to complete all items. If information is not available, "N.A." should be written in, instead of leaving blank spaces.

All forms should be returned to the Survey office no later than January 15, 1969.

The instructions and notes which follow are numbered and lettered to correspond to the numbers and letters on the form (Form ACHIC-1).

## I. GENERAL INFORMATION

## A.

1. Name, Date of Birth, Sex

Self-explanatory.

NOTE: The name and address of the student (A.2.) is required to facilitate identification of individual students in the event further correspondence is required between the Survey office and the school to clarify information submitted on the form. As indicated previously, the Survey office is concerned with collecting data for national statistics. No information about individuals or individual schools will be published or given to anyone without the expressed, prior approval of the schools. In the event laws or regulations prohibit a school from sending names and addresses, it is permissible to submit, in lieu of the name, a distinctive code number for each student.

2. Address

Indicate the usual address of the student when away from school.

3. Present School and

Self-explanatory. (A rubber stamp may be used.)

4. Location

B. Probable Age at Onset of Hearing Loss

Indicate the best estimate of the age at onset of the hearing loss by writing in the year or checking the box "At Birth." If unknown, write in "Unk."

C. Additional Handicapping Conditions

Check the appropriate box(es) or record in the space provided all handicapping conditions other than impairment of hearing, which have a present or may have a future impact on the educational potential of the student.

If the student does not have any additional handicapping conditions, be sure to check "NONE."

NOTE: It should be noted that some of the categories are not necessarily mutually exclusive; therefore, if more than one box covers a single condition, check all boxes which apply.

The term "Perceptual-Motor Disorder" is defined as "variable inconsistent ability to process sensory information in order to execute appropriate motor responses."



## ITEM

## INSTRUCTIONS

## II. EDUCATIONAL HISTORY

## A.

## 1. Student Now Attends

Check the box (or boxes in the case of "Schools for the Deaf") that describes the program in which the student is enrolled. If the program is "Regular Classes Plus Special Training," indicate the number of hours per week the student receives this training. If none of the boxes appropriately describes the program, please describe on the line marked "OTHER."

NOTE: A "School for the Deaf" is defined as an institution consisting of a building or group of buildings used exclusively for the instruction of hearing handicapped children. A "Residential Student" is a student enrolled in a school for the deaf who remains overnight on weeknights during the school year. A "Day Student" is a student enrolled in a school for the deaf who goes home at the end of the school day.

"Full-time Classes for Hearing Impaired" apply to students, other than those enrolled in schools for the deaf, who receive special educational training on a full-time basis. Students may be counted in this category even if during the school day they participate in some activities with non-hearing handicapped students; these activities, however, should not normally exceed one or two hours of the school day.

"Regular Classes Plus Special Education" apply to students who are enrolled in special education programs other than defined above for schools for the deaf and full-time classes for hearing impaired.

2. Total Full Years Attended This School  
Since Age Six

Count all full years, except the present school year, the student was enrolled in your school, beginning with the year the student reached six years of age. (Provisions for recording education for earlier years are made in II. C.)

NOTE: If the student entered your school after the beginning of the school year, count it as a full year if he was in your school for one-half or more than one-half of the school year. If the student was registered for less than one-half of a school year in your school, report as "Attendance at Other Schools" below.

## B. Attendance at Other Schools Since Age Six

Complete all five items. Indicate the number of years the student was enrolled in OTHER programs, beginning with the year he reached six years of age. Be sure to insert "0" for all programs in which the student was never enrolled and "N.A." if information is not available or unknown.

NOTE: If the student was in more than one program during a school year, record the approximate number of months in each program. If the student was in school for less than one full school year, record the approximate number of months he was in school for that year in the appropriate space. When recording months instead of years be sure to cross out "years" on the form and write in "months" or "mos." As noted in II.A.2. above. If the student was registered in your school for less than one-half of a school year, record the number of months in the appropriate category.

## ITEM

## INSTRUCTIONS

## C. Formal Education Prior to Age Six

If the information is "NONE" or "UNKNOWN", check the appropriate box.

## 1. Age Started

Indicate the age of the student when he began training prior to age six.

## 2. Type

Describe the type of program. For example, "Pre-school Class at Speech and Hearing Center" or "At Home, Tracy Clinic Series."

## III. ACHIEVEMENT AND INTELLIGENCE TESTS

## A. Most Recent Achievement Test

Give the name of the most recently administered test, the form number, battery level and other identifying information necessary to fully identify the particular test. For this test, report the Grade Score for the reading level and battery median and the date the test was given.

If more than one test was administered on the same date and one of the tests was in the Stanford series, we would prefer the results of the Stanford test. If more than one test was administered on the same date and a Stanford test was not used, then please submit the score from whichever test you prefer.

**NOTE:** Because of the large variety of achievement tests, it is important to provide a complete description of the test administered. For example, an adequate description might be — "Stanford Achievement Test, Form W, Primary II Battery," OR "Metropolitan Achievement Test, Intermediate."

## B. Most Recent Intelligence Test

Give name and form of the most recently administered test; indicate the student's score and record the date the test was administered.

**NOTE:** Because of the large variety of intelligence tests, it is important to provide a complete description of the test administered. For example, an adequate description might be — "California Test of Mental Maturity, Level 2."

## ITEM

## INSTRUCTIONS

## IV. RECOMMENDED EDUCATIONAL TRAINING

NOTE: This section should be completed by the person in the school most familiar with the student's ability. For example, the person most familiar with the student might be the guidance counselor or the teacher the student had last year. In completing this section the respondent should *NOT* consider only the programs that are available in the particular locale, but should assume an ideal situation exists and all programs are available from which to choose.

A. Would you recommend a different kind of educational training?

Indicate by checking "Yes" or "No" if you would recommend a different kind of educational training for the student.

B. If Yes, what type of program?

If the answer was "Yes" to IV.A., indicate by checking one of the categories or specify in the space marked "Other" what type of program you would recommend.

## V. AUDIOLOGICAL FINDINGS

A. Standard Used for Testing

Check the standard used. If the student has been tested for both standards, report the most recent. If both tests were given on the same day, report the ISO results.

B. Air Conduction

Indicate the results of the most recent pure-tone, air conduction audiometric test. Give results for as many frequencies as possible. Leave the spaces blank for which no attempt was made to test.

C. Unaided Speech Threshold

Indicate if the student was not tested or if tested, whether the test was "SAT" (Speech Awareness Threshold) or "SRT" (Speech Reception Threshold). Check the appropriate box for dB level WITHOUT aid for each ear. If both tests have been administered, report the "SAT."

D. Examiner Identification

Provide the name and address of the clinic or other place that conducted the pure-tone, air conduction examination reported above. If the test was given at your school, write in "At Present School." Be sure to record the date the audiometric test was given. Also indicate the profession of the person conducting the test by checking the appropriate box or describing in the space after "Other."

## ITEM

## INSTRUCTIONS

## VI. HEARING AID USE

## A. Does Student Use a Personal Aid?

Indicate if the student uses a *personal* aid and if "Yes" whether the aid is monaural or binaural.

NOTE: The word "use" is defined as meaning the student wears the aid at least one hour per day.

## B. Speech Awareness Threshold With Aid

Indicate the *aided* SAT dB level.

## C. Speech Reception Threshold With Aid

Indicate the *aided* SRT dB level.

Record "N.A." if the information is not available.

## APPENDIX IV

# Participants in the Annual Survey of Hearing Impaired Children and Youth

### ALABAMA

- \*Alabama Institute for the Deaf & Blind
- \*Birmingham Public Schools

### ALASKA

- \*Anchorage Borough School District

### ARIZONA

- \*Arizona State School for the Deaf & Blind
- \*Samuel Gompers Memorial Rehabilitation Center, Inc.
- \*Phoenix Elementary Oral Day Classes

### ARKANSAS

- Arkansas Speech & Hearing Center
- Jenkins Memorial Children's Center

### CALIFORNIA

- Alhambra City School District
- Alum Rock Union Elementary School District
- \*Anaheim Union High School District
- Azusa Unified School District
- Bellflower Unified School District
- Butte County Schools
- California School for the Deaf, Berkeley
- \*California School for the Deaf, Riverside
- Cedar Creek School for the Deaf
- Centinel Valley Union High School District
- Centralia School District
- Ceres Unified School District
- Compton City Elementary School District
- Covina Valley Unified School District
- Cutler-Orosi Unified School District
- Escondido Union School District
- Eureka City Schools
- Fremont Unified School District - Blacow Elementary
- Fresno City Unified School District
- Glendale Unified School District
- Goleta Union Elementary School District
- Hanford Elementary School District
- Hayward City Unified School District
- Chris Jespersen School
- Kern County Schools

- Lancaster Elementary School District
- Little Lake City Elementary School District
- Livermore Valley Joint Unified School District
- Lompoc Unified School District
- Long Beach Unified School District
- Los Angeles City School District
- Marin County Schools
- Montebello Unified School District
- Monterey County Schools
- Mt. Diablo Therapy Center
- Mt. Diablo Unified School District
- Napa Valley Unified School District
- Norwalk-La Mirada Unified School District
- Oakland City Unified School District
- Orange Unified School District
- Vallejo Unified School District
- Pasadena City Unified School District
- Pomona Unified School District
- Redondo Beach City Elementary School District
- \*Richmond Unified School District
- Riverside Unified School District
- Sacramento City Unified School District
- San Diego Unified School District
- San Francisco Speech & Hearing Center
- \*San Francisco Unified School District
- San Jose City Unified School District
- San Juan Unified School District
- \*San Mateo County Schools
- San Mateo Union High School District
- Santa Ana Unified School District
- Santa Clara Unified School District
- Santa Rosa City School District
- Shasta County Schools
- Simi Valley Unified School District
- South Eastern Los Angeles County Program for the Deaf
- Stockton Unified School District
- Sunnyvale Elementary School District
- Sutter County Schools- Lincoln School
- Tulare County Schools
- Tulare Union High School District
- Union Elementary School District
- Ventura Unified School District

\*Programs that participated in the Annual Survey of Hearing Impaired Children and Youth during the 1968-69 school year. The other programs joined the Survey during the 1969-70 School Year.

## COLORADO

- Children's Hospital, Denver
- \*Colorado School for the Deaf & Blind
- \*Colorado State College - Bishop Lehr Laboratory
- \*Jefferson County Public Schools R-1 Pleasant View Elementary School
- Foudre R-1 Services for Aurally Handicapped Children

## CONNECTICUT

- Capitol Region Education Council - Hearing Impaired Class
- Class for Preschool Hearing Impaired Children, Hartford
- Easter Seals-Goodwill Industries Rehabilitation Center
- East Hartford, Preschool Hearing Impaired
- Enfield Public Schools - Preschool Hearing Impaired Class
- Fairfield Public Schools - Preschool Hearing Impaired Class
- Green Acres School
- Hamden-New Haven Cooperative Educational Center
- Magrath School
- Monroe Preschool Hearing Impaired Program
- \*Mystic Oral School for the Deaf
- Reynolds Preschool Hearing Impaired Program
- South School
- West Haven Department of Special Education

## DELAWARE

- \*Margaret S. Sterck School for Hearing Impaired

## DISTRICT OF COLUMBIA

- \*Department of Special Education
- \*Kendall School for the Deaf
- \*Speech and Hearing Center - Public Schools of the District of Columbia

## FLORIDA

- Brevard County Public Schools
- \*Dade County Day Classes for Deaf
- \*Florida School for the Deaf & Blind
- Robert McCord Oral School
- Palm Beach County Schools
- Rock Lake Elementary School
- Seminole Elementary School
- Tampa Oral School for the Deaf

## GEORGIA

- \*Atlanta Speech School, Inc.
- The Davison School, Inc.
- East Valley Elementary School
- Lawton B. Evans School
- \*Georgia School for the Deaf
- Houston Speech & Hearing School
- Savannah Speech & Hearing Center
- Robert Shaw Center

## HAWAII

- Central Intermediate School
- \*Diamond Head School for the Deaf
- McKinley High School

## IDAHO

- \*Idaho School for the Deaf & Blind
- Speech & Hearing Center - Idaho State University

## ILLINOIS

- Bartonville Grade School Deaf Program
- Beil Elementary School
- Bi-County Oral Deaf Program
- Black Hawk Hearing Handicapped Program
- Champaign Community Schools
- Chicago Vocational High School
- Decatur Public School District
- Dixon State School
- \*Elim Christian School for the Exceptional Child
- Ericson School
- Dr. Robert Henner Hearing & Speech Center
- \*Illinois School for the Deaf
- Jamieson School
- Marquette Elementary School
- Thomas Metcalf School
- Niles Township Department of Special Education
- \*Northwestern Illinois Association
- Northwest Suburban Special Education Organization
- \*Perry School
- Quincy Day Classes for Hearing Impaired
- Ray School
- Reinberg School
- Scammon School
- \*South Metropolitan Association for Low-Incidence Handicapped
- Special Education District of Lake County
- Tazewell-Mason Counties Special Education Association
- West Suburban Association for the Hearing Handicapped

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## INDIANA

- Ball State University
- Central Avenue School
- Deaf-Oral Nursery of the Rehabilitation Center, Evansville
- East Chicago Day Class for the Deaf
- Glenwood Elementary School
- \*Indiana School for the Deaf
- Indiana University Medical Center
- Marion Community Schools
- Oral Deaf Classes & Hearing Conservation Program, South Bend

## IOWA

- Cedar Rapids Community School
- Faith Aid for Teaching Impaired Hearing Children's Classes
- Hope-Haven School
- \*Iowa School for the Deaf
- Ottumwa Community School District
- Preschool Class for the Partially Hearing, Waterloo
- Sioux City Community School District
- \*Smouse Opportunity School
- Wilson School-Oral Deaf Department

## KANSAS

- \*Diagnostic & Resource Center, Wichita
- Hays Regional Classroom for the Hard-of-Hearing
- \*Institute of Logopedics, Inc.
- \*Kansas School for the Deaf
- Lawrence Unified School District 497 -- Grant School
- Shawnee Mission Public Schools
- \*University of Kansas Medical Center

## KENTUCKY

- \*Kentucky School for the Deaf
- Knox Central High School
- \*Lexington Deaf Oral School
- \*Louisville Deaf Oral Institute
- \*Louisville Public Schools

## LOUISIANA

- Acadia Parish School Board
- Baton Rouge Speech & Hearing Foundation
- Delgado College
- Jefferson Parish School Board
- Lafayette Parish School Board
- \*Louisiana School for the Deaf
- Speech & Hearing Center of Southwest Louisiana, Inc.

- \*State School for the Deaf -- Southern Branch
- \*Sunset Acres School

## MAINE

- Bangor Regional Speech & Hearing Center
- \*Governor Baxter State School for the Deaf
- Northeast Hearing & Speech Center, Inc.
- Pine Tree Society

## MARYLAND

- \*William S. Baer School No. 301
- Baltimore County Department of Special Education
- Board of Education of Harford County
- \*Forest Park Senior High School
- Gateway Preschool
- \*Maryland School for the Deaf
- \*Montgomery County Public Schools

## MASSACHUSETTS

- \*Beverly School for the Deaf
- \*Boston School for the Deaf
- \*Peter Bulkeley School
- \*Clarke School for the Deaf
- Day Class for Preschool Deaf, Lowell
- \*Sarah Fuller Foundation
- Habilitation Center for the Pre-School Hard-of-Hearing & Deaf Children, Canton
- Haverhill Preschool Class for Deaf
- Kennedy Junior High School
- Mercer School
- Myrtle Street School
- Page School
- \*Perkins School for Blind
- Thayer-Lindsley Parent Centered Nursery
- \*Upsala Street School
- Weburn Day Class Program

## MICHIGAN

- Howard D. Crull Intermediate School
- Detroit Day School for Deaf
- Douglas School
- Durant-Tuuri-Mott School
- Farmington Public School District
- Handley School
- Ida Public Schools
- Thomas Jefferson School
- \*Ann J. Kellogg School
- Lakeview Public Schools
- Lansing Public Schools
- \*Lapeer State Home & Training School

\*Programs that participated in the Annual Survey of Hearing Impaired Children and Youth during the 1968-69 school year. The other programs joined the Survey during the 1969-70 school year.

John A. Lemmer School

\*Lutheran School for the Deaf  
Marquette Elementary

\*Michigan School for the Blind  
Mott Foundation Children's Health Center  
Oakland County Schools  
Preschool Physically Handicapped Program,  
Wyoming

Pontiac City School District

Public School Program for Deaf & Hard-of-Hearing,  
Jackson

Redford Union Hard-of-Hearing Program

Shawnee Park Schools

Tecumseh Public Schools

\*Traverse City Public Schools

Trenton Public Schools

\*Tri-County Preschool

Utica Schools

Warren Consolidated Schools

Waterford School District Deaf Program

West Hills Junior High School

#### MINNESOTA

Duluth Public Schools

Lutheran High School

\*Minneapolis Public Schools

\*Minnesota School for the Deaf

St. Paul Area Program for Impaired Hearing

Technical Vocational Institute

#### MISSISSIPPI

\*Magnolia Speech School

Mississippi State College for Women

#### MISSOURI

Delaware Elementary School

Hearing & Speech Center, Kansas City

Humboldt School

\*Missouri School for the Deaf

\*St. Louis County Special School District for the  
Handicapped - Litzinger School

St. Louis University Speech & Hearing Clinic

\*Troost School

#### MONTANA

\*Montana State School for the Deaf & Blind

Roosevelt School - School District #1

#### NEBRASKA

\*Nebraska School for the Deaf

Omaha Hearing School for Children, Inc.

\*Prescott Acoustically Handicapped Unit

#### NEVADA

\*Ruby Thomas Elementary School

#### NEW HAMPSHIRE

\*Crotched Mountain School for the Deaf  
Portsmouth Rehabilitation Center

#### NEW JERSEY

Avon School

\*Bruce Street School

Class for the Hard-of-Hearing, Kearny

Clifton Public Schools

Douglas Nursery for Hearing Handicapped

Helmbold Education Center

Hunterdon Medical Center Nursery for Hearing  
Impaired Children

Jackson Avenue School

\*Marie H. Katzenbach School for the Deaf

Millburn Avenue School

Newark State College

Summit Speech School

Township Public Schools, Neptune

Woodbridge Public School System

#### NEW MEXICO

\*New Mexico School for the Deaf

#### NEW YORK

Albany Medical Center Hospital

\*Catholic Charities Day Classes For Deaf Children

Cerebral Palsy Preschool

Children's Hospital & Rehabilitation Center

Dutch Broadway School

Grasslands Hospital

\*Hebrew Institute for the Deaf

\*Junior High 47-M School for Deaf

\*New York Institute for the Education of the  
Blind

\*New York School for the Deaf, White Plains

\*New York State School for the Deaf, Rome

\*Public School #20, Albany

\*Rochester School for the Deaf

\*St. Joseph's School for the Deaf

\*St. Mary's School for the Deaf

\*School for Language & Hearing Impaired  
Children - Public School 158

\*Suffolk School for Deaf Children

Union-Endicott Central School District

#### NORTH CAROLINA

Charlotte Speech & Hearing Center, Inc.

Duke University Medical Center

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- \*Eastern North Carolina School for the Deaf
- \*The Governor Morehead School Path School, Inc.
- \*North Carolina School for the Deaf
- \*Wake County Preschool for the Hearing Impaired

#### **NORTH DAKOTA**

- \*Longfellow School
- \*North Dakota School for the Deaf
- University of North Dakota Speech & Hearing Clinic

#### **OHIO**

- Akron Board of Education
- \*Alexander Graham Bell School
- \*Betty Jane Oral School
- Canton Public Schools
- \*Cincinnati Educational Center
- Cleveland Hearing & Speech Center
- \*Hearing & Speech Center of Columbus and Central Ohio
- L. B. Kean Preschool Deaf Class
- \*Kennedy School for the Deaf
- Kent Public Schools
- Kent State University
- Litchfield Rehabilitation Center
- Mansfield City Schools
- \*Melridge School
- Millridge Center for Hearing Impaired
- \*Ohio School for the Deaf
- Program for Physically Handicapped, Toledo
- \*St. Rita School for the Deaf
- Trumbull County Hearing Society
- Warren City Schools
- Youngstown Public Schools
- \*Zanesville Classes for Deaf

#### **OKLAHOMA**

- \*Jane Brooks Foundation
- Community Speech & Hearing Center, Enid
- Eastside School
- The Junior League Program for Children with Hearing Losses
- Oklahoma City Public Schools
- \*Oklahoma School for the Deaf
- University of Oklahoma Medical Center

#### **OREGON**

- Eugene Regional Facility for the Deaf
- Hearing and Speech Center, Eugene
- \*Oregon State School for the Deaf

- \*Portland Center for Hearing & Speech, Inc.
- \*Portland Public Schools
- \*Tucker-Maxon Oral School

#### **PENNSYLVANIA**

- \*Archbishop Ryan Memorial Institute for the Deaf
- \*De Paul Institute
- \*Friends of the Deaf Nursery School
- \*Willis and Elizabeth Martin School
- \*Pennsylvania School for the Deaf
- \*Pennsylvania State Oral School for the Deaf
- \*Programs for Speech & Hearing Handicapped, State Department of Education
- \*Western Pennsylvania School for the Deaf

#### **RHODE ISLAND**

- \*Rhode Island School for the Deaf
- \*Windmill Hearing Therapy Class

#### **SOUTH CAROLINA**

- Bennettsville Elementary
- Charleston County Schools
- Florence County School District #3
- Pate Elementary School
- \*South Carolina School for the Deaf & Blind
- United Speech & Hearing Services

#### **SOUTH DAKOTA**

- \*South Dakota School for the Deaf

#### **TENNESSEE**

- East Tennessee State University -- Speech & Hearing Clinic
- Hamilton County Speech & Hearing Center
- \*Knox County Public Schools
- Memphis City Schools
- Memphis Parents' School for Deaf & Aphasic
- \*Memphis Speech & Hearing Center
- Sunnyside School
- \*Tennessee School for the Deaf
- University of Tennessee -- Preschool Deaf Program
- \*Bill Wilkerson Hearing & Speech Center

#### **TEXAS**

- Austin Independent School District
- Baylor Speech & Hearing Clinic
- P. F. Brown Elementary School
- \*The Callier Hearing & Speech Center
- Corpus Christi Independent School District
- County-Wide Area Day School, El Paso
- Crippled Children's Center

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- \*Dallas Independent School District
- Dallas Society for Crippled Children
- Houston Independent School District
- \*Houston School for Deaf Children
- Helen Keller Special Education School
- Multi-County School for the Deaf
- Pasadena Independent School District
- Sunnyside Speech & Hearing Center
- \*Sunnyside Cottage School for Deaf Children
- Tarrant County Day School for Deaf
- Texas Christian University Speech & Hearing Clinic
- \*Texas School for the Deaf
- Waco Independent School District
- \*Wichita Falls Independent School District

#### UTAH

- Brigham Young University - Communicative Disorders Clinic
- \*Utah Schools for the Deaf & Blind
- Utah State University - Edith Bowen Laboratory School

#### VERMONT

- \*Austine School for the Deaf

#### VIRGINIA

- \*Arlington County Public Schools
- Blue Ridge Speech & Hearing Center, Inc.
- Diagnostic, Adjustive & Corrective Center for Learning
- Diagnostic Special Education School of Tidewater Rehabilitation Institute
- \*St. Paul's Oral School

- \*Virginia School for the Deaf & Blind
- \*Virginia State School for the Deaf at Hampton

#### WASHINGTON

- Bellingham School District #501
- \*Birney School
- Bremerton School District 100-C
- \*Edna E. Davis School
- Northwest Regional Program for Deaf-Blind-Multi-Handicapped Children
- \*Seattle Public Schools
- \*Seattle Speech & Hearing Center
- University of Washington - Experimental Education Unit
- \*Washington State School for the Deaf
- Yakima School District #7

#### WEST VIRGINIA

- \*West Virginia School for the Deaf & the Blind

#### WISCONSIN

- Bartlett School
- Berryville School
- City District Public Schools, La Crosse
- \*Cooper Day School for Deaf
- Day School for Deaf, Wausau
- \*Madison Public Schools
- \*Milwaukee Hearing Society, Inc.
- School for the Deaf, Green Bay
- \*E. H. Wadewitz School
- Washington School
- \*Wisconsin School for the Deaf

#### WYOMING

- \*Wyoming School for the Deaf

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**REPORTS FROM THE ANNUAL SURVEY OF  
HEARING IMPAIRED CHILDREN AND YOUTH**

**SERIES D**

**No. 1 Academic Achievement Test Performance of Hearing Impaired Students—  
United States: Spring 1969**

**No. 2 Item Analysis of Academic Achievement Tests Hearing Impaired Students—  
United States: Spring 1969**

**No. 3 Additional Handicapping Conditions, Age at Onset of Hearing Loss, and Other  
Characteristics of Hearing Impaired Students—United States: 1968-69**