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Washington, DC 20460

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Noise

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ANALYSIS OF NOISE-RELATED AUDITORY  
AND ASSOCIATED HEALTH PROBLEMS  
IN THE U.S. ADULT POPULATION  
(1971-1975)

VOLUME 2

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16. ABSTRACT The First National Health and Nutrition Examination Survey (NHANES I) was designed to characterize the overall health and nutritional status of the U.S. civilian noninstitutionalized population aged 1-74 years and to permit examination of the prevalence of specific health conditions on a subsample of adults aged 25-74 years. Analyses presented in this report are based on the national probability subsample of 6913 adults aged 25-74 years who were administered an audiometric test as well as detailed questionnaires and physical examinations dealing with hypertension and a variety of other health conditions. Detailed occupational descriptions were used in the present study to estimate approximate eight-hour noise levels for the sample of 3842 adults aged 25-74 years in the workforce. Among the major findings: 1. Hearing impairment is a widespread health problem in the United States; 2. Occupational noise exposure was identified as a major risk factor associated with the prevalence of hearing impairment among men; 3. Occupational noise exposure was not significantly related to hearing sensitivity among working women; 4. Occupational noise exposure was found to have a weak, but nevertheless significant association with hypertension for both men and women; 5. Among men, occupational noise exposure was associated with overall physical health, whereas among women, it was associated with only overall psychological health; and 6. No conclusive relationships were found between occupational noise exposure and the remaining indicators of specific health conditions.		
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APPENDIX III

Hearing Status in the United  
States and the Auditory and  
Non-Auditory Correlates of  
Occupational Noise Exposure

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5.16	Results of Multiple Regression Models Examining the Relationship of Occupational Noise Exposure to Physician's Diagnostic Impression, Physician's Diagnosis of Skin Conditions and Relaxed/Tense Subscale in the Presence of Background Characteristics
5.17	Results of Multiple Regression Models Examining the Relationship of Occupational Noise Exposure to General Well Being Score in the Presence of Background Characteristics

<u>Table Number</u>	<u>Title</u>
5.18	<u>Significant Findings: Relationships Between Hearing Measures and Health Conditions, Controlling for Age and Race by Sex</u>
5.19	Regression Coefficients of Relationships Between Hearing Measures and Health Conditions Within Sex Controlling for Age and Race
5.20	Regression Coefficients of Relationships Between Indicators of Noise Induced Hearing Loss and Health Conditions Within Sex Controlling for Age and Race

Table 3.1

PERCENT DISTRIBUTION OF AIR CONDUCTION HEARING LEVELS (IN DECIBELS)  
FOR THE RIGHT, LEFT, BETTER AND WORSE EARS OF ADULTS  
AT 500, 1000, 2000 AND 4000 HERTZ: UNITED STATES, 1971-1975

FREQUENCY	HEARING LEVEL						
	LESS THAN -4DB	-4DB TO 0DB	0DB TO 16DB	16DB TO 26DB	26DB TO 36DB	36DB TO 46DB	46DB OR MORE
<b>RIGHT EAR</b>							
500.....	2.0	36.3	40.5	13.6	3.6	1.6	2.5
1000.....	2.0	36.3	39.7	13.2	4.5	1.5	2.8
2000.....	4.4	32.9	33.7	13.8	6.8	3.1	5.3
4000.....	4.4	24.2	26.3	13.8	9.4	6.6	15.3
<b>LEFT EAR</b>							
500.....	1.9	34.6	41.5	13.8	4.6	1.1	2.6
1000.....	2.6	39.0	37.1	12.5	4.2	1.8	2.8
2000.....	4.7	31.4	31.0	15.7	7.4	3.6	6.1
4000.....	3.6	22.5	24.8	14.6	9.6	7.9	16.9
<b>BETTER EAR</b>							
500.....	3.4	44.3	30.2	9.9	2.3	.8	1.1
1000.....	4.0	48.0	33.6	9.2	3.0	1.1	1.3
2000.....	7.5	39.8	30.3	11.6	5.2	2.5	3.2
4000.....	6.5	30.0	24.9	13.1	8.0	6.1	11.4
<b>WORSE EAR</b>							
500.....	.5	26.4	43.9	17.5	5.8	2.0	3.9
1000.....	.6	27.3	43.3	16.6	5.7	2.3	4.2
2000.....	1.4	24.4	34.5	18.0	9.1	4.2	8.1
4000.....	1.5	16.7	26.1	15.3	11.1	8.5	20.8

Table 3.2

Correlation Coefficients Among Air Conduction Hearing Levels at  
500, 1000, 2000 and 4000 Hz in the Right and Left Ears:  
United States, 1971-1975

		Right Ear				Left Ear			
		500	1000	2000	4000	500	1000	2000	4000
Right Ear	500	1							
	1000	.82	1						
	2000	.66	.77	1					
	4000	.48	.54	.70	1				
Left Ear	500	.66	.59	.50	.39	1			
	1000	.58	.68	.60	.44	.82	1		
	2000	.48	.58	.75	.61	.64	.75	1	
	4000	.37	.43	.60	.80	.49	.55	.72	1

Table 3.3

PERCENT DISTRIBUTION OF THE DIFFERENCE BETWEEN THE AIR CONDUCTION HEARING LEVELS IN THE RIGHT AND LEFT EARS AT 500, 1000, 2000 AND 4000 HERTZ: UNITED STATES, 1971-1975

RIGHT-LEFT	FREQUENCY			
	500 HERTZ	1000 HERTZ	2000 HERTZ	4000 HERTZ
-20DB OR LESS.....	2.9	2.8	5.2	8.8
-15DB.....	1.7	1.8	3.6	5.6
-10DB.....	7.1	6.3	9.6	10.5
-5DB.....	20.6	19.0	20.1	19.3
0DB.....	37.4	34.7	28.8	23.6
5DB.....	19.0	22.0	18.0	14.5
10DB.....	6.4	8.2	8.5	7.8
15DB.....	1.9	2.6	2.5	3.7
20DB OR MORE.....	2.8	2.6	3.6	6.1

Table 3.4

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 500 HERTZ  
IN THE RIGHT EAR BY AGE, RACE AND SEX; UNITED STATES, 1971-1975

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	12.5	6,792	12.0	3,117	12.9	3,675
25-34 YEARS.....	8.2	1,549	7.8	667	8.7	882
35-44 YEARS.....	9.9	1,202	10.1	520	9.7	682
45-54 YEARS.....	12.5	1,588	12.3	738	12.6	850
55-64 YEARS.....	16.2	1,268	16.4	615	16.1	653
65-74 YEARS.....	20.6	1,185	18.1	577	22.6	608
WHITE						
25-74 YEARS...	12.4	5,874	12.0	2,701	12.8	3,173
25-34 YEARS.....	8.0	1,351	7.6	503	8.4	768
35-44 YEARS.....	9.7	1,036	10.0	461	9.4	575
45-54 YEARS.....	12.4	1,375	12.4	635	12.5	740
55-64 YEARS.....	16.1	1,103	16.4	536	15.9	567
65-74 YEARS.....	20.6	1,009	18.0	486	22.6	523
BLACK						
25-74 YEARS...	13.3	846	12.2	379	14.1	467
25-34 YEARS.....	10.2	172	9.4	71	10.8	101
35-44 YEARS.....	11.5	147	11.7	52	11.4	95
45-54 YEARS.....	12.5	202	10.6	98	14.2	104
55-64 YEARS.....	17.0	156	15.5	73	18.2	83
65-74 YEARS.....	21.2	169	18.9	85	23.1	84

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK



STANDARD ERRORS AND DESIGN EFFECTS FOR AIR CONDUCTION HEARING LEVELS  
IN THE RIGHT EAR AT 500 HERTZ BY AGE, RACE, AND SEX: UNITED STATES 1971-1975

AGE AND RACE	BOTH SEXES		MALE		FEMALE	
	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT
ALL RACES 1/						
25-74 YEARS...	0.24	2.44	0.27	1.56	0.32	2.21
25-34 YEARS.....	.33	2.20	.36	1.54	.40	2.16
35-44 YEARS.....	.38	1.48	.45	.87	.56	1.96
45-54 YEARS.....	.39	1.61	.52	1.22	.52	1.59
55-64 YEARS.....	.42	1.30	.65	1.49	.56	1.20
65-74 YEARS.....	.66	1.99	.70	1.37	.95	1.93
WHITE						
25-74 YEARS...	.25	2.23	.29	1.52	.33	1.97
25-34 YEARS.....	.36	2.40	.37	1.54	.52	2.29
35-44 YEARS.....	.40	1.37	.49	.89	.60	1.77
45-54 YEARS.....	.42	1.57	.54	1.12	.56	1.64
55-64 YEARS.....	.42	1.16	.67	1.40	.53	.94
65-74 YEARS.....	.67	1.70	.74	1.25	1.01	1.80
BLACK						
25-74 YEARS...	.62	2.10	.82	1.65	.85	2.19
25-34 YEARS.....	.94	1.44	1.52	1.56	1.36	1.79
35-44 YEARS.....	.96	1.49	1.61	1.11	1.23	2.12
45-54 YEARS.....	1.15	1.75	1.73	2.18	1.50	1.42
55-64 YEARS.....	1.99	2.55	2.34	1.71	2.94	2.94
65-74 YEARS.....	1.74	2.57	2.27	2.20	2.12	1.98

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.6

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 1000 HERTZ  
IN THE RIGHT EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1975

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
<b>ALL RACES 2/</b>						
25-74 YEARS...	12.7	6,805	12.7	3,125	12.8	3,680
25-34 YEARS.....	7.5	1,550	7.2	667	7.7	883
35-44 YEARS.....	9.7	1,206	10.3	524	9.1	682
45-54 YEARS.....	13.0	1,590	13.1	739	12.9	851
55-64 YEARS.....	17.3	1,271	18.1	617	16.6	654
65-74 YEARS.....	22.3	1,188	21.1	578	23.3	610
<b>WHITE</b>						
25-74 YEARS...	12.6	5,885	12.6	2,709	12.7	3,176
25-34 YEARS.....	7.3	1,352	7.1	583	7.4	769
35-44 YEARS.....	9.4	1,040	9.9	465	8.9	575
45-54 YEARS.....	13.0	1,377	13.2	636	12.8	741
55-64 YEARS.....	17.1	1,106	18.0	538	16.4	568
65-74 YEARS.....	22.2	1,010	20.9	487	23.2	523
<b>BLACK</b>						
25-74 YEARS...	13.8	848	14.0	379	13.6	469
25-34 YEARS.....	9.1	172	8.3	71	9.7	101
35-44 YEARS.....	12.2	147	15.6	52	9.7	95
45-54 YEARS.....	12.6	202	11.4	98	13.7	104
55-64 YEARS.....	19.1	156	19.5	73	18.7	83
65-74 YEARS.....	24.2	171	23.3	85	24.8	86

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

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STANDARD ERRORS AND DESIGN EFFECTS FOR AIR CONDUCTION HEARING LEVELS  
 IN THE RIGHT EAR AT 1000 HERTZ BY AGE, RACE, AND SEX: UNITED STATES 1971-1975

AGE AND RACE	BOTH SEXES		MALE		FEMALE	
	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT
ALL RACES 1/						
25-74 YEARS...	0.27	2.90	0.32	1.94	0.32	2.17
25-34 YEARS.....	.34	2.74	.38	1.85	.46	2.43
35-44 YEARS.....	.33	1.33	.53	1.25	.36	1.12
45-54 YEARS.....	.44	2.04	.53	1.20	.67	2.62
55-64 YEARS.....	.52	1.78	.75	1.74	.63	1.34
65-74 YEARS.....	.62	1.56	.77	1.32	.94	1.75
WHITE						
25-74 YEARS...	.28	2.68	.34	1.90	.33	2.06
25-34 YEARS.....	.36	2.69	.40	1.84	.48	2.32
35-44 YEARS.....	.33	1.16	.52	1.17	.40	1.08
45-54 YEARS.....	.48	2.07	.56	1.20	.72	2.72
55-64 YEARS.....	.54	1.65	.79	1.72	.63	1.22
65-74 YEARS.....	.65	1.46	.85	1.36	1.01	1.69
BLACK						
25-74 YEARS...	.58	1.69	.86	1.54	.82	2.02
25-34 YEARS.....	.86	1.02	1.21	1.34	1.16	2.08
35-44 YEARS.....	1.01	1.35	2.01	1.13	.85	1.60
45-54 YEARS.....	1.09	1.57	1.66	2.05	1.52	1.42
55-64 YEARS.....	1.96	2.48	2.33	1.95	3.05	2.80
65-74 YEARS.....	1.52	1.51	2.10	1.28	1.99	1.46

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.8

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 2000 HERTZ  
IN THE RIGHT EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1975

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	14.9	6,798	16.4	3,122	13.5	3,676
25-34 YEARS.....	6.9	1,548	6.7	666	7.1	882
35-44 YEARS.....	10.5	1,204	12.4	523	8.6	681
45-54 YEARS.....	15.3	1,589	17.8	738	13.1	851
55-64 YEARS.....	21.6	1,270	24.6	617	18.9	653
65-74 YEARS.....	29.1	1,187	31.7	578	27.1	609
WHITE						
25-74 YEARS...	14.8	5,880	16.4	2,707	13.4	3,173
25-34 YEARS.....	6.8	1,351	6.7	583	6.8	768
35-44 YEARS.....	10.3	1,038	12.2	464	8.5	574
45-54 YEARS.....	15.3	1,376	17.8	635	13.0	741
55-64 YEARS.....	21.4	1,105	24.6	538	18.6	567
65-74 YEARS.....	28.9	1,010	31.5	487	27.0	523
BLACK						
25-74 YEARS...	15.7	846	17.1	378	14.5	468
25-34 YEARS.....	8.3	171	6.8	70	9.5	101
35-44 YEARS.....	12.1	147	15.9	52	9.2	95
45-54 YEARS.....	15.6	202	17.0	98	14.3	104
55-64 YEARS.....	23.4	156	24.4	73	22.6	83
65-74 YEARS.....	31.3	170	34.7	85	28.8	85

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.9

STANDARD ERRORS AND DESIGN EFFECTS FOR AIR CONDUCTION HEARING LEVELS  
IN THE RIGHT EAR AT 2000 HERTZ BY AGE, RACE, AND SEX; UNITED STATES 1971-1975

AGE AND RACE	BOTH SEXES		MALE		FEMALE	
	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT
ALL RACES 1/						
25-74 YEARS...	0.31	2.46	0.41	1.70	0.37	2.38
25-34 YEARS.....	.33	1.79	.46	1.79	.46	1.77
35-44 YEARS.....	.42	1.55	.69	1.35	.50	1.96
45-54 YEARS.....	.53	1.91	.79	1.40	.69	2.51
55-64 YEARS.....	.66	1.84	1.03	1.81	.66	1.27
65-74 YEARS.....	.75	1.77	1.03	1.50	1.02	1.90
WHITE						
25-74 YEARS...	.32	2.36	.45	1.78	.39	2.24
25-34 YEARS.....	.35	1.84	.50	1.81	.49	1.78
35-44 YEARS.....	.44	1.43	.74	1.33	.53	1.78
45-54 YEARS.....	.58	1.96	.87	1.50	.73	2.50
55-64 YEARS.....	.67	1.66	1.12	1.83	.69	1.27
65-74 YEARS.....	.79	1.65	1.12	1.45	1.10	1.86
BLACK						
25-74 YEARS...	.65	1.41	1.03	1.39	1.00	2.14
25-34 YEARS.....	1.08	1.96	1.12	1.19	1.58	2.09
35-44 YEARS.....	.91	1.08	1.75	1.00	1.14	2.08
45-54 YEARS.....	1.47	1.71	2.54	1.83	1.53	1.42
55-64 YEARS.....	2.10	2.21	2.39	1.44	3.51	2.77
65-74 YEARS.....	1.05	1.07	2.30	1.34	2.25	1.55

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.10

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 4000 HERTZ  
IN THE RIGHT EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1975

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	22.6	4,791	30.2	3,115	15.0	3,676
25-34 YEARS.....	10.0	1,550	13.9	667	6.3	883
35-44 YEARS.....	14.8	1,704	24.3	522	9.9	682
45-54 YEARS.....	24.9	1,508	35.3	730	15.4	850
55-64 YEARS.....	32.5	1,268	42.7	615	23.4	653
65-74 YEARS.....	41.4	1,181	50.7	573	34.1	608
WHITE						
25-74 YEARS...	23.0	5,874	31.0	2,699	15.7	3,175
25-34 YEARS.....	10.0	1,352	14.4	583	5.9	769
35-44 YEARS.....	17.3	1,038	25.2	463	9.8	575
45-54 YEARS.....	25.2	1,376	36.1	635	15.1	741
55-64 YEARS.....	32.8	1,103	43.5	536	23.1	567
65-74 YEARS.....	41.8	1,005	51.4	482	34.6	523
BLACK						
25-74 YEARS...	19.5	845	23.2	379	16.5	466
25-34 YEARS.....	9.5	172	9.2	71	9.7	101
35-44 YEARS.....	13.7	147	17.0	52	10.6	95
45-54 YEARS.....	22.5	201	27.7	98	17.8	103
55-64 YEARS.....	30.5	156	34.8	73	26.9	83
65-74 YEARS.....	35.9	169	43.0	85	30.3	84

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.11

STANDARD ERRORS AND DESIGN EFFECTS FOR AIR CONDUCTION HEARING LEVELS  
IN THE RIGHT EAR AT 4000 HERTZ BY AGE, RACE, AND SEX: UNITED STATES 1971-1975

AGE AND RACE	BOTH SEXES		MALE		FEMALE	
	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT
ALL RACES 1/						
25-74 YEARS...	0.36	1.81	0.57	1.66	0.37	1.70
25-34 YEARS.....	.52	2.02	.88	1.85	.49	1.84
35-44 YEARS.....	.68	1.50	1.11	1.43	.61	1.62
45-54 YEARS.....	.63	1.30	1.05	1.39	.66	1.82
55-64 YEARS.....	.76	1.51	1.10	1.54	.83	1.46
65-74 YEARS.....	.78	1.46	1.01	1.35	1.07	1.68
WHITE						
25-74 YEARS...	.38	1.69	.61	1.62	.40	1.65
25-34 YEARS.....	.56	1.98	.95	1.80	.47	1.65
35-44 YEARS.....	.75	1.56	1.26	1.56	.66	1.47
45-54 YEARS.....	.71	1.37	1.14	1.39	.74	1.98
55-64 YEARS.....	.79	1.40	1.18	1.52	.86	1.44
65-74 YEARS.....	.80	1.29	1.03	1.18	1.16	1.64
BLACK						
25-74 YEARS...	.70	1.43	1.33	1.56	.95	1.49
25-34 YEARS.....	1.09	1.34	1.20	.80	1.74	1.82
35-44 YEARS.....	1.23	1.52	2.10	1.17	1.21	1.82
45-54 YEARS.....	1.82	1.77	2.79	1.49	1.80	1.56
55-64 YEARS.....	2.54	2.08	2.87	1.58	4.03	2.48
65-74 YEARS.....	1.98	1.98	2.76	1.92	2.25	1.65

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.12

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 500 HERTZ  
IN THE LEFT EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1975

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	12.7	6,706	12.7	3,116	12.7	3,670
25-34 YEARS.....	8.3	1,544	8.4	666	8.2	878
35-44 YEARS.....	10.3	1,200	11.0	520	9.6	680
45-54 YEARS.....	13.0	1,588	13.3	738	12.7	850
55-64 YEARS.....	16.1	1,267	16.4	615	15.8	652
65-74 YEARS.....	20.8	1,187	18.9	577	22.2	610
WHITE						
25-74 YEARS...	12.6	5,067	12.7	2,700	12.5	3,167
25-34 YEARS.....	8.0	1,346	8.3	582	7.8	764
35-44 YEARS.....	10.2	1,034	11.1	461	9.4	573
45-54 YEARS.....	12.9	1,375	13.5	635	12.5	740
55-64 YEARS.....	15.9	1,102	16.4	536	15.4	566
65-74 YEARS.....	20.8	1,010	18.8	486	22.4	524
BLACK						
25-74 YEARS...	13.3	847	12.4	379	14.0	468
25-34 YEARS.....	10.4	172	8.8	71	11.5	101
35-44 YEARS.....	10.9	147	11.1	52	10.8	95
45-54 YEARS.....	12.7	202	11.1	98	14.2	104
55-64 YEARS.....	18.0	156	17.3	73	18.4	83
65-74 YEARS.....	20.4	170	20.0	85	20.8	85

1/ RE AUDIOMETRIC ZERO (ANSI, 1949)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK



Table 3.13

STANDARD ERRORS AND DESIGN EFFECTS FOR AIR CONDUCTION HEARING LEVELS  
IN THE LEFT EAR AT 500 HERTZ BY AGE, RACE, AND SEX: UNITED STATES 1971-1975

AGE AND RACE	BOTH SEXES		MALE		FEMALE	
	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT
ALL RACES 1/						
25-74 YEARS...	0.25	2.70	0.31	1.88	0.30	2.16
25-34 YEARS.....	.29	1.88	.43	1.84	.38	1.67
35-44 YEARS.....	.40	2.37	.62	1.52	.56	2.08
45-54 YEARS.....	.42	1.80	.60	1.55	.59	2.03
55-64 YEARS.....	.48	1.70	.73	1.66	.52	1.21
65-74 YEARS.....	.59	1.69	.62	1.11	.89	1.80
WHITE						
25-74 YEARS...	.24	2.65	.33	1.85	.32	2.06
25-34 YEARS.....	.30	1.78	.44	1.72	.37	1.62
35-44 YEARS.....	.52	2.26	.68	1.51	.60	1.93
45-54 YEARS.....	.45	1.70	.63	1.45	.64	2.07
55-64 YEARS.....	.45	1.46	.74	1.63	.49	1.04
65-74 YEARS.....	.63	1.62	.66	1.06	.97	1.77
BLACK						
25-74 YEARS...	.54	1.51	.92	1.94	.74	1.62
25-34 YEARS.....	1.25	2.36	1.63	1.91	1.53	1.91
35-44 YEARS.....	.84	1.65	1.10	1.43	1.04	1.43
45-54 YEARS.....	.97	1.34	1.56	1.86	1.15	.93
55-64 YEARS.....	2.04	2.10	3.34	2.23	2.65	2.24
65-74 YEARS.....	1.32	1.39	1.58	.93	1.95	1.60

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.14

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 1000 HERTZ  
IN THE LEFT EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1975

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	12.3	6,796	12.9	3,125	11.0	3,671
25-34 YEARS.....	7.0	1,546	7.2	667	6.8	879
35-44 YEARS.....	9.7	1,204	11.1	524	8.5	680
45-54 YEARS.....	12.5	1,589	13.2	739	11.8	850
55-64 YEARS.....	16.7	1,269	17.8	617	15.6	652
65-74 YEARS.....	21.8	1,108	21.2	578	22.3	610
WHITE						
25-74 YEARS...	12.3	5,877	12.9	2,709	11.7	3,168
25-34 YEARS.....	6.7	1,340	7.1	583	6.3	765
35-44 YEARS.....	9.6	1,038	11.1	465	8.3	573
45-54 YEARS.....	12.5	1,376	13.4	636	11.7	740
55-64 YEARS.....	16.4	1,104	17.7	538	15.2	566
65-74 YEARS.....	21.8	1,011	21.0	487	22.5	524
BLACK						
25-74 YEARS...	13.1	847	13.2	379	13.0	468
25-34 YEARS.....	9.1	172	7.9	71	10.0	101
35-44 YEARS.....	10.5	147	12.1	52	9.3	95
45-54 YEARS.....	12.0	202	11.6	98	12.4	104
55-64 YEARS.....	19.3	156	18.7	73	19.7	83
65-74 YEARS.....	22.3	170	24.0	85	21.0	85

1/ RE Audiometric Zero (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.15

STANDARD ERRORS AND DESIGN EFFECTS FOR AIR CONDUCTION HEARING LEVELS  
IN THE LEFT EAR AT 1000 HERTZ BY AGE, RACE, AND SEX: UNITED STATES 1971-1975

AGE AND RACE	BOTH SEXES		MALE		FEMALE	
	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT
ALL RACES 1/						
25-74 YEARS...	0.27	3.01	0.32	1.76	0.34	2.52
25-34 YEARS.....	.28	1.79	.45	1.97	.34	1.48
35-44 YEARS.....	.41	2.01	.58	1.40	.47	1.96
45-54 YEARS.....	.43	1.82	.66	1.74	.56	1.95
55-64 YEARS.....	.56	2.00	.77	1.72	.65	1.55
65-74 YEARS.....	.64	1.63	.74	1.18	.94	1.71
WHITE						
25-74 YEARS...	.28	2.70	.34	1.73	.35	2.36
25-34 YEARS.....	.30	1.79	.47	1.88	.34	1.42
35-44 YEARS.....	.43	1.85	.63	1.37	.50	1.90
45-54 YEARS.....	.46	1.76	.70	1.68	.60	1.94
55-64 YEARS.....	.52	1.62	.77	1.58	.64	1.38
65-74 YEARS.....	.66	1.47	.77	1.06	1.00	1.64
BLACK						
25-74 YEARS...	.60	1.69	.98	1.89	.76	1.63
25-34 YEARS.....	.97	1.81	1.50	2.02	1.07	1.19
35-44 YEARS.....	.89	1.64	1.15	1.00	.98	1.30
45-54 YEARS.....	.99	1.39	1.70	1.79	1.10	.99
55-64 YEARS.....	2.17	2.21	3.24	2.16	2.96	2.33
65-74 YEARS.....	1.64	1.55	2.30	1.36	2.20	1.55

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.16

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 2000 HERTZ  
IN THE LEFT EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1975

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	15.8	6,796	18.4	3,123	13.3	3,673
25-34 YEARS.....	7.5	1,546	8.4	667	6.7	879
35-44 YEARS.....	11.5	1,204	14.0	524	9.2	680
45-54 YEARS.....	16.3	1,589	20.4	739	12.5	850
55-64 YEARS.....	22.3	1,270	26.5	616	18.4	654
65-74 YEARS.....	30.6	1,187	34.5	577	27.5	610
WHITE						
25-74 YEARS...	15.8	5,877	18.6	2,707	13.2	3,170
25-34 YEARS.....	7.3	1,348	8.5	503	6.2	765
35-44 YEARS.....	11.5	1,038	13.9	465	9.1	573
45-54 YEARS.....	16.5	1,376	20.8	636	12.4	740
55-64 YEARS.....	22.0	1,105	26.4	537	10.0	568
65-74 YEARS.....	30.6	1,010	34.5	486	27.7	524
BLACK						
25-74 YEARS...	16.0	847	17.6	379	14.6	468
25-34 YEARS.....	8.8	172	7.6	71	9.7	101
35-44 YEARS.....	12.2	147	14.9	52	10.2	95
45-54 YEARS.....	15.3	202	16.5	98	14.3	104
55-64 YEARS.....	25.6	156	28.4	73	23.3	83
65-74 YEARS.....	30.3	170	35.7	85	26.0	85

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.17

STANDARD ERRORS AND DESIGN EFFECTS FOR AIR CONDUCTION HEARING LEVELS  
IN THE LEFT EAR AT 2000 HERTZ BY AGE, RACE, AND SEX; UNITED STATES 1971-1975

AGE AND RACE	BOTH SEXES		MALE		FEMALE	
	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT
ALL RACES 1/						
25-74 YEARS...	0.32	2.44	0.43	1.69	0.35	2.09
25-34 YEARS.....	.35	1.94	.58	2.01	.39	1.55
35-44 YEARS.....	.47	1.59	.77	1.42	.52	1.77
45-54 YEARS.....	.54	1.72	.79	1.33	.67	2.26
55-64 YEARS.....	.76	2.29	1.06	1.74	.70	1.48
65-74 YEARS.....	.76	1.70	1.14	1.62	.92	1.54
WHITE						
25-74 YEARS...	.34	2.35	.46	1.65	.37	2.04
25-34 YEARS.....	.37	1.87	.60	1.87	.41	1.58
35-44 YEARS.....	.50	1.54	.82	1.39	.57	1.79
45-54 YEARS.....	.59	1.73	.84	1.34	.72	2.30
55-64 YEARS.....	.75	2.00	1.08	1.59	.73	1.48
65-74 YEARS.....	.79	1.55	1.18	1.44	.99	1.48
BLACK						
25-74 YEARS...	.65	1.34	1.29	1.85	.79	1.47
25-34 YEARS.....	1.03	1.94	1.65	1.91	1.06	1.29
35-44 YEARS.....	.99	1.05	1.78	1.00	1.12	1.12
45-54 YEARS.....	1.55	2.01	2.74	2.12	1.34	1.25
55-64 YEARS.....	2.17	1.88	3.50	1.99	2.98	2.24
65-74 YEARS.....	1.77	1.56	2.55	1.50	2.15	1.39

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

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Table 3.18

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 4000 HERTZ  
IN THE LEFT EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1975

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	24.3	6,791	32.9	3,119	16.5	3,672
25-34 YEARS.....	11.2	1,545	16.1	666	6.6	879
35-44 YEARS.....	18.2	1,202	26.7	523	10.6	679
45-54 YEARS.....	26.8	1,508	38.5	738	16.0	850
55-64 YEARS.....	34.1	1,270	45.1	616	24.2	654
65-74 YEARS.....	44.0	1,186	54.1	576	36.1	610
WHITE						
25-74 YEARS...	24.9	5,073	33.9	2,703	16.6	3,170
25-34 YEARS.....	11.3	1,347	16.7	582	6.1	765
35-44 YEARS.....	19.1	1,037	27.9	464	10.8	573
45-54 YEARS.....	27.4	1,375	39.8	635	15.9	740
55-64 YEARS.....	34.5	1,105	46.1	537	24.0	568
65-74 YEARS.....	44.7	1,009	55.0	485	36.8	524
BLACK						
25-74 YEARS...	19.3	846	23.3	379	16.1	467
25-34 YEARS.....	10.2	172	10.8	71	9.8	101
35-44 YEARS.....	11.9	146	14.8	52	9.7	94
45-54 YEARS.....	21.7	302	27.2	98	16.8	104
55-64 YEARS.....	31.5	156	36.5	73	27.3	83
65-74 YEARS.....	36.4	170	45.5	85	29.4	85

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

TABLE 3.13

STANDARD ERRORS AND DESIGN EFFECTS FOR AIR CONDUCTION HEARING LEVELS  
IN THE LEFT EAR AT 4000 HERTZ BY AGE, RACE, AND SEX: UNITED STATES 1971-1975

AGE AND RACE	BOTH SEXES		MALE		FEMALE	
	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT
ALL RACES 1/						
25-74 YEARS...	0.39	2.04	0.63	2.00	0.30	1.76
25-34 YEARS.....	.63	2.55	1.13	2.50	.42	1.61
35-44 YEARS.....	.78	1.99	1.25	1.75	.64	1.88
45-54 YEARS.....	.61	1.18	.89	1.07	.67	1.88
55-64 YEARS.....	.82	1.80	1.12	1.67	.69	1.12
65-74 YEARS.....	.80	1.61	.95	1.32	1.05	1.69
WHITE						
25-74 YEARS...	.41	1.90	.65	1.86	.40	1.69
25-34 YEARS.....	.68	2.52	1.24	2.48	.42	1.57
35-44 YEARS.....	.84	1.89	1.31	1.64	.72	1.98
45-54 YEARS.....	.68	1.27	.95	1.08	.72	1.87
55-64 YEARS.....	.84	1.65	1.15	1.53	.71	1.09
65-74 YEARS.....	.84	1.48	.97	1.16	1.12	1.63
BLACK						
25-74 YEARS...	1.00	1.46	1.48	1.76	.97	1.58
25-34 YEARS.....	1.42	2.32	2.07	1.83	1.43	1.49
35-44 YEARS.....	1.08	1.10	1.91	1.04	1.40	1.49
45-54 YEARS.....	2.19	2.40	3.78	2.37	1.58	1.39
55-64 YEARS.....	2.27	1.75	3.14	1.89	3.59	2.21
65-74 YEARS.....	1.89	1.49	2.48	1.39	2.29	1.40

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.20

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 500 HERTZ  
IN THE BETTER EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1975

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	9.7	6,782	9.3	3,114	10.0	3,668
25-34 YEARS.....	6.0	1,544	5.0	666	6.2	878
35-44 YEARS.....	7.4	1,199	7.5	519	7.3	680
45-54 YEARS.....	9.7	1,508	9.6	738	9.8	850
55-64 YEARS.....	12.0	1,266	12.8	614	12.8	652
65-74 YEARS.....	17.1	1,105	15.0	577	18.7	600
WHITE						
25-74 YEARS...	9.6	5,864	9.3	2,698	9.9	3,166
25-34 YEARS.....	5.8	1,346	5.7	582	5.8	764
35-44 YEARS.....	7.2	1,033	7.4	460	7.0	573
45-54 YEARS.....	9.6	1,375	9.7	635	9.6	740
55-64 YEARS.....	12.7	1,101	13.0	535	12.5	566
65-74 YEARS.....	17.1	1,009	14.9	486	18.8	523
BLACK						
25-74 YEARS...	10.3	846	8.9	379	11.4	467
25-34 YEARS.....	7.4	172	5.6	71	8.0	101
35-44 YEARS.....	8.8	147	8.7	52	8.8	95
45-54 YEARS.....	9.9	202	8.6	98	11.0	104
55-64 YEARS.....	13.5	156	10.7	73	15.8	83
65-74 YEARS.....	17.3	169	16.1	85	18.2	84

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK



Table 3.21

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 1000 HERTZ  
IN THE BETTER EAR BY AGE, RACE AND SEX; UNITED STATES, 1971-1975

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	9.5	6,792	9.7	3,124	9.4	3,668
25-34 YEARS.....	4.9	1,545	4.9	667	4.8	878
35-44 YEARS.....	6.8	1,204	7.6	524	6.1	680
45-54 YEARS.....	9.8	1,589	10.0	739	9.5	850
55-64 YEARS.....	13.4	1,268	14.1	616	12.8	652
65-74 YEARS.....	18.2	1,186	17.3	578	18.0	608
WHITE						
25-74 YEARS...	9.5	5,873	9.6	2,708	9.3	3,165
25-34 YEARS.....	4.7	1,347	4.9	583	4.5	764
35-44 YEARS.....	6.6	1,030	7.4	465	5.9	573
45-54 YEARS.....	9.8	1,376	10.0	636	9.5	740
55-64 YEARS.....	13.3	1,103	14.2	537	12.5	566
65-74 YEARS.....	18.0	1,009	17.0	487	18.8	522
BLACK						
25-74 YEARS...	10.3	847	10.2	379	10.4	468
25-34 YEARS.....	6.4	172	5.3	71	7.2	101
35-44 YEARS.....	8.5	147	10.5	52	7.0	95
45-54 YEARS.....	9.7	202	9.4	98	10.0	104
55-64 YEARS.....	14.7	156	13.3	73	16.0	83
65-74 YEARS.....	19.7	170	20.0	85	19.5	85

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.22

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 2000 HERTZ  
IN THE BETTER EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1975

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	11.7	6,707	13.3	3,119	10.2	3,668
25-34 YEARS.....	4.4	1,544	4.6	666	4.2	878
35-44 YEARS.....	7.5	1,202	9.2	523	6.0	679
45-54 YEARS.....	12.0	1,588	14.5	738	9.7	850
55-64 YEARS.....	17.7	1,268	20.5	615	15.2	653
65-74 YEARS.....	25.2	1,185	28.0	577	23.0	608
WHITE						
25-74 YEARS...	11.7	5,070	13.3	2,704	10.1	3,166
25-34 YEARS.....	4.3	1,347	4.7	583	3.9	764
35-44 YEARS.....	7.4	1,036	9.0	464	5.9	572
45-54 YEARS.....	12.0	1,375	14.5	635	9.5	740
55-64 YEARS.....	17.5	1,103	20.6	536	14.8	567
65-74 YEARS.....	25.1	1,009	27.9	406	23.0	523
BLACK						
25-74 YEARS...	12.2	845	13.4	378	11.3	467
25-34 YEARS.....	5.4	171	4.1	70	6.3	101
35-44 YEARS.....	8.7	147	11.6	52	6.5	95
45-54 YEARS.....	12.6	202	14.0	98	11.4	104
55-64 YEARS.....	19.5	156	19.7	73	19.4	83
65-74 YEARS.....	26.4	169	29.7	85	23.9	84

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

TABLE 3.23

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 4000 HERTZ  
IN THE BETTER EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1975

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	18.7	6,777	25.7	3,109	12.4	3,668
25-34 YEARS.....	6.4	1,545	9.9	664	3.4	879
35-44 YEARS.....	12.9	1,201	19.3	522	6.9	679
45-54 YEARS.....	21.0	1,586	30.7	737	12.0	849
55-64 YEARS.....	28.1	1,266	37.7	613	19.4	653
65-74 YEARS.....	37.5	1,179	46.9	571	30.3	608
WHITE						
25-74 YEARS...	19.2	5,861	26.5	2,693	12.5	3,168
25-34 YEARS.....	6.4	1,347	10.2	582	3.0	765
35-44 YEARS.....	13.5	1,036	20.3	463	7.0	573
45-54 YEARS.....	21.4	1,374	31.5	634	11.9	740
55-64 YEARS.....	28.4	1,101	38.7	534	19.0	567
65-74 YEARS.....	38.0	1,003	47.6	480	30.7	523
BLACK						
25-74 YEARS...	15.2	844	18.4	379	12.7	465
25-34 YEARS.....	6.3	172	6.5	71	6.2	101
35-44 YEARS.....	8.7	146	11.7	52	6.5	94
45-54 YEARS.....	17.8	201	22.9	98	13.4	103
55-64 YEARS.....	25.6	156	27.6	73	23.9	83
65-74 YEARS.....	32.2	169	39.5	85	26.6	84

1/ RE AUDIOMETRIC ZERO (ANST, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.24

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 500 HERTZ  
IN THE WORSE EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1975

RACE AND AGE	BOTH SEXES		Males		Females	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	15.5	6,782	15.4	3,114	15.6	3,668
25-34 YEARS.....	10.6	1,544	10.4	666	10.8	878
35-44 YEARS.....	12.8	1,199	13.6	519	12.0	680
45-54 YEARS.....	15.7	1,500	15.9	730	15.5	770
55-64 YEARS.....	19.5	1,266	20.0	614	19.1	652
65-74 YEARS.....	24.3	1,185	22.0	577	26.1	608
WHITE						
25-74 YEARS...	15.4	5,864	15.3	2,698	15.5	3,166
25-34 YEARS.....	10.3	1,346	10.1	582	10.4	764
35-44 YEARS.....	12.7	1,033	13.7	460	11.9	573
45-54 YEARS.....	15.8	1,375	16.2	635	15.3	740
55-64 YEARS.....	19.3	1,101	19.8	535	18.9	566
65-74 YEARS.....	24.3	1,009	21.9	486	26.2	523
BLACK						
25-74 YEARS...	16.3	846	15.7	379	16.8	467
25-34 YEARS.....	13.1	172	12.5	71	13.5	101
35-44 YEARS.....	13.7	147	14.0	52	13.4	95
45-54 YEARS.....	15.4	202	13.2	98	17.3	104
55-64 YEARS.....	21.5	156	22.1	73	21.0	83
65-74 YEARS.....	24.4	169	22.8	85	25.7	84

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.25

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 1000 HERTZ  
IN THE WORSE EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1975

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	15.5	6,792	15.9	3,124	15.2	3,668
25-34 YEARS.....	9.6	1,545	9.4	667	9.7	878
35-44 YEARS.....	12.4	1,204	13.8	524	11.4	680
45-54 YEARS.....	15.7	1,589	16.3	739	15.1	850
55-64 YEARS.....	20.5	1,260	21.8	616	19.4	652
65-74 YEARS.....	25.8	1,186	25.0	578	26.4	608
WHITE						
25-74 YEARS...	15.4	5,873	15.8	2,708	15.1	3,165
25-34 YEARS.....	9.3	1,347	9.3	583	9.3	764
35-44 YEARS.....	12.4	1,038	13.5	465	11.3	573
45-54 YEARS.....	15.8	1,376	16.6	634	15.0	740
55-64 YEARS.....	20.2	1,103	21.5	537	19.1	566
65-74 YEARS.....	25.7	1,009	24.8	487	26.4	522
BLACK						
25-74 YEARS...	16.5	847	17.0	379	16.2	468
25-34 YEARS.....	11.8	172	10.9	71	12.5	101
35-44 YEARS.....	14.3	147	17.2	52	12.1	95
45-54 YEARS.....	14.9	202	13.6	98	16.0	104
55-64 YEARS.....	23.7	156	25.1	73	22.4	83
65-74 YEARS.....	26.8	170	27.3	85	26.3	85

1/ RE AUDIOMETRIC ZERO (ANST, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

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Table 3.26

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 2000 HERTZ  
IN THE WORSE EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1975

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	19.0	6,707	21.4	3,119	16.6	3,668
25-34 YEARS.....	10.1	1,544	10.5	666	9.7	878
35-44 YEARS.....	14.4	1,202	17.3	523	11.0	679
45-54 YEARS.....	19.7	1,580	23.6	738	16.0	850
55-64 YEARS.....	26.1	1,268	30.5	615	22.1	653
65-74 YEARS.....	34.4	1,185	38.2	577	31.5	608
WHITE						
25-74 YEARS...	19.0	5,870	21.7	2,704	16.5	3,166
25-34 YEARS.....	9.8	1,347	10.5	583	9.2	764
35-44 YEARS.....	14.3	1,036	17.1	464	11.6	572
45-54 YEARS.....	19.9	1,375	24.1	635	15.9	740
55-64 YEARS.....	25.8	1,103	30.3	536	21.8	567
65-74 YEARS.....	34.4	1,009	38.1	486	31.6	523
BLACK						
25-74 YEARS...	19.4	845	21.4	378	17.0	467
25-34 YEARS.....	11.8	171	10.4	70	12.9	101
35-44 YEARS.....	15.6	147	19.1	52	13.0	95
45-54 YEARS.....	18.3	202	19.5	98	17.3	104
55-64 YEARS.....	29.5	156	33.1	73	26.5	83
65-74 YEARS.....	35.1	169	40.7	85	30.7	84

1/ RE AUDIOMETRIC ZERO (ANSI, 1949)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.27

HEAR AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 4000 HERTZ  
IN THE WORSE EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1975

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	28.1	6,777	37.3	3,109	19.9	3,668
25-34 YEARS.....	14.6	1,545	20.1	666	9.5	879
35-44 YEARS.....	22.3	1,201	31.7	522	13.6	679
45-54 YEARS.....	30.8	1,586	43.1	737	19.3	849
55-64 YEARS.....	38.5	1,266	49.9	613	28.2	653
65-74 YEARS.....	47.2	1,179	57.9	571	39.9	608
WHITE						
25-74 YEARS...	28.7	5,861	38.3	2,693	19.9	3,168
25-34 YEARS.....	14.8	1,347	20.8	582	8.9	765
35-44 YEARS.....	22.9	1,036	32.8	463	13.6	573
45-54 YEARS.....	31.3	1,374	44.3	634	19.1	740
55-64 YEARS.....	38.8	1,101	50.7	534	28.1	567
65-74 YEARS.....	48.4	1,003	58.7	480	40.5	523
BLACK						
25-74 YEARS...	23.6	844	28.1	379	19.9	465
25-34 YEARS.....	13.4	172	13.5	71	13.3	101
35-44 YEARS.....	16.9	146	20.9	52	13.9	94
45-54 YEARS.....	26.3	201	32.1	98	21.3	103
55-64 YEARS.....	36.5	156	43.8	73	30.3	83
65-74 YEARS.....	40.0	169	48.9	85	33.1	84

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

DEPT. OF HEALTH AND HUMAN SERVICES

Table 3.2B

Significance Tests (Z Statistics) of Age, Sex and Race Differences in  
Air Conduction Hearing Levels at 500, 1000, 2000  
and 4000 Hz in the Right and Left Ears:  
United States, 1971-1974

	Right Ear				Left Ear			
	500	1000	2000	4000	500	1000	2000	4000
<u>Age Differences</u>								
(25-34) vs. (35-44)	-3.47***	-5.34***	-7.03***	-7.46***	-3.77***	-6.02***	-7.12***	-7.69***
(35-44) vs. (45-54)	-5.01***	-6.92***	-8.88***	-8.59***	-4.90***	-5.74***	-8.00***	-8.80***
(45-54) vs. (55-64)	-6.43***	-6.84***	-7.70***	-7.85***	-4.84***	-6.18***	-6.51***	-6.96***
(55-64) vs. (65-74)	-5.93***	-7.02***	-8.31***	-8.92***	-6.68***	-6.93***	-9.31***	-8.98***
<u>Sex Differences: Males vs. Females</u>								
25-34	-1.59	-1.05	-.60	7.85***	.19	.78	2.48*	8.22***
35-44	.67	2.09*	4.45***	11.62***	2.09*	4.07***	5.25***	12.69***
45-54	-.50	.26	4.79***	17.26***	.74	1.72	7.91***	20.55***
55-64	.27	1.67	5.21***	13.89***	.79	2.46*	8.14***	17.10***
65-74	-4.17***	-1.80	3.26**	11.27***	-3.10**	-.93	5.03***	13.47***
<u>Race Differences: White vs. Black</u>								
Males								
25-34	-1.14	-1.04	-.05	3.38***	-.34	-.49	-.52	2.57*
35-44	-.99	-2.81**	-2.04*	3.04**	.01	-.87	-.50	5.83***
45-54	1.01	1.06	.30	2.80**	1.43	1.01	1.47	3.16*
55-64	.38	-.63	.07	2.77**	-.27	-.36	-.60	2.93*
65-74	-.39	-1.03	-1.23	3.04**	-.69	-1.29	-.49	3.87*
Females								
25-34	-1.63	-1.81	-1.59	-2.15*	-2.34*	-3.32***	-3.04**	-2.49*
35-44	-1.52	-.89	-.59	-.66	-1.24	-.98	-.91	-.64
45-54	-1.06	-.51	-.83	-1.36	-1.34	-.61	-1.26	-.56
55-64	-.79	-.74	-1.10	-.90	-1.20	-1.51	-1.70	-.87
65-74	-.19	-.75	-.72	1.66	.71	.59	-.72	2.96*

\*Significant at the .05 level.  
\*\*Significant at the .01 level.  
\*\*\*Significant at the .001 level.



Table 3.29

PERCENT DISTRIBUTION OF PURE CONDUCTION HEARING LEVELS (IN DECIBELS)  
FOR THE RIGHT, LEFT, BETTER AND WORSE EARS OF ADULTS  
AT 500, 1000, 2000 AND 4000 HERTZ; UNITED STATES, 1971-1975

FREQUENCY	HEARING LEVEL						
	LESS THAN -4DB	-4DB TO 6DB	6DB TO 16DB	16DB TO 26DB	26DB TO 36DB	36DB TO 46DB	46DB OR MORE
<b>RIGHT EAR</b>							
500.....	4.8	22.0	30.2	21.6	8.2	2.3	2.1
1000.....	9.7	32.6	34.0	14.8	5.3	1.6	1.9
2000.....	17.9	33.7	25.4	11.3	5.7	2.5	3.5
4000.....	6.6	24.0	26.4	15.3	9.3	8.6	9.9
<b>LEFT EAR</b>							
500.....	4.7	23.5	36.9	22.5	8.1	2.2	2.1
1000.....	8.4	31.8	35.3	15.6	5.0	2.5	1.4
2000.....	11.7	33.9	28.3	13.7	6.0	2.9	3.6
4000.....	2.5	17.5	28.4	21.0	11.3	7.7	11.6
<b>BETTER EAR</b>							
500.....	7.7	31.3	37.6	16.2	4.9	.9	1.4
1000.....	14.3	39.8	30.1	10.1	3.4	1.3	.9
2000.....	22.2	38.3	22.5	8.6	4.3	2.1	2.0
4000.....	8.5	29.4	26.8	14.2	7.7	6.3	7.1
<b>WORSE EAR</b>							
500.....	1.5	15.3	37.6	28.1	11.3	3.5	2.7
1000.....	3.8	24.8	39.2	20.3	6.9	2.7	2.3
2000.....	7.4	29.5	31.4	16.3	7.4	3.3	4.6
4000.....	.7	12.2	28.2	22.4	13.0	9.9	13.6

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Table 3.30

Correlation Coefficients Among Bone Conduction Hearing Levels at  
500, 1000, 2000 and 4000 Hz in the Right and Left Ears:  
United States, 1971-1974

		Right Ear				Left Ear			
		500	1000	2000	4000	500	1000	2000	4000
Right Ear	500	1							
	1000	.67	1						
	2000	.55	.65	1					
	4000	.39	.43	.62	1				
Left Ear	500	.70	.57	.48	.36	1			
	1000	.58	.72	.59	.41	.67	1		
	2000	.49	.57	.79	.58	.53	.64	1	
	4000	.33	.38	.54	.75	.36	.43	.61	1

Table 3.31

PERCENT DISTRIBUTION OF THE DIFFERENCE BETWEEN THE BONE CONDUCTION HEARING LEVELS IN THE RIGHT AND LEFT EARS AT 500, 1000, 2000 AND 4000 HERTZ; UNITED STATES, 1971-1974

RIGHT-LEFT	FREQUENCY			
	500 HERTZ	1000 HERTZ	2000 HERTZ	4000 HERTZ
-20DB OR LESS.....	3.0	2.7	3.9	8.9
-15DB.....	4.5	4.2	5.8	9.1
-10DB.....	10.1	11.5	13.9	14.9
-5DB.....	10.8	20.4	21.2	17.3
0DB.....	27.3	28.6	26.1	22.5
5DB.....	17.8	17.0	15.8	11.4
10DB.....	10.5	8.8	7.9	7.9
15DB.....	5.1	4.3	3.2	4.0
20DB OR MORE.....	2.8	2.5	2.2	4.1

Table 3.32

MEAN BONE CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 500 HERTZ  
IN THE RIGHT EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1974

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	14.7	3,539	14.5	1,687	14.9	1,852
25-34 YEARS.....	9.3	683	9.3	314	9.3	369
35-44 YEARS.....	12.7	551	13.4	240	12.0	311
45-54 YEARS.....	14.8	663	14.3	419	15.3	444
55-64 YEARS.....	19.1	691	18.8	341	19.3	350
65-74 YEARS.....	23.2	751	21.8	373	24.3	378
WHITE						
25-74 YEARS...	14.5	2,962	14.4	1,414	14.7	1,548
25-34 YEARS.....	8.9	576	9.0	267	8.7	309
35-44 YEARS.....	12.5	459	13.3	209	11.8	250
45-54 YEARS.....	14.8	726	14.2	347	15.3	379
55-64 YEARS.....	18.8	501	18.9	285	18.8	296
65-74 YEARS.....	23.1	620	21.5	306	24.2	314
BLACK						
25-74 YEARS...	16.2	545	15.0	253	17.2	292
25-34 YEARS.....	13.2	102	11.7	43	14.5	59
35-44 YEARS.....	13.6	85	13.7	38	13.5	57
45-54 YEARS.....	15.7	131	15.1	69	16.1	62
55-64 YEARS.....	20.7	103	17.2	52	23.8	51
65-74 YEARS.....	25.1	124	23.8	61	26.2	63

1/ RE AUDIOMETRIC ZERO (ANSI, 1949)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.33

STANDARD ERRORS AND DESIGN EFFECTS FOR BONE CONDUCTION HEARING LEVELS  
IN THE RIGHT EAR AT 500 HERTZ BY AGE, RACE, AND SEX: UNITED STATES 1971-1974

AGE AND RACE	BOTH SEXES		MALE		FEMALE	
	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT
ALL RACES 1/						
25-74 YEARS...	0.34	2.80	0.40	1.93	0.40	2.11
25-34 YEARS.....	.50	1.76	.59	1.13	.66	1.68
35-44 YEARS.....	.57	1.57	.79	1.42	.69	1.26
45-54 YEARS.....	.66	3.04	.68	1.71	.94	2.99
55-64 YEARS.....	.68	2.26	.87	1.90	.86	1.82
65-74 YEARS.....	.62	1.58	.82	1.36	.91	1.76
WHITE						
25-74 YEARS...	.36	2.61	.42	1.80	.45	2.05
25-34 YEARS.....	.53	1.72	.63	1.08	.71	1.67
35-44 YEARS.....	.59	1.36	.78	1.14	.74	1.18
45-54 YEARS.....	.72	2.99	.74	1.66	1.03	2.99
55-64 YEARS.....	.67	1.96	.89	1.71	.83	1.55
65-74 YEARS.....	.70	1.64	.90	1.37	.97	1.65
BLACK						
25-74 YEARS...	.65	1.75	.87	1.58	.94	1.93
25-34 YEARS.....	1.29	1.86	1.49	1.19	1.67	1.72
35-44 YEARS.....	1.15	1.67	1.83	1.33	1.40	1.69
45-54 YEARS.....	1.14	1.60	1.42	1.28	1.74	1.80
55-64 YEARS.....	2.50	3.02	2.67	2.06	3.47	2.79
65-74 YEARS.....	1.53	1.80	1.85	1.21	2.30	2.22

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.34

MEAN BONE CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 1000 HERTZ  
IN THE RIGHT EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1974

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	11.3	3,608	11.1	1,734	11.4	1,874
25-34 YEARS.....	6.1	700	6.0	328	6.1	372
35-44 YEARS.....	9.2	568	10.0	251	8.4	317
45-54 YEARS.....	11.4	881	11.1	432	11.7	449
55-64 YEARS.....	15.1	705	15.1	350	15.1	355
65-74 YEARS.....	20.5	754	19.4	373	21.4	381
WHITE						
25-74 YEARS...	11.0	3,023	10.9	1,457	11.0	1,566
25-34 YEARS.....	5.7	592	5.7	280	5.7	312
35-44 YEARS.....	8.9	471	9.9	217	8.0	254
45-54 YEARS.....	11.1	743	10.8	359	11.4	384
55-64 YEARS.....	14.7	595	14.9	295	14.5	300
65-74 YEARS.....	20.1	622	18.8	306	21.1	316
BLACK						
25-74 YEARS...	13.9	551	13.1	256	14.6	295
25-34 YEARS.....	9.4	102	9.1	43	9.7	59
35-44 YEARS.....	11.2	89	11.7	31	10.9	58
45-54 YEARS.....	14.1	132	12.9	70	15.2	62
55-64 YEARS.....	19.0	103	15.6	51	21.0	52
65-74 YEARS.....	25.2	125	25.2	61	25.1	64

1/ RE AURICULAR ZERO (ANST, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.35

STANDARD ERRORS AND DESIGN EFFECTS FOR BONE CONDUCTION HEARING LEVELS  
IN THE RIGHT EAR AT 1000 HERTZ BY AGE, RACE, AND SEX: UNITED STATES 1971-1975

AGE AND RACE	BOTH SEXES		MALE		FEMALE	
	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT
ALL RACES 1/						
25-74 YEARS...	.0.31	2.30	0.37	1.61	0.36	1.60
25-34 YEARS.....	.40	2.01	.70	1.71	.50	1.34
35-44 YEARS.....	.53	1.54	.86	1.78	.65	1.39
45-54 YEARS.....	.54	1.89	.62	1.31	.80	2.07
55-64 YEARS.....	.69	2.10	.97	1.95	.80	1.47
65-74 YEARS.....	.65	1.55	.86	1.41	.96	1.67
WHITE						
25-74 YEARS...	.34	2.42	.42	1.75	.41	1.81
25-34 YEARS.....	.53	2.07	.77	1.70	.55	1.46
35-44 YEARS.....	.54	1.34	.83	1.44	.70	1.23
45-54 YEARS.....	.61	2.05	.69	1.36	.89	2.20
55-64 YEARS.....	.75	2.16	1.04	1.91	.92	1.75
65-74 YEARS.....	.71	1.61	.96	1.54	1.01	1.59
BLACK						
25-74 YEARS...	.61	1.33	1.13	2.16	1.01	1.07
25-34 YEARS.....	1.01	1.37	1.48	1.45	1.35	1.27
35-44 YEARS.....	1.32	1.72	2.43	1.64	1.72	2.34
45-54 YEARS.....	1.52	2.21	1.72	1.61	2.22	2.13
55-64 YEARS.....	2.15	2.44	2.28	1.55	3.42	3.06
65-74 YEARS.....	2.00	1.73	3.47	2.43	2.63	1.60

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.36

MEAN BONE CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 2000 HERTZ  
IN THE RIGHT EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1974

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	10.1	3,601	11.4	1,727	8.9	1,874
25-34 YEARS.....	2.3	702	2.6	329	2.0	373
35-44 YEARS.....	7.3	567	8.8	251	6.0	316
45-54 YEARS.....	9.9	879	11.9	431	8.1	448
55-64 YEARS.....	16.1	707	18.3	350	14.1	357
65-74 YEARS.....	23.4	746	25.4	366	21.8	380
WHITE						
25-74 YEARS...	9.9	3,016	11.3	1,449	8.7	1,567
25-34 YEARS.....	1.9	594	2.4	281	1.4	313
35-44 YEARS.....	7.3	470	9.0	217	5.8	253
45-54 YEARS.....	9.7	740	11.6	357	7.9	383
55-64 YEARS.....	15.9	596	18.1	294	14.0	302
65-74 YEARS.....	23.2	616	25.0	300	21.8	316
BLACK						
25-74 YEARS...	11.6	551	12.4	257	10.9	294
25-34 YEARS.....	5.8	102	3.8	43	7.5	59
35-44 YEARS.....	8.1	89	8.7	31	7.6	58
45-54 YEARS.....	12.3	133	14.2	71	10.5	62
55-64 YEARS.....	18.3	104	20.9	52	16.2	52
65-74 YEARS.....	25.9	123	29.8	60	22.6	63

1/ RE Audiometric zero (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK



Table 3.37

STANDARD ERRORS AND DESIGN EFFECTS FOR BONE CONDUCTION HEARING LEVELS  
IN THE RIGHT EAR AT 2000 HERTZ BY AGE, RACE, AND SEX: UNITED STATES 1971-1974

AGE AND RACE	BOTH SEXES		MALE		FEMALE	
	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT
ALL RACES 1/						
25-74 YEARS....	0.33	1.78	0.55	2.11	0.36	1.31
25-34 YEARS.....	.46	1.80	.71	1.77	.54	1.53
35-44 YEARS.....	.64	1.49	1.00	1.36	.83	1.69
45-54 YEARS.....	.54	1.32	.82	1.23	.71	1.60
55-64 YEARS.....	.71	1.69	1.07	1.66	.94	1.71
65-74 YEARS.....	.78	1.61	.99	1.13	1.11	1.90
WHITE						
25-74 YEARS....	.38	1.99	.63	2.31	.40	1.40
25-34 YEARS.....	.48	1.66	.75	1.60	.54	1.46
35-44 YEARS.....	.73	1.52	1.12	1.42	.95	1.69
45-54 YEARS.....	.60	1.41	.89	1.24	.79	1.66
55-64 YEARS.....	.83	1.91	1.16	1.60	1.06	1.96
65-74 YEARS.....	.89	1.78	1.11	1.19	1.17	1.77
BLACK						
25-74 YEARS....	.57	.95	1.09	1.36	.90	1.49
25-34 YEARS.....	.94	1.13	1.34	1.54	1.30	1.01
35-44 YEARS.....	1.07	1.20	2.05	1.36	1.24	1.17
45-54 YEARS.....	1.55	1.60	2.53	1.65	1.63	1.36
55-64 YEARS.....	2.43	2.84	2.30	1.88	4.08	3.30
65-74 YEARS.....	2.21	1.92	3.56	2.11	2.34	1.38

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.38

MEAN BONE CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 4000 HERTZ  
IN THE RIGHT EAR BY AGE, RACE AND SEX; UNITED STATES, 1971-1974

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	18.9	3,550	24.3	1,606	14.2	1,864
25-34 YEARS.....	9.5	499	12.7	327	6.5	372
35-44 YEARS.....	15.2	561	20.7	246	10.3	315
45-54 YEARS.....	20.5	864	27.5	416	14.2	448
55-64 YEARS.....	26.3	698	33.5	344	19.9	354
65-74 YEARS.....	33.0	728	38.5	353	28.8	375
WHITE						
25-74 YEARS...	19.3	2,975	24.9	1,415	14.3	1,560
25-34 YEARS.....	9.6	591	13.0	279	6.4	312
35-44 YEARS.....	15.7	466	21.4	213	10.6	253
45-54 YEARS.....	20.7	728	28.1	345	14.1	383
55-64 YEARS.....	26.7	589	34.3	289	19.9	300
65-74 YEARS.....	33.2	601	38.9	289	29.0	312
BLACK						
25-74 YEARS...	15.5	541	18.1	250	13.4	291
25-34 YEARS.....	7.9	102	7.8	43	8.0	59
35-44 YEARS.....	11.4	87	16.2	30	7.8	57
45-54 YEARS.....	18.6	130	22.1	68	15.4	62
55-64 YEARS.....	22.8	102	24.8	51	21.2	51
65-74 YEARS.....	30.1	120	33.5	58	27.3	62

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.39

STANDARD ERRORS AND DESIGN EFFECTS FOR BONE CONDUCTION HEARING LEVELS  
IN THE RIGHT EAR AT 4000 HERTZ BY AGE, RACE, AND SEX: UNITED STATES 1971-1974

AGE AND RACE	BOTH SEXES		MALE		FEMALE	
	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT
ALL RACES 1/						
25-74 YEARS...	0.39	1.75	0.68	2.07	0.40	1.43
25-34 YEARS.....	.53	1.13	1.01	1.21	.50	1.42
35-44 YEARS.....	.88	1.72	1.31	1.31	.93	1.88
45-54 YEARS.....	.64	1.16	1.05	1.38	1.06	2.70
55-64 YEARS.....	.83	1.78	1.27	2.05	.99	1.86
65-74 YEARS.....	.89	2.17	1.15	1.83	1.16	2.12
WHITE						
25-74 YEARS...	.42	1.68	.72	1.96	.46	1.62
25-34 YEARS.....	.57	1.10	1.12	1.25	.54	1.50
35-44 YEARS.....	.95	1.57	1.40	1.26	1.03	1.77
45-54 YEARS.....	.72	1.23	1.05	1.16	1.17	2.68
55-64 YEARS.....	.91	1.79	1.29	1.77	1.10	2.08
65-74 YEARS.....	.96	2.09	1.18	1.68	1.24	1.96
BLACK						
25-74 YEARS...	.94	1.93	1.73	1.62	1.09	1.89
25-34 YEARS.....	1.20	1.14	2.22	1.35	1.36	1.06
35-44 YEARS.....	1.92	1.93	3.72	1.75	1.12	.86
45-54 YEARS.....	2.17	2.62	3.69	2.57	1.63	1.69
55-64 YEARS.....	2.70	2.69	2.81	2.03	4.47	3.04
65-74 YEARS.....	2.14	2.09	3.68	2.33	2.14	1.54

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

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Table 3.40

MEAN BONE CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 500 HERTZ  
IN THE LEFT EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1974

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	14.7	3,520	14.2	1,670	15.1	1,850
25-34 YEARS.....	9.5	680	9.0	312	9.9	368
35-44 YEARS.....	12.1	549	11.6	239	12.5	310
45-54 YEARS.....	15.2	861	14.5	417	15.8	444
55-64 YEARS.....	19.0	686	19.2	337	18.8	349
65-74 YEARS.....	23.1	744	22.3	365	23.8	379
WHITE						
25-74 YEARS...	14.4	2,943	13.9	1,399	14.9	1,544
25-34 YEARS.....	9.0	574	8.5	265	9.4	309
35-44 YEARS.....	11.8	455	11.2	207	12.3	248
45-54 YEARS.....	14.9	724	14.1	346	15.6	378
55-64 YEARS.....	18.7	576	19.1	282	18.4	294
65-74 YEARS.....	23.0	614	22.3	299	23.6	315
BLACK						
25-74 YEARS...	17.1	544	16.4	250	17.7	294
25-34 YEARS.....	13.8	100	12.7	42	14.8	58
35-44 YEARS.....	14.2	87	14.1	29	14.3	58
45-54 YEARS.....	17.4	131	17.7	68	17.1	63
55-64 YEARS.....	22.3	103	20.9	51	23.6	52
65-74 YEARS.....	24.5	123	22.1	60	26.4	63

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.41

STANDARD ERRORS AND DESIGN EFFECTS FOR BONE CONDUCTION HEARING LEVELS  
IN THE LEFT EAR AT 500 HERTZ BY AGE, RACE, AND SEX: UNITED STATES 1971-1974

AGE AND RACE	BOTH SEXES		MALE		FEMALE	
	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT
ALL RACES 1/						
25-74 YEARS...	0.34	2.83	0.45	2.44	0.39	1.90
25-34 YEARS.....	.45	1.40	.63	1.17	.59	1.40
35-44 YEARS.....	.58	1.78	.81	1.78	.74	1.43
45-54 YEARS.....	.58	2.24	.78	2.11	.84	2.25
55-64 YEARS.....	.74	2.57	.97	2.14	.93	2.09
65-74 YEARS.....	.65	1.02	.91	1.71	.89	1.81
WHITE						
25-74 YEARS...	.35	2.52	.49	2.37	.40	1.66
25-34 YEARS.....	.48	1.38	.67	1.17	.63	1.39
35-44 YEARS.....	.60	1.57	.82	1.58	.80	1.30
45-54 YEARS.....	.58	1.91	.72	1.63	.89	2.14
55-64 YEARS.....	.76	2.34	1.05	2.07	.89	1.74
65-74 YEARS.....	.71	1.80	1.00	1.69	.93	1.65
BLACK						
25-74 YEARS...	.79	2.20	1.24	2.45	.99	1.91
25-34 YEARS.....	1.38	1.63	2.27	1.61	1.29	.97
35-44 YEARS.....	1.27	1.57	2.15	1.52	1.57	1.56
45-54 YEARS.....	1.66	2.23	2.62	2.44	1.92	1.73
55-64 YEARS.....	2.30	2.64	2.29	1.60	3.41	2.55
65-74 YEARS.....	1.75	2.30	1.77	1.16	2.38	2.30

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.42

MEAN BONE CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 1000 HERTZ  
IN THE LEFT EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1974

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	11.7	3,606	11.6	1,731	11.8	1,875
25-34 YEARS.....	6.7	700	6.8	326	6.6	374
35-44 YEARS.....	9.0	566	9.3	248	8.8	318
45-54 YEARS.....	12.0	884	11.6	435	12.5	449
55-64 YEARS.....	15.9	704	16.4	349	15.5	355
65-74 YEARS.....	20.6	752	19.6	373	21.4	379
WHITE						
25-74 YEARS...	11.5	3,023	11.5	1,454	11.5	1,569
25-34 YEARS.....	6.4	592	6.8	279	6.0	313
35-44 YEARS.....	8.6	471	8.9	215	8.3	256
45-54 YEARS.....	11.9	744	11.5	361	12.3	383
55-64 YEARS.....	15.6	592	16.3	292	14.9	300
65-74 YEARS.....	20.4	624	19.2	307	21.3	317
BLACK						
25-74 YEARS...	13.7	550	12.6	256	14.7	294
25-34 YEARS.....	8.8	102	5.8	42	11.2	60
35-44 YEARS.....	12.9	88	13.6	30	12.4	58
45-54 YEARS.....	12.7	134	11.7	71	13.6	63
55-64 YEARS.....	19.8	105	17.8	53	21.5	52
65-74 YEARS.....	23.3	121	23.7	60	23.1	61

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.43

STANDARD ERRORS AND DESIGN EFFECTS FOR BONE CONDUCTION HEARING LEVELS  
IN THE LEFT EAR AT 1000 HERTZ BY AGE, RACE, AND SEX: UNITED STATES 1971-1974

AGE AND RACE	BOTH SEXES		MALE		FEMALE	
	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT
ALL RACES 1/						
25-74 YEARS...	0.31	2.41	0.39	1.87	0.35	1.67
25-34 YEARS.....	.38	1.27	.64	1.57	.44	.98
35-44 YEARS.....	.54	1.90	.74	1.68	.80	2.22
45-54 YEARS.....	.48	1.59	.64	1.42	.70	1.74
55-64 YEARS.....	.74	2.47	1.04	2.12	.83	1.63
65-74 YEARS.....	.70	1.83	.94	1.57	.94	1.79
WHITE						
25-74 YEARS...	.33	2.29	.44	1.98	.39	1.69
25-34 YEARS.....	.43	1.37	.74	1.74	.46	.96
35-44 YEARS.....	.54	1.58	.71	1.41	.84	1.87
45-54 YEARS.....	.51	1.57	.68	1.36	.77	1.81
55-64 YEARS.....	.80	2.33	1.12	2.04	.89	1.66
65-74 YEARS.....	.73	1.70	.94	1.37	.98	1.63
BLACK						
25-74 YEARS...	.62	1.39	1.13	2.12	.98	1.95
25-34 YEARS.....	1.17	1.61	1.50	1.58	1.35	1.15
35-44 YEARS.....	1.14	1.41	2.60	1.89	1.46	2.02
45-54 YEARS.....	1.40	1.74	1.92	1.75	1.87	1.49
55-64 YEARS.....	2.10	2.41	2.04	1.34	3.39	2.84
65-74 YEARS.....	1.69	1.58	2.97	2.25	2.47	1.84

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

DEPT. OF HEALTH AND HUMAN SERVICES

Table 3.44

MEAN BONE CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 2000 HERTZ  
IN THE LEFT EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1974

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	11.7	3,600	13.5	1,721	10.1	1,879
25-34 YEARS.....	4.8	700	5.9	327	3.7	373
35-44 YEARS.....	8.2	567	9.9	249	6.7	318
45-54 YEARS.....	12.4	884	14.7	434	10.3	450
55-64 YEARS.....	16.7	700	19.3	344	14.3	356
65-74 YEARS.....	24.9	749	27.2	367	23.0	382
WHITE						
25-74 YEARS...	11.6	3,014	13.5	1,444	10.0	1,570
25-34 YEARS.....	4.6	592	5.9	280	3.3	312
35-44 YEARS.....	8.1	471	9.6	215	6.7	256
45-54 YEARS.....	12.2	744	14.6	360	10.0	384
55-64 YEARS.....	16.5	589	19.3	288	14.0	301
65-74 YEARS.....	24.8	618	27.1	301	23.1	317
BLACK						
25-74 YEARS...	12.6	553	13.7	256	11.6	297
25-34 YEARS.....	6.3	102	5.1	42	7.3	60
35-44 YEARS.....	9.0	89	12.1	31	6.6	58
45-54 YEARS.....	14.1	134	15.4	71	12.8	63
55-64 YEARS.....	19.3	104	20.3	52	18.3	52
65-74 YEARS.....	25.5	124	28.2	60	23.3	64

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK



Table 3.45

STANDARD ERRORS AND DESIGN EFFECTS FOR BONE CONDUCTION HEARING LEVELS  
IN THE LEFT EAR AT 2000 HERTZ BY AGE, RACE, AND SEX; UNITED STATES 1971-1974

AGE AND RACE	BOTH SEXES		MALE		FEMALE	
	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT
ALL RACES 1/						
25-74 YEARS...	0.33	1.97	0.50	1.83	0.38	1.60
25-34 YEARS.....	.47	1.74	.81	1.84	.43	1.00
35-44 YEARS.....	.53	1.23	.94	1.41	.63	1.32
45-54 YEARS.....	.59	1.55	.77	1.15	.94	2.45
55-64 YEARS.....	.79	2.13	1.13	1.90	.97	1.96
65-74 YEARS.....	.80	1.91	1.05	1.37	.99	1.81
WHITE						
25-74 YEARS...	.37	2.01	.55	1.81	.44	1.80
25-34 YEARS.....	.53	1.82	.90	1.91	.44	1.01
35-44 YEARS.....	.58	1.18	1.04	1.39	.71	1.24
45-54 YEARS.....	.66	1.62	.93	1.12	1.06	2.58
55-64 YEARS.....	.84	2.05	1.19	1.71	1.10	2.27
65-74 YEARS.....	.84	1.77	1.13	1.29	1.02	1.62
BLACK						
25-74 YEARS...	.50	1.02	1.26	2.01	.94	1.66
25-34 YEARS.....	1.21	1.74	1.90	1.66	1.38	1.43
35-44 YEARS.....	.93	1.26	1.76	1.34	.81	.96
45-54 YEARS.....	1.52	1.75	2.53	1.93	1.60	1.33
55-64 YEARS.....	2.18	2.06	2.11	1.25	3.88	2.74
65-74 YEARS.....	1.85	1.52	3.17	2.08	2.35	1.36

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.46

MEAN BONE CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 4000 HERTZ  
IN THE LEFT EAR BY AGE, RACE AND SEX; UNITED STATES, 1971-1974

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	21.8	3,540	27.1	1,683	17.2	1,855
25-34 YEARS.....	14.4	697	17.6	324	11.4	373
35-44 YEARS.....	17.0	560	22.4	245	13.6	315
45-54 YEARS.....	23.7	870	31.0	422	17.1	448
55-64 YEARS.....	26.0	692	33.6	338	20.9	354
65-74 YEARS.....	35.1	729	41.6	354	30.1	375
WHITE						
25-74 YEARS...	22.3	2,967	27.8	1,409	17.4	1,558
25-34 YEARS.....	14.6	589	17.9	277	11.5	312
35-44 YEARS.....	18.5	466	23.3	212	14.1	254
45-54 YEARS.....	24.0	730	31.7	348	17.0	362
55-64 YEARS.....	27.1	581	34.4	282	20.8	299
65-74 YEARS.....	35.4	601	42.0	290	30.4	311
BLACK						
25-74 YEARS...	18.1	549	20.8	254	15.8	295
25-34 YEARS.....	12.0	102	13.4	42	10.8	60
35-44 YEARS.....	12.3	88	15.0	31	10.1	57
45-54 YEARS.....	21.8	134	25.3	71	18.6	63
55-64 YEARS.....	24.9	104	26.3	52	23.7	52
65-74 YEARS.....	31.4	121	36.6	58	27.2	63

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.47

STANDARD ERRORS AND DESIGN EFFECTS FOR PHONE CONDUCTION HEARING LEVELS  
IN THE LEFT EAR AT 4000 HERTZ BY AGE, RACE, AND SEX: UNITED STATES 1971-1974

AGE AND RACE	BOTH SEXES		MALE		FEMALE	
	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT
ALL RACES 1/						
25-74 YEARS...	0.39	1.95	0.45	2.08	0.38	1.57
25-34 YEARS.....	.63	1.60	1.14	1.59	.59	1.74
35-44 YEARS.....	.80	1.52	1.34	1.39	.65	1.09
45-54 YEARS.....	.55	.98	.94	1.29	.79	1.85
55-64 YEARS.....	.99	2.61	1.23	1.86	.89	1.62
65-74 YEARS.....	.82	2.03	1.07	2.05	.95	1.57
WHITE						
25-74 YEARS...	.42	1.89	.60	1.89	.43	1.66
25-34 YEARS.....	.72	1.72	1.28	1.67	.66	1.84
35-44 YEARS.....	.80	1.45	1.47	1.36	.72	1.02
45-54 YEARS.....	.63	1.09	.98	1.21	.87	1.88
55-64 YEARS.....	1.11	2.70	1.31	1.75	1.01	1.84
65-74 YEARS.....	.86	1.86	1.00	1.78	1.00	1.45
BLACK						
25-74 YEARS...	.75	1.41	1.20	1.58	.96	1.67
25-34 YEARS.....	1.10	1.09	1.90	.98	1.37	1.45
35-44 YEARS.....	1.09	1.17	2.11	1.24	1.06	1.03
45-54 YEARS.....	1.93	1.99	3.48	2.47	1.87	1.57
55-64 YEARS.....	2.30	2.38	2.38	1.62	3.79	2.74
65-74 YEARS.....	2.26	2.42	3.03	3.12	2.41	1.82

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.48

MEAN BONE CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 500 HERTZ  
IN THE BETTER EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1974

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	11.3	3,468	11.0	1,641	11.7	1,827
25-34 YEARS.....	6.3	671	6.4	307	6.2	364
35-44 YEARS.....	9.3	538	9.4	233	9.2	305
45-54 YEARS.....	11.5	849	11.1	409	11.9	440
55-64 YEARS.....	15.5	675	15.2	330	15.7	345
65-74 YEARS.....	19.6	735	18.0	362	20.0	373
WHITE						
25-74 YEARS...	11.2	2,901	10.9	1,375	11.4	1,526
25-34 YEARS.....	5.9	567	6.1	261	5.7	306
35-44 YEARS.....	9.1	447	9.1	203	9.0	244
45-54 YEARS.....	11.4	714	10.9	339	11.8	375
55-64 YEARS.....	15.3	567	15.3	276	15.2	291
65-74 YEARS.....	19.4	606	17.7	296	20.6	310
BLACK						
25-74 YEARS...	13.1	535	11.8	246	14.2	289
25-34 YEARS.....	9.8	99	8.6	42	10.9	57
35-44 YEARS.....	10.6	84	10.9	27	10.4	57
45-54 YEARS.....	13.0	129	12.8	67	13.1	62
55-64 YEARS.....	17.6	101	12.9	50	21.5	51
65-74 YEARS.....	21.0	122	19.5	60	23.7	62

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.49

MEAN BONE CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 1000 HERTZ  
IN THE BETTER EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1974

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	8.2	3,570	8.0	1,715	8.4	1,855
25-34 YEARS.....	3.3	695	3.1	324	3.4	371
35-44 YEARS.....	6.1	562	6.9	247	5.3	315
45-54 YEARS.....	8.4	877	7.7	430	9.0	447
55-64 YEARS.....	12.0	697	12.2	346	11.8	351
65-74 YEARS.....	17.1	739	15.9	368	18.1	371
WHITE						
25-74 YEARS...	7.9	2,993	7.9	1,441	8.0	1,552
25-34 YEARS.....	2.9	508	3.0	277	2.9	311
35-44 YEARS.....	5.7	467	6.5	214	4.8	253
45-54 YEARS.....	8.1	739	7.5	357	8.7	382
55-64 YEARS.....	11.7	587	12.3	291	11.1	296
65-74 YEARS.....	16.8	612	15.4	302	17.9	310
BLACK						
25-74 YEARS...	10.8	544	9.4	253	12.0	291
25-34 YEARS.....	6.3	101	4.0	42	8.2	59
35-44 YEARS.....	9.5	88	10.3	30	9.0	58
45-54 YEARS.....	10.5	132	9.2	70	11.8	62
55-64 YEARS.....	15.7	103	11.1	51	19.5	52
65-74 YEARS.....	20.9	120	21.1	60	20.7	60

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.50

MEAN BONE CONDUCTION HEARING LEVELS (10 DECIBELS) 1/ AT 2000 HERTZ  
IN THE BETTER EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1974

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	7.3	3,566	8.7	1,705	6.1	1,861
25-34 YEARS.....	.4	697	.9	326	.0	371
35-44 YEARS.....	4.3	562	5.7	248	3.1	314
45-54 YEARS.....	7.5	875	9.3	428	5.8	447
55-64 YEARS.....	12.7	697	14.9	343	10.8	354
65-74 YEARS.....	20.1	735	22.4	360	18.2	375
WHITE						
25-74 YEARS...	7.2	2,986	8.6	1,430	5.9	1,556
25-34 YEARS.....	.1	590	.7	279	-.6	311
35-44 YEARS.....	4.2	466	5.6	214	3.0	252
45-54 YEARS.....	7.2	736	8.9	354	5.6	382
55-64 YEARS.....	12.6	587	14.8	288	10.5	299
65-74 YEARS.....	19.9	600	22.1	295	18.2	312
BLACK						
25-74 YEARS...	9.2	547	10.3	254	8.2	293
25-34 YEARS.....	3.5	101	2.2	42	4.6	59
35-44 YEARS.....	5.8	89	8.1	31	4.1	58
45-54 YEARS.....	10.4	133	12.3	71	8.7	62
55-64 YEARS.....	15.1	103	16.2	51	14.1	52
65-74 YEARS.....	22.2	121	25.1	59	19.6	62

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.51

MEAN BONE CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 4000 HERTZ  
IN THE BETTER EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1974

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	15.7	3,502	20.8	1,657	11.3	1,845
25-34 YEARS.....	7.1	692	9.7	322	4.7	370
35-44 YEARS.....	11.5	552	16.2	242	7.3	310
45-54 YEARS.....	17.5	856	24.5	410	11.3	446
55-64 YEARS.....	22.2	687	29.1	337	16.1	350
65-74 YEARS.....	30.2	715	36.5	346	25.3	369
WHITE						
25-74 YEARS...	16.1	2,934	21.4	1,390	11.4	1,544
25-34 YEARS.....	7.1	585	9.8	275	4.7	310
35-44 YEARS.....	12.1	450	17.0	210	7.6	250
45-54 YEARS.....	17.6	720	25.0	339	11.2	381
55-64 YEARS.....	22.5	570	29.9	282	16.0	296
65-74 YEARS.....	30.4	591	36.9	284	25.5	307
BLACK						
25-74 YEARS...	12.6	536	15.0	247	10.6	289
25-34 YEARS.....	5.9	101	7.1	42	4.9	59
35-44 YEARS.....	7.3	64	9.9	30	5.4	56
45-54 YEARS.....	15.9	130	20.0	68	12.3	62
55-64 YEARS.....	19.2	102	19.3	51	19.2	51
65-74 YEARS.....	27.8	117	32.2	56	24.2	61

1/ RE AUDIOMETRIC ZERO (ANST, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.52

MEAN BONE CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 500 HERTZ  
IN THE WORSE EAR BY AGE, RACE AND SEX; UNITED STATES, 1971-1974

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS....	18.0	3,460	17.7	1,641	18.3	1,827
25-34 YEARS.....	12.5	671	12.0	307	12.9	364
35-44 YEARS.....	15.5	538	15.6	233	15.4	305
45-54 YEARS.....	18.5	849	17.7	409	19.2	440
55-64 YEARS.....	22.7	675	23.1	330	22.4	345
65-74 YEARS.....	26.8	735	26.3	362	27.2	373
WHITE						
25-74 YEARS....	17.8	2,901	17.5	1,375	18.1	1,526
25-34 YEARS.....	12.1	567	11.6	261	12.5	306
35-44 YEARS.....	15.3	447	15.5	203	15.1	244
45-54 YEARS.....	18.3	714	17.3	339	19.1	375
55-64 YEARS.....	22.4	567	22.9	276	21.9	291
65-74 YEARS.....	26.7	606	26.2	296	27.0	310
BLACK						
25-74 YEARS....	19.9	535	19.3	246	20.4	289
25-34 YEARS.....	16.4	99	15.6	42	17.1	57
35-44 YEARS.....	16.9	84	15.8	27	17.7	57
45-54 YEARS.....	20.3	129	20.6	67	20.0	62
55-64 YEARS.....	25.2	101	24.4	50	25.8	51
65-74 YEARS.....	28.2	122	26.8	60	29.2	62

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK



Table 3.53

MEAN BONE CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 1000 HERTZ  
IN THE WORSE EAR BY AGE, RACE AND SEX; UNITED STATES, 1971-1974

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	14.6	3,570	14.6	1,715	14.6	1,855
25-34 YEARS.....	9.4	695	9.6	324	9.2	371
35-44 YEARS.....	12.0	562	12.6	247	11.5	315
45-54 YEARS.....	15.1	877	14.9	430	15.2	447
55-64 YEARS.....	18.8	697	19.2	346	18.5	351
65-74 YEARS.....	23.7	739	23.0	368	24.2	371
WHITE						
25-74 YEARS...	14.4	2,993	14.5	1,441	14.3	1,552
25-34 YEARS.....	9.1	583	9.4	277	8.8	311
35-44 YEARS.....	11.7	467	12.4	214	11.1	253
45-54 YEARS.....	14.9	739	14.8	357	15.0	382
55-64 YEARS.....	18.5	587	19.0	291	18.0	296
65-74 YEARS.....	23.4	612	22.5	302	24.1	310
BLACK						
25-74 YEARS...	16.5	544	16.0	253	17.0	291
25-34 YEARS.....	11.9	101	10.9	42	12.7	59
35-44 YEARS.....	14.5	88	14.8	30	14.4	58
45-54 YEARS.....	16.1	132	15.3	70	16.8	62
55-64 YEARS.....	22.5	103	21.0	51	23.8	52
65-74 YEARS.....	27.2	120	28.0	60	26.5	60

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.54

MEAN BONE CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 2000 HERTZ  
IN THE WORSE EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1974

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	14.2	3,566	15.9	1,705	12.6	1,861
25-34 YEARS.....	6.6	697	7.6	326	5.7	371
35-44 YEARS.....	11.0	562	13.1	248	9.1	314
45-54 YEARS.....	14.5	875	16.7	428	12.5	447
55-64 YEARS.....	19.9	697	22.4	343	17.6	354
65-74 YEARS.....	27.8	735	29.8	360	26.2	375
WHITE						
25-74 YEARS...	14.1	2,986	16.0	1,430	12.5	1,556
25-34 YEARS.....	6.4	590	7.7	279	5.2	311
35-44 YEARS.....	11.0	466	13.2	214	9.0	252
45-54 YEARS.....	14.4	736	16.6	354	12.4	382
55-64 YEARS.....	19.7	587	22.3	288	17.4	299
65-74 YEARS.....	27.7	607	29.6	295	26.2	312
BLACK						
25-74 YEARS...	14.8	547	15.6	254	14.1	293
25-34 YEARS.....	8.6	101	6.8	42	10.1	59
35-44 YEARS.....	11.3	89	12.7	31	10.2	58
45-54 YEARS.....	15.8	133	17.3	71	14.3	62
55-64 YEARS.....	21.8	103	23.5	51	20.3	52
65-74 YEARS.....	29.4	121	32.9	59	26.6	62

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.55

MEAN BONE CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 4000 HERTZ  
IN THE WORSE EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1974

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 2/						
25-74 YEARS...	24.7	3,502	30.4	1,657	19.8	1,845
25-34 YEARS.....	16.6	692	20.3	322	13.2	370
35-44 YEARS.....	21.1	552	27.0	242	15.8	310
45-54 YEARS.....	26.5	856	33.9	410	20.0	446
55-64 YEARS.....	30.7	687	37.6	337	24.7	350
65-74 YEARS.....	37.6	715	43.5	346	33.2	369
WHITE						
25-74 YEARS...	25.2	2,934	31.1	1,390	20.0	1,544
25-34 YEARS.....	16.8	505	20.8	275	13.2	310
35-44 YEARS.....	21.7	460	27.7	210	16.2	250
45-54 YEARS.....	26.8	720	34.7	339	19.8	381
55-64 YEARS.....	31.0	578	38.3	282	24.6	296
65-74 YEARS.....	38.0	591	44.0	284	33.4	307
BLACK						
25-74 YEARS...	20.7	536	23.4	247	18.5	289
25-34 YEARS.....	14.0	101	14.3	42	13.8	59
35-44 YEARS.....	16.3	86	21.3	30	12.5	56
45-54 YEARS.....	23.9	130	26.5	68	21.5	62
55-64 YEARS.....	27.8	102	30.4	51	25.5	51
65-74 YEARS.....	33.7	117	37.8	56	30.4	61

1/ RE AUDIOMETRIC ZERO (ANSI, 1949)

2/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.56

Significance Tests (Z Statistics) of Age, Sex and Race Differences in  
Bone Conduction Hearing Levels at 500, 1000, 2000  
and 4000 HZ in the Right and Left Ears:  
United States, 1971-1974

	Right Ear				Left Ear			
	500	1000	2000	4000	500	1000	2000	4000
<u>Age Differences</u>								
(25-34) vs. (35-44)	-3.75***	-3.71***	-5.10***	-3.35***	-4.66***	-4.64***	-6.45***	-5.11*
(35-44) vs. (45-54)	-4.12***	-4.52***	-6.57***	-6.16***	-2.87**	-3.32***	-3.72***	-4.89*
(45-54) vs. (55-64)	-3.96***	-4.19***	-3.97***	-2.74**	-4.42***	-3.74***	-7.35***	-5.53*
(55-64) vs. (65-74)	-5.14***	-5.08***	-9.55***	-7.67***	-4.98***	-6.90***	-7.16***	-6.48*
<u>Sex Differences: Males vs. Females</u>								
25-34	-1.13	.26	2.50*	4.82***	-.01	-.10	.73	5.47*
35-44	-.84	.47	2.73**	6.24***	1.43	1.53	2.16*	7.07*
45-54	-1.10	-.91	3.69***	11.20***	-1.03	-.71	3.67***	8.18*
55-64	.33	.79	3.39***	10.22***	-.40	-.02	2.91**	7.49*
65-74	-1.17	-1.41	3.14**	8.59***	-2.11*	-1.59	2.52*	6.01*
<u>Race Differences: White vs. Black</u>								
Males 25-34	-1.82	.56	.37	1.99*	-1.67	-1.98*	-.99	2.09*
35-44	-1.32	-1.86	-1.22	3.35***	-.21	-.74	.12	1.37
45-54	-1.45	-.07	-.30	1.81	-.61	-1.07	-.92	1.67
55-64	-.68	-.64	-.47	2.92**	.63	-.26	-1.09	3.21*
65-74	.11	-1.44	-.33	1.42	-.99	-1.66	-1.19	1.51
Females 25-34	-3.70***	-3.57***	-2.68**	.47	-3.06**	-2.61**	-4.45***	-1.09
35-44	-1.20	-2.83**	.10	3.20**	-1.05	-1.60	-1.12	1.98*
45-54	-.76	-.62	-1.38	-.76	-.40	-1.53	-1.41	-.68
55-64	-1.54	-1.82	-.99	-.70	-1.43	-1.92	-.48	-.28
65-74	-1.15	-.69	-.11	1.26	-.77	-1.44	-.35	-.70

\*Significant at the .05 level.

\*\*Significant at the .01 level.

\*\*\*Significant at the .001 level.

Table 3.57

PERCENT DISTRIBUTION OF SPEECH DISCRIMINATION SCORES (AT 20DB SENSATION LEVEL)  
 IN THE RIGHT, LEFT, BETTER AND WORSE EARS: UNITED STATES, 1974-1975

EAR	SPEECH DISCRIMINATION SCORE									
	0 TO 10	10 TO 19	20 TO 29	30 TO 39	40 TO 49	50 TO 59	60 TO 69	70 TO 79	80 TO 89	90 TO 100
RIGHT.....	5.4	1.2	1.2	1.3	1.5	3.1	2.9	3.9	9.0	70.5
LEFT.....	5.3	.9	1.0	2.2	1.6	3.0	3.2	4.1	9.0	69.6
BETTER.....	2.0	.5	.6	.9	1.0	2.1	1.9	3.0	6.7	81.4
WORSE.....	7.4	1.4	1.6	2.5	2.0	4.0	4.2	5.0	11.5	60.5

Table 3.58

JOINT PERCENT DISTRIBUTION OF SPEECH DISCRIMINATION SCORES AT 20DB  
SENSATION LEVEL IN THE RIGHT AND LEFT EARS: UNITED STATES, 1974-1975

LEFT EAR	RIGHT EAR									
	0 TO 9	10 TO 19	20 TO 29	30 TO 39	40 TO 49	50 TO 59	60 TO 69	70 TO 79	80 TO 89	90 TO 100
0 TO 9.....	1.8	0.4	0.2	0.2	0.1	0.2	0.1	0.4	0.1	0.9
10 TO 19.....	.1	.1	.0	.0	.0	.1	.2	.1	.1	.1
20 TO 29.....	.3	.1	.1	.1	-	.1	-	.1	.2	.1
30 TO 39.....	.2	.1	.0	.0	.1	.2	.4	.2	.1	.3
40 TO 49.....	.2	.1	.1	.1	.4	.1	.3	.0	.3	.8
50 TO 59.....	.4	.1	-	.1	.1	.1	.3	.3	.1	.7
60 TO 69.....	.3	.1	.1	.0	.0	.1	.3	.2	.5	1.4
70 TO 79.....	.1	-	.1	.1	.2	.2	.4	.4	.7	1.9
80 TO 89.....	.2	-	.1	.0	.1	.4	.2	.4	.7	3.3
90 TO 100.....	.9	.3	.2	.4	.5	.8	1.1	1.4	3.0	66.2

Table 3.59

MEAN SPEECH DISCRIMINATION SCORES (AT 20DB SENSATION LEVEL)  
IN THE RIGHT EAR BY AGE, RACE AND SEX; UNITED STATES, 1974-1975

RACE AND AGE	BOTH SEXED		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 1/						
25-74 YEARS...	85.4	2,795	84.2	1,219	86.5	1,576
25-34 YEARS.....	95.2	795	94.9	317	95.4	478
35-44 YEARS.....	92.4	576	92.1	246	92.8	330
45-54 YEARS.....	84.7	634	81.7	281	87.5	353
55-64 YEARS.....	77.7	484	74.1	225	80.8	259
65-74 YEARS.....	61.2	306	60.9	150	61.4	156
WHITE						
25-74 YEARS...	86.0	2,531	84.6	1,106	87.3	1,425
25-34 YEARS.....	96.1	717	95.7	285	96.4	432
35-44 YEARS.....	92.8	517	91.8	225	93.7	292
45-54 YEARS.....	84.9	574	82.2	255	87.5	319
55-64 YEARS.....	78.6	444	74.9	206	81.8	238
65-74 YEARS.....	62.4	279	60.4	135	63.9	144
BLACK						
25-74 YEARS...	81.2	234	80.9	101	81.5	133
25-34 YEARS.....	91.4	62	87.3	27	94.5	35
35-44 YEARS.....	90.2	51	93.5	18	88.3	33
45-54 YEARS.....	83.1	56	78.8	24	86.8	32
55-64 YEARS.....	70.2	38	69.8	17	70.6	21
65-74 YEARS.....	48.6	27	65.7	15	36.0	12

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.60

STANDARD ERRORS AND DESIGN EFFECTS FOR SPEECH DISCRIMINATION SCORES AT  
20DB SENSATION LEVEL IN THE RIGHT EAR BY AGE, RACE AND SEX; UNITED STATES, 1974-1975

AGE AND RACE	BOTH SEXES		MALE		FEMALE	
	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT
ALL RACES 1/						
25-74 YEARS...	0.28	0.29	0.39	0.25	0.38	0.31
25-34 YEARS.....	.22	.19	.34	.22	.26	.15
35-44 YEARS.....	.45	.38	.80	.60	.43	.18
45-54 YEARS.....	.64	.34	1.05	.37	.66	.23
55-64 YEARS.....	.70	.24	.92	.19	1.09	.33
65-74 YEARS.....	.90	.18	1.26	.19	1.26	.17
WHITE						
25-74 YEARS...	.29	.29	.41	.26	.38	.30
25-34 YEARS.....	.20	.20	.37	.28	.15	.07
35-44 YEARS.....	.40	.41	.87	.59	.39	.16
45-54 YEARS.....	.60	.36	1.12	.40	.69	.23
55-64 YEARS.....	.70	.22	.95	.18	1.08	.30
65-74 YEARS.....	.97	.19	1.34	.19	1.35	.19
BLACK						
25-74 YEARS...	1.07	.31	1.45	.26	1.53	.34
25-34 YEARS.....	.83	.12	1.63	.14	.63	.07
35-44 YEARS.....	1.15	.19	.97	.25	1.79	.20
45-54 YEARS.....	1.67	.19	2.46	.14	2.31	.30
55-64 YEARS.....	3.43	.43	3.96	.27	5.52	.58
65-74 YEARS.....	3.10	.19	3.30	.14	5.27	.27

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK



Table 3.61

MEAN SPEECH DISCRIMINATION SCORES (AT 20dB SENSATION LEVEL)  
IN THE LEFT EAR BY AGE, RACE AND SEX: UNITED STATES, 1974-1975

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 1/						
25-74 YEARS...	85.1	2,781	83.4	1,210	86.7	1,571
25-34 YEARS.....	95.0	790	94.2	315	95.7	475
35-44 YEARS.....	92.0	586	89.5	249	94.4	337
45-54 YEARS.....	85.0	630	82.0	275	87.7	355
55-64 YEARS.....	73.9	477	71.8	221	75.7	256
65-74 YEARS.....	64.5	298	62.9	150	65.8	148
WHITE						
25-74 YEARS...	85.6	2,515	84.0	1,093	87.1	1,422
25-34 YEARS.....	95.0	714	95.0	283	96.5	431
35-44 YEARS.....	92.3	524	89.6	226	95.0	298
45-54 YEARS.....	85.5	569	82.7	249	88.2	320
55-64 YEARS.....	74.2	439	72.2	202	75.9	237
65-74 YEARS.....	65.4	269	63.9	133	66.7	136
BLACK						
25-74 YEARS...	82.6	236	79.2	105	85.3	131
25-34 YEARS.....	94.5	60	90.4	27	97.8	33
35-44 YEARS.....	90.1	54	88.0	20	91.5	34
45-54 YEARS.....	81.1	57	76.9	24	84.5	33
55-64 YEARS.....	72.0	36	71.2	17	72.8	19
65-74 YEARS.....	55.6	29	53.1	17	57.7	12

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.62

STANDARD ERRORS AND DESIGN EFFECTS FOR SPEECH DISCRIMINATION SCORES AT  
 ODD SENSATION LEVEL IN THE LEFT EAR BY AGE, RACE AND SEX: UNITED STATES, 1974-1975

AGE AND RACE	BOTH SEXES		MALE		FEMALE	
	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT	STANDARD ERROR	DESIGN EFFECT
ALL RACES 1/						
25-74 YEARS...	0.20	0.32	0.45	0.33	0.34	0.27
25-34 YEARS.....	.33	.47	.50	.48	.33	.35
35-44 YEARS.....	.60	.63	.90	.50	.58	.62
45-54 YEARS.....	.59	.32	.94	.35	.72	.29
55-64 YEARS.....	.64	.19	.86	.16	.94	.22
65-74 YEARS.....	1.02	.24	1.41	.26	1.42	.21
WHITE						
25-74 YEARS...	.29	.29	.45	.31	.35	.26
25-34 YEARS.....	.26	.34	.47	.37	.21	.10
35-44 YEARS.....	.65	.69	1.07	.53	.48	.48
45-54 YEARS.....	.57	.28	.86	.28	.78	.31
55-64 YEARS.....	.62	.17	.91	.16	.87	.17
65-74 YEARS.....	1.08	.24	1.54	.27	1.40	.21
BLACK						
25-74 YEARS...	1.21	.47	1.46	.30	1.53	.42
25-34 YEARS.....	.58	.09	.96	.06	.34	.09
35-44 YEARS.....	2.01	.57	1.66	.12	3.50	1.31
45-54 YEARS.....	2.60	.51	4.75	.65	2.14	.23
55-64 YEARS.....	3.25	.41	2.00	.19	5.95	.57
65-74 YEARS.....	3.59	.33	1.65	.07	6.46	.34

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.63

MEAN SPEECH DISCRIMINATION SCORES (AT 2000 SENSATION LEVEL)  
IN THE BETTER EAR BY AGE, RACE AND SEX; UNITED STATES, 1974-1975

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 1/						
25-74 YEARS...	91.8	2,718	91.2	1,180	92.4	1,538
25-34 YEARS.....	98.3	707	98.5	315	98.1	472
35-44 YEARS.....	96.4	569	95.0	241	97.8	328
45-54 YEARS.....	92.1	620	90.5	272	93.5	348
55-64 YEARS.....	85.8	462	84.2	213	87.2	249
65-74 YEARS.....	74.6	200	75.2	139	74.2	141
WHITE						
25-74 YEARS...	92.2	2,458	91.6	1,067	92.8	1,391
25-34 YEARS.....	98.9	711	98.9	283	98.8	428
35-44 YEARS.....	96.4	510	94.9	220	98.2	290
45-54 YEARS.....	92.4	560	90.9	246	93.7	314
55-64 YEARS.....	86.3	424	85.1	194	87.3	230
65-74 YEARS.....	75.6	253	75.7	124	75.6	129
BLACK						
25-74 YEARS...	89.7	230	88.5	101	90.5	129
25-34 YEARS.....	97.3	60	96.5	27	98.0	33
35-44 YEARS.....	96.3	51	95.0	18	97.0	33
45-54 YEARS.....	90.2	56	88.8	24	91.4	32
55-64 YEARS.....	82.8	36	79.7	17	85.9	19
65-74 YEARS.....	64.8	27	70.2	15	60.8	12

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.64

MEAN SPEECH DISCRIMINATION SCORES (AT 20dB SENSATION LEVEL)  
IN THE WORSE EAR BY AGE, RACE AND SEX: UNITED STATES, 1974-1975

RACE AND AGE	BOTH SEXES		MALES		FEMALES	
	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE	MEAN	SAMPLE SIZE
ALL RACES 1/						
25-74 YEARS...	80.4	2,778	78.4	1,180	82.2	1,538
25-34 YEARS.....	92.3	787	91.2	315	93.3	472
35-44 YEARS.....	88.4	569	86.8	241	89.9	328
45-54 YEARS.....	78.5	620	74.7	272	82.2	348
55-64 YEARS.....	68.5	462	65.2	213	71.3	249
65-74 YEARS.....	55.5	280	52.9	139	57.6	141
WHITE						
25-74 YEARS...	81.2	2,458	79.1	1,067	83.1	1,391
25-34 YEARS.....	93.5	711	92.5	283	94.4	428
35-44 YEARS.....	89.1	510	86.8	220	91.2	290
45-54 YEARS.....	79.1	560	75.6	246	82.4	314
55-64 YEARS.....	69.4	424	66.0	194	72.1	230
65-74 YEARS.....	57.1	253	53.2	124	60.2	129
BLACK						
25-74 YEARS...	74.6	230	71.5	101	77.0	129
25-34 YEARS.....	88.3	60	81.2	27	94.1	33
35-44 YEARS.....	83.6	51	85.0	18	82.0	33
45-54 YEARS.....	74.1	56	66.9	24	80.3	32
55-64 YEARS.....	62.1	36	61.2	17	62.9	19
65-74 YEARS.....	39.9	27	49.4	15	32.9	12

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.65

Significance Tests (Z Statistics) of Age, Sex and Race Differences  
in Speech Discrimination Scores at 20 db SL in the  
Right and Left Ears: United States, 1974-1975

	<u>Right</u>	<u>Left</u>
<u>Age Differences</u>		
(25-34) vs. (35-44)	3.23**	2.87**
(35-44) vs. (45-54)	7.65***	5.78***
(45-54) vs. (55-64)	4.02***	5.27***
(55-64) vs. (65-74)	6.68***	3.91***
<u>Sex Differences: Males vs. Females</u>		
25-34	- .20	-1.32
35-44	- .25	-3.38***
45-54	-2.55*	-2.86**
55-64	-1.83	-1.04
65-74	- .24	- .31
<u>Race Differences: White vs. Black</u>		
Males 25-34	2.20*	.87
35-44	- .76	.23
45-54	.49	.90
55-64	.63	.15
65-74	- .16	1.37
Females 25-34	.67	-1.11
35-44	.93	.89
45-54	.02	.68
55-64	1.18	.29
65-74	2.10*	.58

\*Significant at the .05 level.

\*\*Significant at the .01 level.

\*\*\*Significant at the .001 level.

DEPT. OF HEALTH AND HUMAN SERVICES

Table 3.66

PREVALENCE OF POOR HEARING IN BOTH EARS, THE RIGHT EAR AND  
THE LEFT EAR BY AGE, RACE AND SEX: UNITED STATES: 1971-1975

AGE AND RACE	BOTH SEXES			MALES			FEMALES		
	PREV. POOR HEARING BOTH EARS	PREV. POOR HEARING IN RIGHT EAR	PREV. POOR HEARING IN LEFT EAR	PREV. POOR HEARING BOTH EARS	PREV. POOR HEARING IN RIGHT EAR	PREV. POOR HEARING IN LEFT EAR	PREV. POOR HEARING BOTH EARS	PREV. POOR HEARING IN RIGHT EAR	PREV. POOR HEARING IN LEFT EAR
ALL RACES 1/									
25-74 YEARS...	13.9	10.5	10.9	17.3	13.5	13.6	10.9	7.7	8.4
25-34 YEARS.....	4.7	4.5	4.5	8.3	5.7	5.9	5.1	3.3	3.2
35-44 YEARS.....	10.9	6.5	8.6	13.3	8.4	10.8	8.6	4.8	6.6
45-54 YEARS.....	15.0	11.8	12.1	20.1	16.2	16.2	10.3	7.9	8.3
55-64 YEARS.....	18.4	15.2	13.8	24.1	21.1	18.4	13.2	9.8	9.5
65-74 YEARS.....	26.1	20.7	22.1	29.6	24.9	24.5	23.3	17.5	20.3
WHITE									
25-74 YEARS...	14.4	10.9	11.3	17.8	13.9	14.1	11.3	8.1	8.8
25-34 YEARS.....	6.7	4.5	4.5	8.2	5.4	5.8	5.3	3.6	3.3
35-44 YEARS.....	11.3	6.9	8.9	13.6	8.3	11.2	9.2	5.5	6.7
45-54 YEARS.....	15.5	12.3	12.6	20.9	16.9	16.8	10.4	8.1	8.6
55-64 YEARS.....	19.0	15.8	14.4	25.0	22.0	19.1	13.5	10.1	10.0
65-74 YEARS.....	26.8	21.1	22.9	30.5	25.7	25.6	24.0	17.6	20.9
BLACK									
25-74 YEARS...	10.0	7.2	7.1	12.6	10.2	8.8	8.0	4.8	5.7
25-34 YEARS.....	6.5	4.7	4.6	10.9	9.5	7.2	3.2	1.1	2.6
35-44 YEARS.....	6.1	2.6	4.3	7.2	6.2	2.8	5.3	.0	5.3
45-54 YEARS.....	11.0	7.7	8.0	12.1	8.9	10.4	10.1	6.7	5.9
55-64 YEARS.....	13.5	10.2	8.8	16.4	12.8	12.6	11.2	8.0	5.6
65-74 YEARS.....	20.2	17.8	15.3	23.4	19.4	15.9	17.7	16.6	14.8

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.67

PREVALENCE OF DEAFNESS OR TROUBLE HEARING IN ONE OR BOTH EARS  
BY AGE, RACE AND SEX: UNITED STATES, 1971-1975

AGE AND RACE	BOTH SEXES	MALES	FEMALES
	PREVALENCE OF DEAFNESS OR TROUBLE HEARING IN ONE OR BOTH EARS		
ALL RACES 1/			
25-74 YEARS...	16.1	19.1	13.4
25-34 YEARS.....	9.5	11.2	7.9
35-44 YEARS.....	13.3	15.1	11.6
45-54 YEARS.....	17.2	21.6	13.1
55-64 YEARS.....	20.2	25.4	15.5
65-74 YEARS.....	27.2	30.7	24.5
WHITE			
25-74 YEARS...	16.6	19.6	13.9
25-34 YEARS.....	9.5	10.5	8.5
35-44 YEARS.....	13.6	15.5	11.8
45-54 YEARS.....	17.8	22.5	13.4
55-64 YEARS.....	20.9	26.4	15.9
65-74 YEARS.....	27.9	31.7	25.0
BLACK			
25-74 YEARS...	12.5	15.7	10.1
25-34 YEARS.....	10.8	20.2	3.8
35-44 YEARS.....	9.7	8.6	10.5
45-54 YEARS.....	11.6	12.5	10.8
55-64 YEARS.....	14.8	16.9	13.0
65-74 YEARS.....	21.7	23.7	20.2

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.68

PREVALENCE OF SELECTED CAUSES OF HEARING LOSS BY  
AGE, RACE AND SEX: UNITED STATES, 1971-1975

AGE AND RACE	BOTH SEXES			MALES			FEMALES		
	CAUSE OF HEARING PROBLEM								
	Ear Infection	Born With It	Loud Noise	Ear Infection	Born With It	Loud Noise	Ear Infection	Born With It	Loud Noise
ALL RACES 1/									
25-74 YEARS...	27.8	5.4	32.0	21.7	4.8	48.5	36.2	6.3	9.4
25-34 YEARS.....	30.7	8.2	38.9	29.5	7.3	58.2	32.6	9.4	9.6
35-44 YEARS.....	41.0	6.1	25.7	29.1	6.5	39.3	56.2	5.6	8.2
45-54 YEARS.....	26.9	6.3	34.5	24.6	3.1	40.4	30.3	11.0	13.8
55-64 YEARS.....	23.6	3.9	36.9	13.0	4.4	51.5	40.5	3.0	13.3
65-74 YEARS.....	18.6	2.9	22.0	13.5	3.2	43.6	23.7	2.6	1.9
WHITE									
25-74 YEARS...	27.3	5.7	30.7	21.7	5.0	46.1	35.0	6.6	9.4
25-34 YEARS.....	29.2	9.4	32.3	27.0	8.9	49.7	32.2	10.1	8.9
35-44 YEARS.....	41.2	6.4	24.9	31.3	7.0	37.0	54.0	5.6	9.0
45-54 YEARS.....	25.3	6.6	35.3	24.3	3.3	48.7	26.8	11.8	14.3
55-64 YEARS.....	24.1	4.1	36.7	13.6	4.6	50.9	41.8	3.3	12.6
65-74 YEARS.....	19.0	2.6	21.1	14.4	2.4	40.7	23.5	2.7	2.0
BLACK									
25-74 YEARS...	32.7	2.4	49.9	20.2	2.3	81.2	48.5	2.4	9.9
25-34 YEARS.....	40.3	.0	81.4	41.0	.0	98.1	37.7	.0	18.7
35-44 YEARS.....	39.6	3.1	39.2	.0	.0	81.3	76.4	6.0	.0
45-54 YEARS.....	46.5	2.7	23.4	19.2	.0	48.9	61.1	4.1	9.7
55-64 YEARS.....	14.2	.0	40.4	.0	.0	64.7	25.7	.0	20.6
65-74 YEARS.....	13.1	7.9	46.4	3.6	13.0	76.8	27.6	.0	.0

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK



PREVALENCE OF SELECTED CAUSES OF HEARING LOSS BY  
AGE, RACE AND SEX - UNITED STATES, 1971-1975  
(CONTINUED)

AGE AND RACE	BOTH SEXES			MALES			FEMALES		
	CAUSE OF HEARING PROBLEM								
	Ear Surgery	Ear Injury	Other	Ear Surgery	Ear Injury	Other	Ear Surgery	Ear Injury	Other
<b>ALL RACES 1/</b>									
25-74 YEARS...	2.9	6.5	32.6	2.6	6.6	25.8	3.5	6.3	41.9
25-34 YEARS.....	3.8	8.6	23.1	4.8	6.4	15.7	2.3	12.1	34.7
35-44 YEARS.....	1.1	8.7	25.3	.0	10.8	21.4	2.4	6.1	30.1
45-54 YEARS.....	3.3	5.4	32.2	2.5	6.8	25.3	4.6	3.3	42.6
55-64 YEARS.....	2.2	4.9	31.9	2.1	6.1	27.5	2.4	2.0	39.3
65-74 YEARS.....	4.4	5.8	49.8	3.7	2.9	40.1	5.1	8.8	59.6
<b>WHITE</b>									
25-74 YEARS...	2.8	6.7	33.6	2.5	6.7	26.9	3.4	6.7	42.9
25-34 YEARS.....	4.4	8.5	25.7	5.8	6.1	18.9	2.4	11.8	35.2
35-44 YEARS.....	1.2	8.8	26.1	.0	10.4	21.8	2.6	6.7	31.4
45-54 YEARS.....	2.8	5.7	33.0	2.6	7.1	25.3	3.3	3.6	45.2
55-64 YEARS.....	1.6	5.2	31.1	1.0	6.4	26.9	2.6	3.0	38.4
65-74 YEARS.....	4.7	6.1	51.8	4.0	2.9	43.2	5.4	9.3	60.2
<b>BLACK</b>									
25-74 YEARS...	4.4	3.1	20.7	3.9	3.7	13.2	4.9	2.3	30.5
25-34 YEARS.....	.0	9.5	5.9	.0	7.9	.0	.0	15.5	28.1
35-44 YEARS.....	.0	.0	18.1	.0	.0	18.7	.0	.0	17.6
45-54 YEARS.....	10.9	.0	23.0	.0	.0	31.8	17.4	.0	17.8
55-64 YEARS.....	13.2	.0	46.1	29.5	.0	41.7	.0	.0	49.6
65-74 YEARS.....	.0	1.5	21.6	.0	2.5	4.8	.0	.0	47.2

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.69

PREVALENCE OF RUNNING AND RINGING IN THE EAR BY  
AGE, RACE AND SEX: UNITED STATES, 1971-1975

AGE AND RACE	BOTH SEXES			MALES			FEMALES		
	RUNNING IN THE EAR	RINGING OR OTHER NOISES	RINGING EVERY FEW DAYS	RUNNING IN THE EAR	RINGING OR OTHER NOISES	RINGING EVERY FEW DAYS	RUNNING IN THE EAR	RINGING OR OTHER NOISES	RINGING EVERY FEW DAYS
ALL RACES 1/									
25-74 YEARS...	18.5	26.1	32.8	19.4	24.9	33.1	17.8	27.2	28.4
25-34 YEARS.....	18.4	22.6	32.5	19.2	22.3	25.4	16.8	22.9	14.2
35-44 YEARS.....	19.1	19.3	28.1	16.8	17.4	32.2	20.9	21.1	25.1
45-54 YEARS.....	20.1	27.9	34.2	26.8	27.3	39.5	14.2	28.4	29.5
55-64 YEARS.....	18.7	30.8	38.4	17.7	29.8	46.8	19.6	31.7	31.3
65-74 YEARS.....	15.6	21.4	46.0	10.9	32.8	49.5	10.8	37.0	43.7
WHITE									
25-74 YEARS...	19.1	25.8	33.6	19.9	24.8	39.1	18.3	26.6	29.0
25-34 YEARS.....	18.7	22.1	18.4	19.3	22.1	26.0	18.1	22.0	11.2
35-44 YEARS.....	18.9	19.0	29.2	16.7	17.3	33.7	20.6	20.7	25.5
45-54 YEARS.....	20.8	27.4	36.0	28.4	27.5	40.9	13.8	27.3	31.5
55-64 YEARS.....	19.7	30.5	39.4	18.4	29.6	47.1	20.9	31.4	32.9
65-74 YEARS.....	16.4	34.9	46.8	12.0	32.5	50.8	19.3	36.6	44.1
BLACK									
25-74 YEARS...	15.0	30.0	26.0	15.9	27.4	29.7	14.4	32.0	23.4
25-34 YEARS.....	16.1	28.4	27.4	26.4	27.8	21.1	8.6	28.9	31.9
35-44 YEARS.....	23.4	21.1	19.4	22.1	16.7	25.4	24.1	24.4	16.4
45-54 YEARS.....	15.5	32.6	20.6	12.0	27.5	26.4	17.8	37.0	16.9
55-64 YEARS.....	10.0	36.3	29.5	11.8	35.2	44.7	8.6	37.3	17.3
65-74 YEARS.....	9.2	27.7	35.3	1.4	36.0	34.2	14.4	39.1	36.0

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.70

PREVALENCE OF PERSONS WHO CANNOT UNDERSTAND A WHISPER ACROSS  
A QUIET ROOM BY AGE, RACE, AND SEX: UNITED STATES, 1974-1975

AGE AND RACE	BOTH SEXES	MALES	FEMALES
	PREVALENCE OF PERSONS WHO CANNOT UNDERSTAND A WHISPER ACROSS A QUIET ROOM		
ALL RACES 1/			
25-74 YEARS...	21.2	20.5	21.7
25-34 YEARS.....	14.0	13.9	14.2
35-44 YEARS.....	14.5	13.8	15.1
45-54 YEARS.....	21.6	21.4	21.9
55-64 YEARS.....	25.9	27.0	24.9
65-74 YEARS.....	40.2	37.5	42.2
WHITE			
25-74 YEARS...	21.4	21.3	21.5
25-34 YEARS.....	13.5	14.5	12.5
35-44 YEARS.....	14.9	13.8	15.9
45-54 YEARS.....	21.9	22.2	21.6
55-64 YEARS.....	25.8	28.1	23.7
65-74 YEARS.....	41.6	38.6	43.8
BLACK			
25-74 YEARS...	20.3	15.8	23.8
25-34 YEARS.....	19.5	12.8	24.5
35-44 YEARS.....	11.5	11.6	11.5
45-54 YEARS.....	20.7	14.6	25.7
55-64 YEARS.....	27.8	18.6	35.5
65-74 YEARS.....	26.6	27.2	26.2

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.71

NUMBER OF PERSONS (IN THOUSANDS) WITH POOR HEARING IN BOTH EARS,  
THE RIGHT EAR AND LEFT EAR BY AGE, RACE AND SEX<sup>1/</sup>  
UNITED STATES, 1971-1975

AGE AND RACE	BOTH SEXES			MALES			FEMALES		
	POP. POOR HEARING BOTH EARS	POP. POOR HEARING IN RIGHT EAR	POP. POOR HEARING IN LEFT EAR	POP. POOR HEARING BOTH EARS	POP. POOR HEARING IN RIGHT EAR	POP. POOR HEARING IN LEFT EAR	POP. POOR HEARING BOTH EARS	POP. POOR HEARING IN RIGHT EAR	POP. POOR HEARING IN LEFT EAR
ALL RACES 1/									
25-74 YEARS...	14,797	11,134	11,587	8,716	6,036	6,866	6,081	4,298	4,721
25-34 YEARS.....	1,070	1,250	1,269	1,138	773	798	740	486	471
35-44 YEARS.....	2,420	1,447	1,911	1,423	895	1,155	997	552	756
45-54 YEARS.....	3,533	2,780	2,849	2,269	1,823	1,834	1,264	965	1,016
55-64 YEARS.....	3,547	2,926	2,657	2,207	1,933	1,689	1,340	993	968
65-74 YEARS.....	3,419	2,715	2,901	1,679	1,412	1,390	1,740	1,303	1,511
WHITE									
25-74 YEARS...	13,634	10,293	10,737	8,047	6,292	6,376	5,587	4,000	4,361
25-34 YEARS.....	1,668	1,104	1,119	996	648	704	672	456	415
35-44 YEARS.....	2,207	1,339	1,742	1,291	787	1,067	916	552	675
45-54 YEARS.....	3,257	2,590	2,645	2,120	1,710	1,704	1,137	880	942
55-64 YEARS.....	3,310	2,753	2,508	2,079	1,833	1,590	1,239	920	917
65-74 YEARS.....	3,184	2,507	2,723	1,561	1,314	1,310	1,623	1,192	1,413
BLACK									
25-74 YEARS...	1,068	767	755	592	481	413	476	286	342
25-34 YEARS.....	198	143	139	142	124	94	56	19	45
35-44 YEARS.....	148	63	103	74	63	29	74	0	74
45-54 YEARS.....	260	182	180	133	97	114	127	85	74
55-64 YEARS.....	227	171	147	126	98	97	101	73	51
65-74 YEARS.....	235	208	178	118	98	80	117	110	98

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.72

NUMBER OF PERSONS (IN THOUSANDS) WITH DEAFNESS OR TROUBLE HEARING  
IN ONE OR BOTH EARS BY AGE, RACE AND SEX: UNITED STATES, 1971-1975

AGE AND RACE	BOTH SEXES	MALES	FEMALES
	NUMBER OF PERSONS WITH DEAFNESS OR TROUBLE HEARING IN ONE OR BOTH EARS		
ALL RACES 1/			
25-74 YEARS...	17,163	9,669	7,494
25-34 YEARS.....	2,681	1,532	1,149
35-44 YEARS.....	2,962	1,629	1,333
45-54 YEARS.....	4,041	2,437	1,604
55-64 YEARS.....	3,908	2,329	1,579
65-74 YEARS.....	3,571	1,742	1,829
WHITE			
25-74 YEARS...	15,732	8,056	6,076
25-34 YEARS.....	2,342	1,270	1,072
35-44 YEARS.....	2,663	1,403	1,180
45-54 YEARS.....	3,752	2,284	1,468
55-64 YEARS.....	3,650	2,197	1,461
65-74 YEARS.....	3,317	1,622	1,695
BLACK			
25-74 YEARS...	1,336	736	599
25-34 YEARS.....	320	263	65
35-44 YEARS.....	234	88	146
45-54 YEARS.....	273	136	136
55-64 YEARS.....	247	130	117
65-74 YEARS.....	254	120	134

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

Table 3.73

NUMBER OF PERSONS (IN THOUSANDS) WITH SELECTED CAUSES OF HEARING LOSS BY AGE, RACE AND SEX: UNITED STATES, 1971-1975

AGE AND RACE	BOTH SEXES			MALES			FEMALES		
	CAUSE OF HEARING PROBLEM								
	Ear Infection	Born With It	Loud Noise	Ear Infection	Born With It	Loud Noise	Ear Infection	Born With It	Loud Noise
<b>ALL RACES 1/</b>									
25-74 YEARS...	3,502	681	4,039	1,582	347	3,539	1,919	334	499
25-34 YEARS.....	645	171	817	373	93	737	272	79	80
35-44 YEARS.....	926	137	500	368	82	498	558	55	81
45-54 YEARS.....	832	195	1,066	455	58	894	377	137	172
55-64 YEARS.....	671	110	1,049	229	77	905	441	33	144
65-74 YEARS.....	428	67	526	157	37	504	272	30	21
<b>WHITE</b>									
25-74 YEARS...	3,172	658	3,564	1,461	335	3,105	1,710	324	458
25-34 YEARS.....	531	171	508	282	93	519	249	79	69
35-44 YEARS.....	855	132	517	368	82	435	487	50	81
45-54 YEARS.....	728	190	1,019	428	58	859	300	132	160
55-64 YEARS.....	648	110	986	229	77	859	419	33	126
65-74 YEARS.....	408	55	454	153	25	433	255	30	21
<b>BLACK</b>									
25-74 YEARS...	310	22	473	108	12	432	202	10	41
25-34 YEARS.....	113	0	229	91	0	218	22	0	11
35-44 YEARS.....	64	5	63	0	0	63	64	5	0
45-54 YEARS.....	90	5	45	13	0	33	77	5	12
55-64 YEARS.....	22	0	64	0	0	46	22	0	18
65-74 YEARS.....	20	12	71	3	12	71	17	0	0

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

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Table 3.74

NUMBER OF PERSONS (IN THOUSANDS) WITH RINGING OR RUMBLING IN THE EAR BY AGE, RACE AND SEX: UNITED STATES, 1971-1975

AGE AND RACE	BOTH SEXES			MALES			FEMALES		
	RUNNING IN THE EAR	RINGING OR OTHER NOISES	RINGING EVERY FEW DAYS	RUNNING IN THE EAR	RINGING OR OTHER NOISES	RINGING EVERY FEW DAYS	RUNNING IN THE EAR	RINGING OR OTHER NOISES	RINGING EVERY FEW DAYS
ALL RACES 1/									
25-74 YEARS...	11,917	27,535	9,026	5,174	12,407	4,728	6,404	15,128	4,298
25-34 YEARS.....	2,676	6,259	1,222	1,319	2,960	755	1,240	3,291	467
35-44 YEARS.....	2,578	4,283	1,205	950	1,856	597	1,490	2,427	608
45-54 YEARS.....	2,680	6,529	2,230	1,374	3,054	1,206	1,246	3,475	1,024
55-64 YEARS.....	2,651	5,073	2,255	1,071	2,694	1,262	1,546	3,178	993
65-74 YEARS.....	1,332	4,591	2,113	462	1,835	909	866	2,756	1,205
WHITE									
25-74 YEARS...	11,153	24,171	8,131	5,512	11,069	4,333	5,977	13,102	3,798
25-34 YEARS.....	2,502	5,353	985	1,427	2,606	678	1,183	2,747	307
35-44 YEARS.....	2,292	3,701	1,079	1,080	1,640	553	1,342	2,061	526
45-54 YEARS.....	2,494	5,722	2,059	1,434	2,751	1,124	1,120	2,972	935
55-64 YEARS.....	2,508	5,264	2,076	1,105	2,424	1,141	1,517	2,841	935
65-74 YEARS.....	1,277	4,130	1,932	466	1,649	837	815	2,481	1,095
BLACK									
25-74 YEARS...	656	3,103	826	363	1,278	380	493	1,905	446
25-34 YEARS.....	159	864	237	108	361	76	51	503	160
35-44 YEARS.....	216	510	99	81	171	44	136	339	56
45-54 YEARS.....	152	768	158	36	301	80	126	467	79
55-64 YEARS.....	64	608	179	35	270	121	29	338	59
65-74 YEARS.....	55	432	152	4	174	59	51	259	93

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK



Table 3.75

NUMBER OF PERSONS (IN THOUSANDS) WHO CANNOT UNDERSTAND A WHISPER ACROSS A QUIET ROOM BY AGE, RACE AND SEX: UNITED STATES, 1974-1975

AGE AND RACE	NUMBER OF PERSONS WHO CANNOT UNDERSTAND A WHISPER ACROSS A QUIET ROOM		
	BOTH SEXES	MALES	FEMALES
ALL RACES 1/			
25-74 YEARS...	22,914	10,556	12,358
25-34 YEARS.....	4,138	1,978	2,160
35-44 YEARS.....	3,245	1,499	1,747
45-54 YEARS.....	5,074	2,385	2,689
55-64 YEARS.....	5,047	2,501	2,546
65-74 YEARS.....	5,409	2,193	3,216
WHITE			
25-74 YEARS...	20,599	9,778	10,821
25-34 YEARS.....	3,484	1,829	1,654
35-44 YEARS.....	2,919	1,333	1,586
45-54 YEARS.....	4,592	2,233	2,360
55-64 YEARS.....	4,531	2,342	2,189
65-74 YEARS.....	5,073	2,041	3,032
BLACK			
25-74 YEARS...	2,150	727	1,423
25-34 YEARS.....	540	149	391
35-44 YEARS.....	275	114	161
45-54 YEARS.....	482	152	330
55-64 YEARS.....	516	159	357
65-74 YEARS.....	337	153	184

1/ INCLUDES RACIAL GROUPS IN ADDITION TO WHITE AND BLACK

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Table 3.76

Significance Tests (Z Statistics) of Age, Sex and Race  
Differences in Self-Assessment of Hearing

	Overall Rating Both Ears	Right Ear	Left Ear
<u>Age Differences</u>			
(25-34) vs. (35-44)	-3.42***	-2.04*	-3.56***
(35-44) vs. (45-54)	-2.75**	-3.85***	-2.40*
(45-54) vs. (55-64)	-2.01*	-2.13*	-1.06
(55-64) vs. (65-74)	-3.96***	-2.88**	-4.77***
<u>Sex Differences: Males vs. Females</u>			
25-34	1.99*	1.76	1.97*
35-44	2.22*	2.06*	2.24*
45-54	4.55***	4.27***	3.69***
55-64	4.54***	5.26***	3.63***
65-74	2.31*	2.84**	1.62
<u>Race Differences: White vs. Black</u>			
Males 25-34	-.51	-.87	-.34
35-44	1.47	.49	3.49***
45-54	2.27*	2.32*	1.63
55-64	1.36	1.70	1.22
65-74	1.15	.96	2.05*
Females 25-34	1.10	2.41*	.46
35-44	.94	4.75***	.35
45-54	.10	.43	1.20
55-64	.46	.41	1.36
65-74	1.14	.19	1.12

\*Significant at the .05 level.

\*\*Significant at the .01 level.

\*\*\*Significant at the .001 level.

Table 3.77

Significance Tests (Z Statistics) of Age, Sex and Race  
Differences in Causes of Self-Reported Hearing Loss:  
United States, 1971-1975

		Ever Have Deafness or Trouble Hearing	Infec- tion	Born With It	Loud Noise	Surgery	Injury	Other
<u>Age Differences</u>								
(25-34) vs. (35-44)		-2.78**	-1.18	.71	1.88	.98	.02	-.31
(35-44) vs. (45-54)		-2.38*	2.33*	-.22	-2.01*	-.58	.86	-1.18
(45-54) vs. (55-64)		-1.63	.54	.81	.43	-.03	.16	.09
(55-64) vs. (65-74)		-3.19**	.78	.66	1.68	-.84	-.29	-3.27**
<u>Sex Differences: Males vs. Females</u>								
25-34		1.67	-.15	-.49	5.09***	.70	-.81	-1.94
35-44		1.66	-2.36*	.25	4.28***	-1.01	.77	-.84
45-54		3.93***	-.79	-1.80	4.09***	.02	.94	-2.16*
55-64		3.69***	-2.59**	.65	2.42*	.12	1.00	-1.32
65-74		2.31*	-1.83	.24	3.43***	-.40	-1.41	-2.67**
<u>Race Differences: White vs. Black</u>								
Males	25-34	-1.20	-.46	2.05*	-6.53***	1.35	-.22	2.89**
	35-44	1.45	4.15***	1.89	-2.98**	---	2.14*	.16
	45-54	2.60**	.26	1.44	1.06	1.41	2.02*	-.26
	55-64	1.50	3.86***	2.01*	-.59	-1.23	2.31*	-.64
	65-74	1.30	2.00*	-.87	-3.10**	1.33	.09	5.65**
Females	25-34	2.27*	-.32	2.16*	-.83	.99	-.27	.31
	35-44	.22	-1.07	-.11	1.11	1.01	1.48	.78
	45-54	.75	-2.10*	1.28	.52	-1.04	1.67	1.97*
	55-64	.55	.63	1.62	-.63	1.29	1.37	-.38
	65-74	.88	-.14	1.02	1.31	1.65	2.41*	.43

\*Significant at the .05 level.

\*\*Significant at the .01 level.

\*\*\*Significant at the .001 level.

Table 3.78

Significance Tests (Z Statistics) of Age, Sex and Race  
Differences in Prevalence of Ear Problems  
United States, 1971-1975

	Ringling (Ever)	Ringling (Often)	Running
<u>Age Differences</u>			
(25-34) vs. (35-44)	1.85	-1.85	-1.31
(35-44) vs. (45-54)	-4.70***	-1.27	.09
(45-54) vs. (55-64)	-1.45	-1.12	-1.44
(55-64) vs. (65-74)	-1.80	-1.69	2.05*
<u>Sex Differences: Males vs. Females</u>			
25-34	-.25	2.36*	1.03
35-44	-1.44	1.09	-1.18
45-54	-.40	1.61	1.30
55-64	-.64	2.69**	-1.19
65-74	-1.27	.93	-1.70
<u>Race Differences: White vs. Black</u>			
Males 25-34	-.68	.35	.35
35-44	.08	.44	.49
45-54	-.01	1.21	3.66***
55-64	-.76	.20	2.12*
65-74	-.43	1.11	5.21***
Females 25-34	-1.18	-2.05*	3.62***
35-44	-.69	1.11	.88
45-54	-1.62	1.80	.08
55-64	-.82	1.82	4.30***
65-74	-.38	.71	.97

\*Significant at the .05 level.

\*\*Significant at the .01 level.

\*\*\*Significant at the .001 level.

Table 3.79

Prevalence of Hearing Impairment (Under 7 Alternative Definitions)  
in the Right Ear by Age and Sex: United States, 1971-1975

AGE AND SEX	AVERAGE .5,1,2 KHZ			AVERAGE .5,1,2,4 KHZ		AVERAGE 1,2,4 KHZ	
	>15	>20	>25	>20	>25	>25	>30
	<b>BOTH SEXES</b>						
25-74 YEARS...	20.2	17.7	11.0	25.8	17.2	20.8	14.5
25-34 YEARS.....	7.9	4.0	1.9	5.4	2.2	3.9	1.7
35-44 YEARS.....	15.1	7.9	4.5	12.6	7.5	9.4	5.9
45-54 YEARS.....	26.9	15.6	9.8	26.3	16.2	20.7	13.9
55-64 YEARS.....	50.1	31.4	18.2	44.9	31.3	36.8	25.2
65-74 YEARS.....	65.4	40.0	33.5	63.7	47.8	53.8	42.0
<b>MALE</b>							
25-74 YEARS...	29.9	18.6	12.0	33.5	22.0	28.5	19.8
25-34 YEARS.....	6.7	3.5	2.0	7.7	2.5	5.9	1.8
35-44 YEARS.....	18.5	11.0	5.5	20.4	11.7	15.7	10.0
45-54 YEARS.....	30.3	17.6	11.5	38.8	23.5	32.3	21.8
55-64 YEARS.....	56.0	34.3	21.6	57.1	40.5	49.7	34.9
65-74 YEARS.....	65.3	46.3	34.0	72.1	56.4	65.9	53.7
<b>FEMALE</b>							
25-74 YEARS...	26.7	16.9	10.1	18.9	12.8	13.9	9.7
25-34 YEARS.....	9.0	4.5	1.8	3.2	1.9	2.1	1.7
35-44 YEARS.....	12.0	5.2	3.5	5.5	3.6	3.6	2.3
45-54 YEARS.....	23.7	13.7	8.2	14.8	9.4	10.0	6.7
55-64 YEARS.....	44.7	28.7	15.2	34.0	23.0	25.2	16.4
65-74 YEARS.....	65.5	49.2	33.2	57.2	41.1	44.6	33.0

Table 3.80

Prevalence of Hearing Impairment (Under 7 Alternative Definitions)  
in the Right Ear by Age, Race, and Sex: United States, 1971-1975

AGE, RACE AND SEX	AVERAGE .5,1,2 KHZ			AVERAGE .5,1,2,4 KHZ		AVERAGE 1,2,4 KHZ	
	> 15	> 20	> 25	> 20	> 25	> 25	> 30
	WHITE MALES						
25-74 YEARS...	29.8	18.4	11.9	34.0	22.3	29.3	20.2
25-34 YEARS.....	6.2	3.2	1.9	7.6	2.2	6.1	1.7
35-44 YEARS.....	18.3	10.4	5.0	20.7	11.6	15.7	10.3
45-54 YEARS.....	30.4	17.1	11.4	40.0	23.7	33.5	21.9
55-64 YEARS.....	55.7	34.5	22.2	57.4	41.8	51.1	36.1
65-74 YEARS.....	64.4	45.9	33.4	71.9	56.4	66.6	53.7
BLACK MALES							
25-74 YEARS...	32.2	21.5	13.3	30.0	20.5	22.4	17.3
25-34 YEARS.....	12.1	6.9	3.8	10.5	6.0	5.4	2.8
35-44 YEARS.....	23.8	17.5	10.7	18.3	14.7	15.6	8.5
45-54 YEARS.....	27.7	22.5	11.7	29.0	21.4	21.9	20.6
55-64 YEARS.....	56.8	30.1	17.1	51.1	28.9	37.6	25.8
65-74 YEARS.....	73.4	51.8	40.5	73.5	54.7	57.9	52.1
WHITE FEMALES							
25-74 YEARS...	26.7	17.0	9.9	19.0	12.9	14.0	9.7
25-34 YEARS.....	0.4	4.3	1.5	2.8	1.5	1.7	1.4
35-44 YEARS.....	11.9	5.1	3.7	5.6	3.6	3.8	2.4
45-54 YEARS.....	23.5	13.5	8.0	14.7	9.3	10.0	6.8
55-64 YEARS.....	44.0	29.0	14.6	33.6	23.2	25.1	16.1
65-74 YEARS.....	65.3	48.7	32.2	57.1	40.7	44.2	32.5
BLACK FEMALES							
25-74 YEARS...	27.9	16.2	12.0	18.6	13.0	13.7	10.1
25-34 YEARS.....	14.2	5.8	4.1	6.3	4.6	5.1	4.1
35-44 YEARS.....	12.9	5.0	2.3	4.5	3.5	1.8	1.2
45-54 YEARS.....	26.6	16.1	9.7	16.9	11.3	9.9	5.7
55-64 YEARS.....	49.6	25.3	22.7	37.4	22.7	28.5	21.1
65-74 YEARS.....	69.7	56.2	44.2	59.8	46.2	49.5	38.6

Table 3.81

Prevalence of Hearing Impairment (Under 7 Alternative Definitions)  
in the Left Ear by Age and Sex: United States, 1971-1975

AGE AND SEX	AVERAGE .5,1,2 KHZ			AVERAGE .5,1,2,4 KHZ		AVERAGE 1,2,4 KHZ	
	> 15	> 20	> 25	> 20	> 25	> 25	> 30
<b>BOTH SEXES</b>							
25-74 YEARS...	30.3	18.3	12.0	28.5	18.9	23.0	15.7
25-34 YEARS.....	9.6	3.0	2.5	7.3	3.7	5.7	3.1
35-44 YEARS.....	19.3	8.8	5.1	16.1	9.2	12.1	7.3
45-54 YEARS.....	31.8	18.2	10.9	30.2	18.8	23.5	15.4
55-64 YEARS.....	40.0	31.0	19.6	47.2	31.9	37.8	25.6
65-74 YEARS.....	65.3	47.8	35.4	65.6	49.7	56.4	43.8
<b>MALE</b>							
25-74 YEARS...	34.7	21.9	14.0	39.1	26.0	33.1	22.8
25-34 YEARS.....	10.8	4.4	2.8	11.5	5.4	9.2	4.9
35-44 YEARS.....	27.2	13.0	6.7	26.3	14.6	20.2	12.4
45-54 YEARS.....	38.3	23.1	14.5	46.4	29.6	38.9	24.9
55-64 YEARS.....	54.1	39.2	24.5	63.3	44.4	54.2	38.3
65-74 YEARS.....	68.6	51.0	37.4	76.9	60.3	69.9	56.4
<b>FEMALE</b>							
25-74 YEARS...	26.2	15.0	10.2	19.0	12.5	13.8	9.4
25-34 YEARS.....	8.5	3.1	2.2	3.3	2.1	2.4	1.4
35-44 YEARS.....	12.1	5.0	3.7	6.8	4.2	4.8	2.7
45-54 YEARS.....	25.7	13.6	7.6	15.2	8.9	9.2	6.6
55-64 YEARS.....	42.4	23.7	15.1	32.6	20.6	23.0	14.1
65-74 YEARS.....	62.7	45.3	33.8	57.0	41.6	46.1	34.1

Table 3.82

Prevalence of Hearing Impairment (Under 7 Alternative Definitions)  
in the Left Ear by Age, Race, and Sex: United States, 1971-1975

AGE, RACE AND SEX	AVERAGE .5,1,2 KHZ			AVERAGE .5,1,2,4 KHZ		AVERAGE 1,2,4 KHZ	
	> 15	> 20	> 25	> 20	> 25	> 25	> 30
<b>WHITE MALES</b>							
25-74 YEARS...	35.0	22.0	14.1	40.5	26.8	34.4	23.6
25-34 YEARS.....	10.1	3.9	2.5	11.9	5.1	9.6	5.1
35-44 YEARS.....	27.5	13.3	7.0	27.7	15.6	21.7	13.1
45-54 YEARS.....	39.0	23.0	14.6	48.3	30.3	40.6	25.5
55-64 YEARS.....	55.4	39.8	24.7	65.2	46.3	56.1	39.8
65-74 YEARS.....	67.5	50.6	36.9	77.0	61.1	70.0	57.3
<b>BLACK MALES</b>							
25-74 YEARS...	33.1	22.4	14.0	20.6	19.1	22.8	16.0
25-34 YEARS.....	17.1	9.5	6.2	9.9	9.4	7.5	4.3
35-44 YEARS.....	26.0	12.2	4.5	15.6	5.9	7.4	5.9
45-54 YEARS.....	30.4	24.6	12.5	29.1	23.2	24.9	19.6
55-64 YEARS.....	44.7	34.5	23.4	47.3	26.4	37.7	23.8
65-74 YEARS.....	78.9	54.5	43.1	75.6	52.5	67.5	47.8
<b>WHITE FEMALES</b>							
25-74 YEARS...	26.0	14.8	10.0	19.1	12.5	13.9	9.5
25-34 YEARS.....	7.0	2.6	1.5	2.7	1.5	1.8	1.0
35-44 YEARS.....	12.5	5.3	3.9	7.3	4.4	5.1	2.8
45-54 YEARS.....	25.1	13.1	7.7	14.9	8.7	9.0	6.8
55-64 YEARS.....	41.6	22.1	13.9	32.0	19.8	22.3	13.8
65-74 YEARS.....	62.6	45.5	34.0	57.8	42.2	46.6	34.4
<b>BLACK FEMALES</b>							
25-74 YEARS...	29.3	16.9	12.4	17.8	13.5	14.4	9.0
25-34 YEARS.....	19.9	7.4	7.0	8.1	7.0	7.6	4.5
35-44 YEARS.....	9.9	3.5	2.7	3.3	2.7	2.7	1.7
45-54 YEARS.....	31.4	17.5	7.9	18.1	10.4	10.1	5.1
55-64 YEARS.....	48.0	35.2	28.8	34.9	30.8	32.1	17.5
65-74 YEARS.....	64.1	44.0	33.3	50.3	35.9	41.8	32.1



Table 3.83

Prevalence of Hearing Impairment (Under 7 Alternative Definitions)  
in the Better Ear by Age and Sex: United States, 1971-1975

AGE AND SEX	AVERAGE .5,1,2 KHZ			AVERAGE .5,1,2,4 KHZ		AVERAGE 1,2,4 KHZ	
	> 15	> 20	> 25	> 20	> 25	> 25	> 30
<b>BOTH SEXES</b>							
25-74 YEARS...	21.3	12.2	7.4	20.2	12.8	13.0	8.4
25-34 YEARS.....	4.3	1.6	.7	3.0	1.0	1.8	.4
35-44 YEARS.....	9.3	3.8	1.8	8.6	4.1	4.4	2.5
45-54 YEARS.....	20.3	11.1	6.3	19.6	11.5	12.1	8.1
55-64 YEARS.....	38.4	21.5	11.7	36.5	23.5	22.6	13.6
65-74 YEARS.....	55.0	38.4	26.9	54.9	39.0	39.2	28.7
<b>MALE</b>							
25-74 YEARS...	23.2	13.5	8.1	27.7	17.0	17.6	11.5
25-34 YEARS.....	3.9	1.6	.7	4.8	1.2	2.9	.6
35-44 YEARS.....	13.3	5.5	2.0	15.2	7.0	7.8	4.5
45-54 YEARS.....	23.2	12.9	8.0	30.4	17.6	19.2	12.5
55-64 YEARS.....	43.6	25.5	14.3	49.3	31.8	30.7	19.5
65-74 YEARS.....	56.0	39.7	28.1	66.4	49.1	47.3	36.8
<b>FEMALE</b>							
25-74 YEARS...	19.6	11.1	6.7	13.5	9.0	8.8	5.5
25-34 YEARS.....	4.6	1.7	.8	1.3	.8	.8	.3
35-44 YEARS.....	5.7	2.2	1.6	2.5	1.4	1.3	.7
45-54 YEARS.....	17.7	9.4	4.0	9.6	5.9	5.6	4.0
55-64 YEARS.....	33.6	17.9	9.4	25.0	16.1	15.3	8.3
65-74 YEARS.....	55.5	37.5	25.9	46.1	32.7	32.9	22.4

Table 3.84

Prevalence of Hearing Impairment (Under 7 Alternative Definitions) in the Better Ear by Age, Race, and Sex: United States, 1971-1975

AGE, RACE AND SEX	AVERAGE .5, 1, 2 KHZ			AVERAGE .5, 1, 2, 4 KHZ		AVERAGE 1, 2, 4 KHZ	
	> 15	> 20	> 25	> 20	> 25	> 25	> 30
	WHITE MALES						
25-74 YEARS...	23.1	13.6	8.1	20.5	17.5	18.2	11.9
25-34 YEARS.....	3.6	1.5	.8	4.7	1.1	2.0	.6
35-44 YEARS.....	13.1	5.4	1.7	16.1	7.4	8.1	4.6
45-54 YEARS.....	22.8	12.3	7.7	31.3	17.6	19.5	12.3
55-64 YEARS.....	44.3	26.6	14.9	51.2	33.6	32.4	20.7
65-74 YEARS.....	54.4	39.2	27.4	66.1	49.3	48.2	37.4
BLACK MALES							
25-74 YEARS...	25.4	13.8	8.5	21.1	12.8	12.3	9.5
25-34 YEARS.....	7.4	2.0	.0	6.4	2.1	4.4	1.1
35-44 YEARS.....	17.1	6.8	4.5	7.0	4.5	4.5	4.5
45-54 YEARS.....	24.8	18.0	10.1	22.3	17.5	16.1	14.2
55-64 YEARS.....	38.5	16.2	8.5	32.7	13.4	13.0	9.1
65-74 YEARS.....	70.3	45.6	35.0	60.3	46.6	39.9	31.6
WHITE FEMALES							
25-74 YEARS...	19.5	11.0	6.5	13.6	8.9	8.9	5.5
25-34 YEARS.....	3.9	1.4	.5	.9	.5	.6	.2
35-44 YEARS.....	6.0	2.3	1.6	2.7	1.4	1.5	.7
45-54 YEARS.....	17.3	9.2	4.9	9.3	5.7	5.7	4.1
55-64 YEARS.....	32.9	17.1	8.2	24.6	15.6	14.7	7.0
65-74 YEARS.....	55.2	37.3	25.9	46.2	32.5	33.0	22.2
BLACK FEMALES							
25-74 YEARS...	20.6	12.0	8.4	13.5	10.0	8.8	5.8
25-34 YEARS.....	9.9	4.3	2.8	4.5	2.8	2.8	.4
35-44 YEARS.....	3.7	1.0	1.0	1.0	1.0	.0	.0
45-54 YEARS.....	21.5	11.4	4.3	12.9	7.6	5.1	3.8
55-64 YEARS.....	37.5	23.9	22.7	27.3	22.7	22.5	14.0
65-74 YEARS.....	60.8	40.7	27.4	46.4	35.7	32.1	24.6

Table 3.85

Prevalence of Hearing Impairment (Under 7 Alternative Definitions)  
in the Worse Ear by Age and Sex: United States, 1971-1975

AGE AND SEX	AVERAGE .5,1,2 KHZ			AVERAGE .5,1,2,4 KHZ		AVERAGE 1,2,4 KHZ	
	> 15	> 20	> 25	> 20	> 25	> 25	> 30
<b>BOTH SEXES</b>							
25-74 YEARS...	41.5	23.7	15.6	34.1	23.3	27.8	19.6
25-34 YEARS.....	20.1	6.1	3.6	9.7	4.9	7.1	4.2
35-44 YEARS.....	31.5	12.9	7.8	20.1	12.5	15.5	9.9
45-54 YEARS.....	38.5	22.7	14.4	37.0	23.5	29.6	19.7
55-64 YEARS.....	63.7	40.9	26.0	58.6	39.6	45.5	32.7
65-74 YEARS.....	77.9	57.2	42.0	74.4	57.6	64.3	50.6
<b>MALE</b>							
25-74 YEARS...	44.8	27.0	17.9	44.9	31.0	38.8	27.5
25-34 YEARS.....	18.4	6.4	4.1	14.4	6.8	10.9	6.1
35-44 YEARS.....	39.1	18.4	10.1	31.4	19.3	25.2	16.3
45-54 YEARS.....	45.9	27.9	18.0	54.8	35.4	47.1	30.9
55-64 YEARS.....	69.4	47.9	31.8	71.1	53.1	63.0	46.5
65-74 YEARS.....	70.1	57.6	43.2	62.6	47.6	76.9	63.7
<b>FEMALE</b>							
25-74 YEARS...	30.5	20.8	13.6	24.3	16.4	17.8	12.5
25-34 YEARS.....	21.7	5.9	3.2	5.3	3.2	3.6	2.5
35-44 YEARS.....	24.5	8.0	5.7	9.7	6.4	6.6	4.0
45-54 YEARS.....	31.7	17.9	11.0	20.4	12.4	13.4	9.2
55-64 YEARS.....	58.6	34.5	20.9	41.6	27.5	29.8	20.3
65-74 YEARS.....	77.7	56.9	41.1	68.1	49.9	54.6	40.5

Table 3.86

## Prevalence of Hearing Impairment (Under 7 Alternative Definitions) in the Worse Ear by Age, Race, and Sex: United States, 1971-1975

AGE, RACE AND SEX	AVERAGE .5,1,2 KHZ			AVERAGE .5,1,2,4 KHZ		AVERAGE 1,2,4 KHZ	
	> 15	> 20	> 25	> 20	> 25	> 25	> 30
<b>WHITE MALES</b>							
25-74 YEARS...	44.4	26.0	17.9	45.9	31.6	40.0	28.3
25-34 YEARS.....	14.2	5.6	3.5	14.7	6.2	11.4	6.2
35-44 YEARS.....	40.3	18.2	10.3	32.3	19.7	26.2	17.1
45-54 YEARS.....	47.0	27.8	18.4	57.0	36.4	49.2	31.6
55-64 YEARS.....	69.9	47.6	31.9	71.5	54.5	64.1	47.5
65-74 YEARS.....	77.7	57.3	42.8	82.8	60.2	77.2	64.1
<b>BLACK MALES</b>							
25-74 YEARS...	50.1	30.1	18.7	37.4	26.7	29.8	22.0
25-34 YEARS.....	58.6	14.3	9.9	13.9	13.1	8.5	6.0
35-44 YEARS.....	32.7	22.8	10.7	27.0	16.1	17.7	9.9
45-54 YEARS.....	33.3	29.1	14.1	35.8	27.2	29.1	24.9
55-64 YEARS.....	63.0	48.5	32.0	65.7	41.9	55.4	38.8
65-74 YEARS.....	82.0	60.6	48.6	80.8	60.6	73.7	57.4
<b>WHITE FEMALES</b>							
25-74 YEARS...	38.8	20.8	13.4	24.5	16.5	17.9	12.6
25-34 YEARS.....	21.6	5.5	2.6	4.6	2.5	2.8	2.1
35-44 YEARS.....	25.4	8.0	5.9	10.2	6.6	6.9	4.1
45-54 YEARS.....	31.3	17.4	10.8	20.3	12.3	13.4	9.5
55-64 YEARS.....	58.3	33.9	20.3	41.0	27.4	29.3	20.1
65-74 YEARS.....	77.4	56.8	40.3	68.7	50.4	55.1	40.6
<b>BLACK FEMALES</b>							
25-74 YEARS...	37.4	21.0	16.0	22.9	16.5	18.2	11.9
25-34 YEARS.....	24.2	8.8	8.3	9.9	8.0	9.9	5.8
35-44 YEARS.....	19.1	7.4	4.0	6.7	5.2	4.6	2.9
45-54 YEARS.....	36.5	22.2	13.3	22.1	14.0	13.3	7.0
55-64 YEARS.....	60.1	36.7	28.8	45.1	30.8	38.2	24.4
65-74 YEARS.....	82.5	59.4	50.0	63.5	46.3	51.3	40.2

Table 3.87

Number of Persons (in Thousands) With Hearing Impairment (Under 7 Alternative Definitions) in the Right Ear by Age and Sex: United States, 1971-1975

AGE AND SEX	AVERAGE .5, 1, 2 KHZ			AVERAGE .5, 1, 2, 4 KHZ		AVERAGE 1, 2, 4 KHZ	
	> 15	> 20	> 25	> 20	> 25	> 25	> 30
<b>BOTH SEXES</b>							
25-74 YEARS...	129,553	10,511	11,405	26,977	17,986	21,760	15,123
25-34 YEARS.....	2,200	1,120	530	1,509	607	1,098	483
35-44 YEARS.....	3,319	1,741	977	2,760	1,636	2,053	1,305
45-54 YEARS.....	6,206	3,601	2,257	6,083	3,740	4,786	3,220
55-64 YEARS.....	9,534	5,972	3,470	8,553	5,950	7,003	4,792
65-74 YEARS.....	8,294	6,077	4,251	8,071	6,053	6,820	5,322
<b>MALE</b>							
25-74 YEARS...	14,847	9,222	5,937	16,598	10,924	14,137	9,809
25-34 YEARS.....	905	475	271	1,043	338	801	243
35-44 YEARS.....	1,940	1,147	573	2,132	1,225	1,640	1,044
45-54 YEARS.....	3,362	1,957	1,278	4,308	2,610	3,591	2,422
55-64 YEARS.....	5,046	3,094	1,945	5,145	3,646	4,478	3,145
65-74 YEARS.....	3,594	2,550	1,870	3,970	3,105	3,626	2,955
<b>FEMALE</b>							
25-74 YEARS...	14,706	9,289	5,548	10,379	7,062	7,623	5,314
25-34 YEARS.....	1,295	645	260	466	269	296	240
35-44 YEARS.....	1,380	594	404	627	411	413	262
45-54 YEARS.....	2,844	1,644	978	1,776	1,130	1,195	799
55-64 YEARS.....	4,488	2,878	1,525	3,408	2,304	2,524	1,647
65-74 YEARS.....	4,700	3,527	2,381	4,102	2,948	3,194	2,366

Table 3.88

Number of Persons (in Thousands) With Hearing Impairment (Under 7 Alternative Definitions) in the Right Ear by Age, Race, and Sex: United States, 1971-1975

AGE, RACE AND SEX	AVERAGE .5,1,2 KHZ			AVERAGE .5,1,2,4 KHZ		AVERAGE 1,2,4 KHZ	
	> 15	> 20	> 25	> 20	> 25	> 25	> 30
<b>WHITE MALES</b>							
25-74 YEARS...	13,215	8,152	5,295	15,000	9,913	13,017	8,963
25-34 YEARS.....	749	390	223	912	244	734	200
35-44 YEARS.....	1,696	968	463	1,925	1,074	1,460	957
45-54 YEARS.....	3,023	1,698	1,137	3,979	2,363	3,339	2,184
55-64 YEARS.....	4,546	2,813	1,813	4,688	3,408	4,174	2,947
65-74 YEARS.....	3,202	2,284	1,659	3,577	2,805	3,310	2,668
<b>BLACK MALES</b>							
25-74 YEARS...	1,485	991	612	1,380	944	1,033	796
25-34 YEARS.....	151	86	48	131	74	67	35
35-44 YEARS.....	243	179	110	188	151	160	87
45-54 YEARS.....	301	246	128	315	233	239	224
55-64 YEARS.....	432	229	130	388	219	286	196
65-74 YEARS.....	357	252	197	358	266	282	254
<b>WHITE FEMALES</b>							
25-74 YEARS...	12,980	8,291	4,844	9,250	6,300	6,820	4,722
25-34 YEARS.....	1,044	537	191	350	192	209	172
35-44 YEARS.....	1,180	588	366	559	356	381	238
45-54 YEARS.....	2,503	1,445	858	1,566	990	1,073	728
55-64 YEARS.....	3,987	2,624	1,323	3,046	2,102	2,270	1,460
65-74 YEARS.....	4,266	3,177	2,106	3,729	2,660	2,886	2,126
<b>BLACK FEMALES</b>							
25-74 YEARS...	1,622	940	697	1,082	755	797	585
25-34 YEARS.....	240	97	69	106	78	87	69
35-44 YEARS.....	177	68	31	62	48	25	17
45-54 YEARS.....	329	199	120	209	139	122	71
55-64 YEARS.....	442	226	202	333	202	254	188
65-74 YEARS.....	434	350	275	373	288	308	241

Table 3.89

Number of Persons (in Thousands) With Hearing Impairment (Under 7 Alternative Definitions) in the Left Ear by Age and Sex: United States, 1971-1975

AGE AND SEX	AVERAGE .5,1,2 KHZ			AVERAGE .5,1,2,4 KHZ		AVERAGE 1,2,4 KHZ	
	> 15	> 20	> 25	> 20	> 25	> 25	> 30
<b>BOTH SEXES</b>							
25-74 YEARS...	31,441	19,140	12,545	29,825	19,770	24,021	16,447
25-34 YEARS.....	2,481	1,050	687	2,029	1,045	1,597	871
35-44 YEARS.....	4,212	1,929	1,123	3,522	2,006	2,652	1,407
45-54 YEARS.....	7,342	4,197	2,523	6,976	4,345	5,425	3,553
55-64 YEARS.....	9,122	5,903	3,724	8,948	6,063	7,188	4,858
65-74 YEARS.....	8,203	6,062	4,487	8,329	6,311	7,159	5,557
<b>MALE</b>							
25-74 YEARS...	17,219	10,872	6,953	19,401	12,878	16,422	11,296
25-34 YEARS.....	1,457	599	375	1,553	736	1,250	668
35-44 YEARS.....	2,833	1,353	695	2,745	1,522	2,106	1,295
45-54 YEARS.....	4,259	2,569	1,608	5,153	3,283	4,324	2,767
55-64 YEARS.....	4,885	3,537	2,214	5,710	4,008	4,889	3,454
65-74 YEARS.....	3,706	2,814	2,061	4,242	3,329	3,854	3,113
<b>FEMALE</b>							
25-74 YEARS...	14,421	8,269	5,592	10,423	6,892	7,599	5,151
25-34 YEARS.....	1,224	451	312	477	309	347	203
35-44 YEARS.....	1,379	576	428	777	484	547	312
45-54 YEARS.....	3,083	1,620	915	1,824	1,062	1,101	787
55-64 YEARS.....	4,237	2,366	1,510	3,259	2,056	2,300	1,404
65-74 YEARS.....	4,490	3,248	2,426	4,088	2,982	3,305	2,445

Table 3.90

Number of Persons (in Thousands) With Hearing Impairment (Under 7 Alternative Definitions) in the Left Ear by Age, Race, and Sex: United States, 1971-1975

AGE, RACE AND SEX	AVERAGE .5,1,2 KHZ			AVERAGE .5,1,2,4 KHZ		AVERAGE 1,2,4 KHZ	
	>15	>20	>25	>20	>25	>25	>30
<b>WHITE MALES</b>							
25-74 YEARS...	15,530	9,769	6,259	17,972	11,910	15,277	10,476
25-34 YEARS.....	1,211	472	295	1,425	615	1,153	613
35-44 YEARS.....	2,547	1,229	650	2,565	1,442	2,010	1,214
45-54 YEARS.....	3,879	2,288	1,458	4,012	3,017	4,039	2,540
55-64 YEARS.....	4,527	3,255	2,018	5,332	3,788	4,584	3,255
65-74 YEARS.....	3,366	2,525	1,839	3,839	3,049	3,491	2,855
<b>BLACK MALES</b>							
25-74 YEARS...	1,540	1,042	649	1,330	890	1,058	742
25-34 YEARS.....	220	123	80	127	122	97	56
35-44 YEARS.....	266	124	46	160	60	76	60
45-54 YEARS.....	331	267	136	317	253	271	213
55-64 YEARS.....	339	262	177	359	200	206	181
65-74 YEARS.....	304	265	210	367	255	328	232
<b>WHITE FEMALES</b>							
25-74 YEARS...	12,631	7,212	4,865	9,314	6,101	6,742	4,624
25-34 YEARS.....	870	326	194	340	190	219	127
35-44 YEARS.....	1,230	522	304	725	440	503	282
45-54 YEARS.....	2,682	1,399	817	1,588	933	964	724
55-64 YEARS.....	3,750	1,993	1,254	2,888	1,782	2,014	1,248
65-74 YEARS.....	4,083	2,972	2,218	3,772	2,757	3,043	2,243
<b>BLACK FEMALES</b>							
25-74 YEARS...	1,703	979	719	1,032	784	839	520
25-34 YEARS.....	336	125	119	137	119	128	76
35-44 YEARS.....	135	47	37	45	37	37	23
45-54 YEARS.....	390	217	98	225	129	126	63
55-64 YEARS.....	427	314	257	311	274	286	156
65-74 YEARS.....	414	276	209	315	225	262	201



Table 3.91

Number of Persons (in Thousands) With Hearing Impairment (Under 7 Alternative Definitions) in the Better Ear by Age and Sex: United States, 1971-1975

AGE AND SEX	AVERAGE .5, 1, 2 KHZ			AVERAGE .5, 1, 2, 4 KHZ		AVERAGE 1, 2, 4 KHZ	
	> 15	> 20	> 25	> 20	> 25	> 25	> 30
	<b>BOTH SEXES</b>						
25-74 YEARS...	22,253	12,776	7,678	21,095	13,322	13,512	8,734
25-34 YEARS.....	1,192	451	204	827	269	507	120
35-44 YEARS.....	2,032	825	388	1,873	888	967	545
45-54 YEARS.....	4,697	2,561	1,463	4,520	2,652	2,801	1,862
55-64 YEARS.....	7,283	4,079	2,227	6,932	4,464	4,287	2,583
65-74 YEARS.....	7,050	4,860	3,399	6,944	5,038	4,951	3,625
<b>MALE</b>							
25-74 YEARS...	11,492	6,685	4,013	13,684	8,398	8,688	5,710
25-34 YEARS.....	531	209	93	645	157	388	80
35-44 YEARS.....	1,382	572	205	1,581	727	815	467
45-54 YEARS.....	2,577	1,433	887	3,370	1,955	2,127	1,383
55-64 YEARS.....	3,924	2,293	1,284	4,439	2,860	2,758	1,759
65-74 YEARS.....	3,078	2,178	1,544	3,648	2,699	2,600	2,022
<b>FEMALE</b>							
25-74 YEARS...	10,762	6,091	3,664	7,411	4,924	4,825	3,023
25-34 YEARS.....	660	242	110	182	112	119	40
35-44 YEARS.....	650	253	180	291	161	152	78
45-54 YEARS.....	2,120	1,128	576	1,150	707	674	479
55-64 YEARS.....	3,360	1,786	943	2,492	1,604	1,529	824
65-74 YEARS.....	3,972	2,682	1,855	3,296	2,340	2,351	1,602

Table 3.92

Number of Persons (in Thousands) With Hearing Impairment (Under 7 Alternative Definitions) in the Better Ear by Age, Race, and Sex: United States, 1971-1975.

AGE, RACE AND SEX	AVERAGE .5,1,2 KHZ			AVERAGE .5,1,2,4 KHZ		AVERAGE 1,2,4 KHZ	
	> 15	> 20	> 25	> 20	> 25	> 25	> 30
<b>WHITE MALES</b>							
25-74 YEARS...	10,224	6,021	3,594	12,621	7,751	8,054	5,261
25-34 YEARS.....	435	185	93	566	130	333	66
35-44 YEARS.....	1,207	502	160	1,490	682	750	421
45-54 YEARS.....	2,269	1,222	763	3,114	1,751	1,938	1,228
55-64 YEARS.....	3,613	2,168	1,217	4,172	2,740	2,640	1,690
65-74 YEARS.....	2,701	1,944	1,361	3,280	2,448	2,394	1,856
<b>BLACK MALES</b>							
25-74 YEARS...	1,171	635	391	974	591	568	436
25-34 YEARS.....	92	24	0	79	27	55	13
35-44 YEARS.....	175	70	46	72	46	46	46
45-54 YEARS.....	270	197	110	243	190	175	154
55-64 YEARS.....	292	123	64	240	101	99	69
65-74 YEARS.....	342	222	170	332	227	194	154
<b>WHITE FEMALES</b>							
25-74 YEARS...	9,477	5,361	3,171	6,594	4,337	4,308	2,683
25-34 YEARS.....	482	169	63	106	65	71	31
35-44 YEARS.....	592	232	159	270	140	145	71
45-54 YEARS.....	1,843	987	523	990	613	612	432
55-64 YEARS.....	2,966	1,544	741	2,321	1,402	1,329	700
65-74 YEARS.....	3,593	2,429	1,605	3,007	2,118	2,151	1,449
<b>BLACK FEMALES</b>							
25-74 YEARS...	1,197	695	487	782	580	510	334
25-34 YEARS.....	168	73	48	76	48	48	10
35-44 YEARS.....	51	14	14	14	14	0	0
45-54 YEARS.....	266	141	53	160	94	62	47
55-64 YEARS.....	334	213	202	243	202	200	124
65-74 YEARS.....	379	254	171	289	222	200	153

Table 3.93

Number of Persons (in Thousands) With Hearing Impairment (Under 7 Alternative Definitions) in the Worse Ear by Age and Sex: United States, 1971-1975

AGE AND SEX	AVERAGE .5,1,2 KHZ			AVERAGE .5,1,2,4 KHZ		AVERAGE 1,2,4 KHZ	
	>15	>20	>25	>20	>25	>25	>30
<b>BOTH SEXES</b>							
25-74 YEARS...	43,506	24,882	14,360	35,720	24,447	29,105	20,560
25-34 YEARS.....	5,627	1,710	1,014	2,711	1,383	1,997	1,180
35-44 YEARS.....	4,917	2,846	1,715	4,408	2,754	3,397	2,165
45-54 YEARS.....	8,905	5,243	3,323	8,540	5,423	6,843	4,542
55-64 YEARS.....	12,158	7,796	4,968	10,603	7,562	8,689	6,244
65-74 YEARS.....	9,899	7,279	5,341	9,457	7,326	8,179	6,429
<b>MALE</b>							
25-74 YEARS...	22,292	13,416	8,885	22,329	15,417	19,296	13,695
25-34 YEARS.....	2,496	865	552	1,950	917	1,481	824
35-44 YEARS.....	4,103	1,928	1,043	3,296	2,020	2,636	1,709
45-54 YEARS.....	5,098	3,099	2,006	6,091	3,938	5,232	3,439
55-64 YEARS.....	6,280	4,337	2,876	6,428	4,806	5,696	4,205
65-74 YEARS.....	4,315	3,186	2,389	4,563	3,736	4,252	3,518
<b>FEMALE</b>							
25-74 YEARS...	21,215	11,466	7,476	13,391	9,030	9,809	6,864
25-34 YEARS.....	3,131	853	462	761	466	517	356
35-44 YEARS.....	2,814	917	652	1,113	734	761	456
45-54 YEARS.....	3,807	2,144	1,317	2,449	1,485	1,612	1,104
55-64 YEARS.....	5,878	3,458	2,092	4,174	2,756	2,993	2,039
65-74 YEARS.....	5,584	4,093	2,953	4,094	3,590	3,927	2,910

Table 3.94

Number of Persons (in Thousands) With Hearing Impairment (Under 7 Alternative Definitions) in the Worse Ear by Age, Race, and Sex: United States, 1971-1975

AGE, RACE AND SEX	AVERAGE .5,1,2 KHZ			AVERAGE .5,1,2,4 KHZ		AVERAGE 1,2,4 KHZ	
	> 15	> 20	> 25	> 20	> 25	> 25	> 30
<b>WHITE MALES</b>							
25-74 YEARS...	19,762	11,906	7,967	20,443	14,085	17,821	12,583
25-34 YEARS.....	1,714	677	424	1,771	748	1,371	747
35-44 YEARS.....	3,740	1,695	953	3,000	1,834	2,435	1,587
45-54 YEARS.....	4,686	2,769	1,838	5,677	3,628	4,201	3,153
55-64 YEARS.....	5,733	3,900	2,613	5,861	4,469	5,256	3,891
65-74 YEARS.....	3,881	2,865	2,139	4,135	3,406	3,858	3,204
<b>BLACK MALES</b>							
25-74 YEARS...	2,331	1,397	871	1,737	1,243	1,387	1,024
25-34 YEARS.....	757	184	128	179	169	110	77
35-44 YEARS.....	334	234	110	276	165	181	101
45-54 YEARS.....	362	316	154	389	296	317	271
55-64 YEARS.....	479	368	243	499	318	420	295
65-74 YEARS.....	399	295	236	393	295	359	279
<b>WHITE FEMALES</b>							
25-74 YEARS...	18,935	10,142	6,539	11,970	8,064	8,734	6,163
25-34 YEARS.....	2,712	694	322	504	317	350	259
35-44 YEARS.....	2,830	798	591	1,014	656	691	409
45-54 YEARS.....	3,342	1,857	1,152	2,164	1,311	1,435	1,017
55-64 YEARS.....	5,283	3,073	1,836	3,714	2,482	2,653	1,821
65-74 YEARS.....	5,067	3,721	2,638	4,495	3,299	3,605	2,658
<b>BLACK FEMALES</b>							
25-74 YEARS...	2,176	1,224	930	1,333	959	1,057	694
25-34 YEARS.....	409	149	140	167	149	167	97
35-44 YEARS.....	262	101	54	92	72	63	40
45-54 YEARS.....	453	275	165	274	174	165	87
55-64 YEARS.....	535	326	257	401	274	340	218
65-74 YEARS.....	518	372	313	399	291	322	252

Table 3.95

Significance Tests (Z Statistics) of Age, Sex and Race Differences in  
Prevalence of Hearing Impairment (Under 7 Definitions)  
in the Right Ear: United States, 1971-1975

	Average of 500, 1,000 and 2000 HZ			Average of 500, 1000, 2000 and 4000 HZ		Average of 1000, 2000 and 4000 HZ	
	>15	>20	>25	>20	>25	>25	>30
<u>Age Differences</u>							
(25-34) vs. (35-44)	- 4.43***	-3.25**	-3.31***	-4.85***	-4.96***	-4.46***	-4.66***
(35-44) vs. (45-54)	- 6.91***	-5.60***	-4.59***	-8.72***	-6.33***	-7.48***	-6.60***
(45-54) vs. (55-64)	-10.73***	-7.91***	-4.98***	-9.19***	-8.09***	-8.02***	-6.43***
(55-64) vs. (65-74)	- 5.01***	-6.08***	-7.41***	-6.83***	-6.60***	-6.36***	-6.94***
<u>Sex Differences: Males vs. Females</u>							
25-34	- 1.36	- .75	.22	2.66**	.65	2.76**	.15
35-44	2.43*	2.88**	1.31	5.97***	4.29***	5.83***	4.29***
45-54	2.32*	2.05*	1.99*	9.67***	6.69***	9.29***	7.50***
55-64	3.02**	1.86	2.36*	6.82***	5.29***	7.22***	5.89***
65-74	- .03	- .78	.34	4.38***	4.71***	6.50***	6.14***
<u>Race Differences: White vs. Black</u>							
Males 25-34	- 1.25	- .90	- .60	- .55	-1.03	.21	- .58
35-44	- .80	-1.22	-1.44	.37	- .55	.08	.44
45-54	.45	- .93	- .07	1.74	.41	2.10*	.22
55-64	- .12	.58	.89	.71	1.96*	1.76	1.40
65-74	- 1.42	- .79	- .88	- .30	.27	1.36	.20
Females 25-34	- 1.34	- .51	- .97	-1.26	-1.15	-1.28	-1.04
35-44	- .29	.04	.76	.39	.02	1.21	.80
45-54	- .61	- .54	- .40	- .45	- .46	.03	.35
55-64	- .73	.48	-1.18	- .48	.07	- .45	- .69
65-74	- .63	-1.02	-1.78	- .34	- .69	- .77	- .89

\*Significant at the .05 level.

\*\*Significant at the .01 level.

\*\*\*Significant at the .001 level.

Table 3.96

Significance Tests (Z Statistics) of Age, Sex and Race Differences in  
Prevalence of Hearing Impairment (Under 7 Definitions)  
in the Left Ear: United States, 1971-1975

	Average of 500, 1,000 and 2000 HZ			Average of 500, 1000, 2000 and 4000 HZ		Average of 1000, 2000 and 4000 HZ	
	>15	>20	>25	>20	>25	>25	>30
<u>Age Differences</u>							
(25-34) vs. (35-44)	-5.46***	-4.18***	-2.72**	-4.97***	-4.65***	-4.64***	-3.71*
(35-44) vs. (45-54)	-5.95***	-6.54***	-5.04***	-6.73***	-6.53***	-6.75***	-5.80*
(45-54) vs. (55-64)	-6.33***	-5.69***	-4.46***	-7.07***	-6.09***	-6.04***	-4.98*
(55-64) vs. (65-74)	-6.95***	-7.35***	-7.43***	-6.84***	-7.66***	-8.08***	-8.81*
<u>Sex Differences: Males vs. Females</u>							
25-34	1.12	1.25	.69	3.93***	2.29*	3.52***	2.53*
35-44	5.75***	4.09***	1.96*	7.13***	4.89***	6.05***	5.39*
45-54	4.39***	4.04***	3.73***	10.66***	9.12***	11.92***	9.33*
55-64	3.19**	5.06***	3.59***	10.89***	6.87***	10.08***	8.82*
65-74	1.64	1.57	1.11	5.72***	5.42***	6.90***	6.88*
<u>Race Differences: White vs. Black</u>							
Males 25-34	-1.43	-1.45	-1.09	.46	-1.01	.49	.23
35-44	.25	.20	1.04	1.86	2.98**	3.72***	2.19*
45-54	1.49	.30	.50	2.99**	1.15	2.50*	1.05
55-64	1.29	.65	.20	1.92	2.90**	2.33*	2.33*
65-74	-2.01*	-.54	-.69	.28	1.14	.34	1.21
Females 25-34	-1.99*	-1.45	-1.69	-1.59	-1.70	-1.78	-1.28
35-44	.99	.77	.54	1.58	.74	1.00	.59
45-54	-1.05	-1.02	-.09	-.75	-.47	-.32	.66
55-64	-.86	-1.88	-2.29*	-.40	-1.52	-1.35	-.59
65-74	-.58	.24	.07	1.27	.94	.74	.35

\*Significant at the .05 level.

\*\*Significant at the .01 level.

\*\*\*Significant at the .001 level.

Table 3.97

Correlation Coefficients Among Air Conduction Hearing Levels  
and Bone Conduction Hearing Levels and Speech  
Discrimination Scores

		Air Conduction Hearing Levels								
		Right Ear				Left Ear				
		500	1000	2000	4000	500	1000	2000	4000	
B O N E C O N D U L T I O N S	R I G H T E A R	500	.58	.54	.48	.35	.53	.48	.41	.32
		Right 1000	.51	.66	.56	.37	.51	.62	.52	.37
		Ear 2000	.50	.60	.80	.58	.45	.56	.71	.56
		4000	.33	.43	.58	.85	.33	.40	.55	.73
	L E F T E A R	500	.52	.48	.42	.31	.56	.49	.41	.31
		Left 1000	.48	.61	.54	.36	.51	.64	.53	.38
		Ear 2000	.43	.54	.71	.55	.45	.56	.75	.59
		4000	.28	.37	.51	.70	.32	.40	.54	.82
Speech Disc Score:										
Right Ear			-.59	-.62	-.59	-.44	-.41	-.44	-.46	-.38
Speech Disc Score:										
Left Ear			-.41	-.44	-.50	-.40	-.57	-.60	-.55	-.45

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Table 3.98

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) <sup>1/</sup> AT 500, 1000,  
2000 AND 4000 HERTZ IN THE RIGHT EAR BY SELECTED SELF REPORT ITEMS:  
UNITED STATES, 1971-1975

SELF REPORT ITEM	MEAN LEVEL 500 HERTZ	MEAN LEVEL 1000 HERTZ	MEAN LEVEL 2000 HERTZ	MEAN LEVEL 4000 HERTZ
<b>TINNITUS</b>				
YES.....	19.5	21.0	26.4	37.5
NO.....	13.8	13.8	16.3	23.8
<b>RINGING, OTHER NOISE</b>				
YES.....	15.7	16.2	19.6	28.3
NO.....	11.3	11.5	13.2	20.6
<b>RUNNING, DISCHARGE</b>				
YES.....	19.7	19.5	24.1	33.1
NO.....	14.7	15.5	18.6	27.2
<b>DEAFNESS, TROUBLE HEARING</b>				
YES.....	23.0	24.6	30.6	42.3
NO.....	12.2	12.2	14.4	21.6
<b>RIGHT EAR RATING</b>				
GOOD.....	12.5	12.5	14.7	22.3
LITTLE DECREASED....	20.2	22.9	30.4	43.6
SEVERELY DECREASED..	40.0	41.2	49.6	61.1
DEAF.....	64.5	70.8	76.0	81.2

<sup>1/</sup> RE AUDIOMETRIC ZERO (ANSI, 1969)



Table 3.99

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 500, 1000,  
2000 AND 4000 HERTZ IN THE LEFT EAR BY SELECTED SELF REPORT ITEMS:  
UNITED STATES, 1971-1975

SELF REPORT ITEM	MEAN LEVEL 500 HERTZ	MEAN LEVEL 1000 HERTZ	MEAN LEVEL 2000 HERTZ	MEAN LEVEL 4000 HERTZ
<b>TINNITUS</b>				
YES.....	19.9	21.1	27.6	39.0
NO.....	13.9	13.7	17.1	25.5
<b>RINGING, OTHER NOISE</b>				
YES.....	15.9	16.1	20.6	30.0
NO.....	11.5	11.0	14.1	22.3
<b>RUNNING, DISCHARGE</b>				
YES.....	20.2	20.6	25.4	35.2
NO.....	14.9	15.1	19.5	28.8
<b>DEAFNESS, TROUBLE HEARING</b>				
YES.....	23.5	25.1	32.2	44.1
NO.....	12.3	11.0	15.0	23.2
<b>LEFT EAR RATING</b>				
GOOD.....	12.6	12.1	15.5	23.7
LITTLE DECREASED.....	19.3	21.0	29.2	44.6
SEVERELY DECREASED..	36.0	41.4	51.3	60.2
DEAF.....	66.3	67.5	69.6	78.2

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

Table 3.100

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 500, 1000,  
2000 AND 4000 HERTZ IN THE BETTER EAR BY SELECTED SELF REPORT ITEMS:  
UNITED STATES, 1971-1975

SELF REPORT ITEM	MEAN LEVEL 500 HERTZ	MEAN LEVEL 1000 HERTZ	MEAN LEVEL 2000 HERTZ	MEAN LEVEL 4000 HERTZ
<b>TINNITUS</b>				
YES.....	15.4	16.5	22.0	32.6
NO.....	10.8	10.6	12.8	19.7
<b>RINGING, OTHER NOISE</b>				
YES.....	12.3	12.5	15.8	23.9
YES.....	8.8	8.5	10.2	17.0
<b>RUNNING, DISCHARGE</b>				
YES.....	15.4	15.4	19.1	27.6
NO.....	11.6	11.8	15.0	23.1
<b>DEAFNESS, TROUBLE HEARING</b>				
YES.....	18.3	19.5	25.4	36.5
NO.....	9.4	9.2	11.2	18.0
<b>OVERALL HEARING RATING</b>				
BOTH EARS GOOD.....	9.3	9.2	11.0	17.7
ONE EAR GOOD, OTHER WORSE.....	15.9	14.6	19.5	30.7
ONE SOME IMPAIRMENT OTHER SAME OR WORSE	17.8	20.4	28.5	41.3
ONE EAR SEVERE IMPAIRMENT OTHER SAME OR WORSE	42.6	47.6	57.8	68.9
DEAF BOTH EARS.....	79.9	86.1	89.1	93.0

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

Table 3.101

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 500, 1000,  
2000 AND 4000 HERTZ IN THE WORSE EAR BY SELECTED SELF REPORT ITEMS:  
UNITED STATES, 1971-1975

SELF REPORT ITEM	MEAN LEVEL 500 HERTZ	MEAN LEVEL 1000 HERTZ	MEAN LEVEL 2000 HERTZ	MEAN LEVEL 4000 HERTZ
TINNITUS				
YES.....	24.0	25.7	32.1	44.1
NO.....	17.0	17.0	20.7	29.5
RINGING, OTHER NOISE				
YES.....	19.3	19.9	24.4	34.3
NO.....	14.1	14.0	17.1	26.0
RUNNING, DISCHARGE				
YES.....	25.0	25.1	30.7	41.0
NO.....	18.0	18.7	23.0	32.8
DEAFNESS, TROUBLE HEARING				
YES.....	28.4	30.6	37.5	50.2
NO.....	15.0	14.8	18.2	26.8
OVERALL HEARING RATING				
BOTH EARS GOOD.....	14.9	14.7	17.9	26.4
ONE EAR GOOD, OTHER WORSE.....	29.4	30.2	36.4	48.5
ONE SOME IMPAIRMENT OTHER SAME OR WORSE	26.0	29.6	38.5	53.7
ONE EAR SEVERE IMPAIRMENT OTHER SAME OR WORSE	53.3	58.4	67.9	79.2
DEAF BOTH EARS.....	83.7	90.9	92.0	94.0

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

Table 3.102

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 500, 1000,  
2000 AND 4000 HERTZ IN THE RIGHT EAR BY CAUSES OF HEARING PROBLEM:  
UNITED STATES, 1971-1975

CAUSE OF HEARING PROBLEM	MEAN LEVEL 500 HERTZ	MEAN LEVEL 1000 HERTZ	MEAN LEVEL 2000 HERTZ	MEAN LEVEL 4000 HERTZ
<b>EAR INFECTION</b>				
YES.....	19.7	20.7	22.5	30.6
NO.....	12.2	12.4	14.6	22.3
<b>BORN WITH IT</b>				
YES.....	23.9	28.1	32.2	37.7
NO.....	12.4	12.6	14.7	22.5
<b>LOUD NOISE</b>				
YES.....	18.0	21.3	29.6	46.1
NO.....	12.2	12.4	14.3	21.7
<b>EAR SURGERY</b>				
YES.....	29.2	32.2	32.0	40.2
NO.....	12.4	12.6	14.8	22.5
<b>EAR INJURY</b>				
YES.....	20.8	20.5	25.7	41.0
NO.....	12.4	12.6	14.8	22.5
<b>OTHER</b>				
YES.....	25.7	26.1	31.6	43.1
NO.....	11.9	12.2	14.2	21.8

1/ RE AUDIOLOGIC ZERO (ANSI, 1969)

Table 3.103

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 500, 1000, 2000 AND 4000 HERTZ IN THE LEFT EAR BY CAUSES OF HEARING PROBLEM; UNITED STATES, 1971-1975

CAUSE OF HEARING PROBLEM	MEAN LEVEL 500 HERTZ	MEAN LEVEL 1000 HERTZ	MEAN LEVEL 2000 HERTZ	MEAN LEVEL 4000 HERTZ
<b>EAR INFECTION</b>				
YES.....	19.7	20.6	24.3	33.5
NO.....	12.2	11.9	15.4	23.8
<b>BORN WITH IT</b>				
YES.....	24.0	23.6	31.4	39.0
NO.....	12.4	12.1	15.5	24.0
<b>LOUD NOISE</b>				
YES.....	16.9	19.8	29.8	47.2
NO.....	12.3	11.8	15.1	23.2
<b>EAR SURGERY</b>				
YES.....	22.3	25.2	30.6	38.1
NO.....	12.4	12.1	15.6	24.0
<b>EAR INJURY</b>				
YES.....	26.6	27.4	32.0	46.9
NO.....	12.3	12.0	15.5	23.9
<b>OTHER</b>				
YES.....	23.2	22.9	31.4	42.2
NO.....	12.0	11.7	15.0	23.4

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

Table 3.104

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 500, 1000,  
2000 AND 4000 HERTZ IN THE BETTER EAR BY CAUSES OF HEARING PROBLEM:  
UNITED STATES, 1971-1975

CAUSE OF HEARING PROBLEM	MEAN LEVEL 500 HERTZ	MEAN LEVEL 1000 HERTZ	MEAN LEVEL 2000 HERTZ	MEAN LEVEL 4000 HERTZ
<b>EAR INFECTION</b>				
YES.....	14.6	15.5	17.7	25.3
NO.....	9.5	9.3	11.4	18.5
<b>BORN WITH IT</b>				
YES.....	17.0	17.4	24.4	28.4
NO.....	9.6	9.5	11.6	18.7
<b>LOUD NOISE</b>				
YES.....	13.9	16.6	24.5	40.4
NO.....	9.5	9.3	11.1	17.9
<b>EAR SURGERY</b>				
YES.....	16.8	20.2	21.3	29.8
NO.....	9.6	9.5	11.6	18.7
<b>EAR INJURY</b>				
YES.....	16.5	15.5	20.9	36.1
NO.....	9.6	9.5	11.6	18.6
<b>OTHER</b>				
YES.....	20.0	20.2	26.2	37.6
NO.....	9.3	9.1	11.1	18.0

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

Table 3.105

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 500, 1000, 2000 AND 4000 HERTZ IN THE WORSE EAR BY CAUSES OF HEARING PROBLEMS: UNITED STATES, 1971-1975

CAUSE OF HEARING PROBLEM	MEAN LEVEL 500 HERTZ	MEAN LEVEL 1000 HERTZ	MEAN LEVEL 2000 HERTZ	MEAN LEVEL 4000 HERTZ
<b>EAR INFECTION</b>				
YES.....	26.1	27.2	30.4	40.2
NO.....	15.1	15.1	18.6	27.7
<b>BORN WITH IT</b>				
YES.....	31.7	34.3	39.2	49.1
NO.....	15.3	15.4	18.8	28.0
<b>LOUD NOISE</b>				
YES.....	21.1	24.5	34.9	52.9
NO.....	15.2	15.1	18.3	27.1
<b>EAR SURGERY</b>				
YES.....	41.5	43.9	48.4	55.5
NO.....	15.3	15.4	18.9	28.0
<b>EAR INJURY</b>				
YES.....	30.8	32.3	37.6	52.8
NO.....	15.3	15.4	18.8	27.9
<b>OTHER</b>				
YES.....	30.0	30.7	37.2	48.4
NO.....	14.9	14.9	18.2	27.3

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

Table 3.106

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 500, 1000,  
2000 AND 4000 HERTZ IN THE RIGHT EAR BY ASSESSMENT OF SPEECH AND SOUND  
UNDERSTANDING: UNITED STATES, 1974-1975

SELF ASSESSMENT	MEAN LEVEL 500 HERTZ	MEAN LEVEL 1000 HERTZ	MEAN LEVEL 2000 HERTZ	MEAN LEVEL 4000 HERTZ
UNDERSTAND WHISPER..	12.5	12.3	14.2	21.9
UNDERSTAND TALKING..	19.5	19.8	26.5	35.8
UNDERSTAND SHOUT.....	37.2	44.8	54.5	60.0
UNDERSTAND LOUD SPEECH.....	52.1	57.7	60.5	64.8
HEAR LOUD NOISE.....	75.0	75.0	95.0	99.0

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

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Table 3.107

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 500, 1000, 2000 AND 4000 HERTZ IN THE LEFT EAR BY ASSESSMENT OF SPEECH AND SOUND UNDERSTANDING; UNITED STATES, 1974-1975

SELF ASSESSMENT	MEAN LEVEL 500 HERTZ	MEAN LEVEL 1000 HERTZ	MEAN LEVEL 2000 HERTZ	MEAN LEVEL 4000 HERTZ
UNDERSTAND WHISPER...	12.9	12.5	15.6	24.1
UNDERSTAND TALKING...	19.0	20.7	29.0	38.3
UNDERSTAND SHOUT....	35.9	43.4	53.0	59.1
UNDERSTAND LOUD SPEECH.....	49.9	53.4	60.3	62.9
HEAR LOUD NOISE.....	65.0	75.0	75.0	70.0

1/ RE AURIOMETRIC ZERO (ANSI, 1969)

Table 3.108

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 500, 1000, 2000 AND 4000 HERTZ IN THE BETTER EAR BY ASSESSMENT OF SPEECH AND SOUND UNDERSTANDING: UNITED STATES, 1974-1975

SELF ASSESSMENT	MEAN LEVEL 500 HERTZ	MEAN LEVEL 1000 HERTZ	MEAN LEVEL 2000 HERTZ	MEAN LEVEL 4000 HERTZ
UNDERSTAND WHISPER...	9.4	9.3	11.4	18.1
UNDERSTAND TALKING...	15.5	15.8	22.6	31.5
UNDERSTAND SHOUT....	31.0	39.0	48.9	55.0
UNDERSTAND LOUD SPEECH.....	49.9	52.0	57.7	58.9
HEAR LOUD NOISE.....	65.0	75.0	75.0	70.0

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

Table 3.109

MEAN AIR CONDUCTION HEARING LEVELS (IN DECIBELS) 1/ AT 500, 1000,  
2000 AND 4000 HERTZ IN THE WORSE EAR BY ASSESSMENT OF SPEECH AND SOUND  
UNDERSTANDING: UNITED STATES, 1974-1975

SELF ASSESSMENT	MEAN LEVEL 500 HERTZ	MEAN LEVEL 1000 HERTZ	MEAN LEVEL 2000 HERTZ	MEAN LEVEL 4000 HERTZ
UNDERSTAND WHISPER..	15.9	15.5	18.5	27.9
UNDERSTAND TALKING..	23.1	24.8	33.1	42.6
UNDERSTAND SHOUT....	42.6	50.6	58.9	64.4
UNDERSTAND LOUD SPEECH.....	52.1	59.1	63.2	68.8
HEAR LOUD NOISE.....	75.0	75.0	95.0	99.0

1/ RE AUDIOMETRIC ZERO (ANSI, 1969)

Table 3.110

Prevalence of Hearing Impairment (Under 7 Alternative Definitions) in the Right Ear by Selected Self Report Items: United States, 1971-1975

SELF ASSESSMENT	AVERAGE .5,1,2 KHZ			AVERAGE .5,1,2,4 KHZ		AVERAGE 1,2,4 KHZ	
	> 15	> 20	> 25	> 20	> 25	> 25	> 30
<b>TINNITUS</b>							
YES.....	59.6	47.9	35.1	50.3	52.0	53.5	44.5
NO.....	29.2	18.5	12.7	26.0	17.0	20.8	14.0
<b>RINGING, OTHER NOISE</b>							
YES.....	41.5	30.4	21.8	39.1	31.2	34.0	26.4
NO.....	24.3	14.1	8.0	22.0	13.4	17.1	11.2
<b>RUNNING, DISCHARGE</b>							
YES.....	50.6	41.0	33.9	46.2	42.1	42.8	34.4
NO.....	39.1	27.7	18.6	37.2	28.3	31.7	24.2
<b>DEAFNESS, TROUBLE HEARING</b>							
YES.....	70.0	59.7	47.1	69.6	61.1	63.9	55.1
NO.....	27.4	16.0	9.3	24.0	16.4	19.2	12.1
<b>RIGHT EAR RATING</b>							
GOOD.....	29.3	18.2	10.8	35.7	18.2	20.9	13.6
LITTLE DECREASED.....	70.8	58.8	44.0	74.4	64.4	67.4	59.8
SEVERELY DECREASED..	96.8	86.2	79.3	92.4	85.0	85.1	75.2
DEAF.....	100.0	100.0	91.0	100.0	91.0	91.0	91.0

Table 3.111

Prevalence of Hearing Impairment (Under 7 Alternative Definitions) in the Left Ear by Selected Self Report Items: United States, 1971-1975

SELF ASSESSMENT	AVERAGE .5,1,2 KHZ			AVERAGE .5,1,2,4 KHZ		AVERAGE 1,2,4 KHZ	
	> 15	> 20	> 25	> 20	> 25	> 25	> 30
<b>TINNITUS</b>							
YES.....	56.9	42.1	32.3	57.9	45.0	50.5	39.4
NO.....	34.7	22.6	14.9	31.2	22.3	25.5	18.3
<b>RINGING, OTHER NOISE</b>							
YES.....	42.0	29.0	20.6	40.0	30.1	33.9	25.3
NO.....	20.2	14.5	9.0	24.5	15.0	19.1	12.3
<b>RUNNING, DISCHARGE</b>							
YES.....	51.3	37.0	20.7	49.0	38.6	41.4	33.7
NO.....	39.9	26.9	18.7	37.8	20.1	32.1	23.4
<b>DEAFNESS, TROUBLE HEARING</b>							
YES.....	63.7	50.0	41.3	64.0	54.5	59.0	48.1
NO.....	31.6	18.5	10.7	20.1	18.3	21.9	14.4
<b>LEFT EAR RATING</b>							
GOOD.....	32.4	19.7	11.3	29.2	19.4	22.7	15.3
LITTLE DECREASED.....	64.7	47.3	37.0	66.3	54.7	61.5	45.6
SEVERELY DECREASED.....	92.0	84.7	78.5	94.7	85.7	89.5	83.2
DEAF.....	100.0	88.3	80.3	100.0	95.2	100.0	95.2

Table 3.112

Prevalence of Hearing Impairment (Under 7 Alternative Definitions) in the Better Ear by Selected Self Report Items: United States, 1971-1975

SELF ASSESSMENT	AVERAGE .5, 1, 2 KHZ			AVERAGE .5, 1, 2, 4 KHZ		AVERAGE 1, 2, 4 KHZ	
	> 15	> 20	> 25	> 20	> 25	> 25	> 30
<b>TINNITUS</b>							
YES.....	51.6	41.4	27.3	54.0	44.7	40.8	31.4
NO.....	21.8	13.9	7.6	20.5	12.6	14.6	9.1
<b>RINGING, OTHER NOISE</b>							
YES.....	33.9	25.1	15.6	34.0	25.6	25.2	18.1
NO.....	17.8	9.2	5.3	16.8	9.6	10.3	6.1
<b>RUNNING, DISCHARGE</b>							
YES.....	41.2	31.6	22.4	41.2	31.4	29.7	21.4
NO.....	32.0	23.3	13.8	32.2	24.1	24.1	17.3
<b>DEAFNESS, TROUBLE HEARING</b>							
YES.....	63.7	51.6	36.1	65.7	52.6	50.5	38.7
NO.....	19.2	11.9	5.4	18.4	12.2	12.8	8.0
<b>OVERALL HEARING RATING</b>							
BOTH EARS GOOD.....	19.5	11.8	5.5	18.1	12.0	12.7	7.9
ONE EAR GOOD, OTHER WORSE.....	49.0	35.2	19.1	52.6	37.0	31.1	22.5
ONE SOME IMPAIRMENT OTHER SAME OR WORSE	71.2	62.1	41.3	75.3	61.8	62.9	44.3
ONE EAR SEVERE IMPAIRMENT OTHER SAME OR WORSE	100.0	84.9	80.5	100.0	89.4	83.8	80.5
DEAF BOTH EARS.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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Table 3.114

Prevalence of Hearing Impairment (Under 7 Alternative Definitions) in the Right Ear by Causes of Hearing Problem: United States, 1971-1975

CAUSES OF HEARING PROBLEM	AVERAGE .5,1,2 KHZ			AVERAGE .5,1,2,4 KHZ		AVERAGE 1,2,4 KHZ	
	> 15	> 20	> 25	> 20	> 25	> 25	> 30
<b>EAR INFECTION</b>							
YES.....	46.5	38.0	30.1	42.3	35.4	36.6	31.7
NO.....	39.2	27.5	18.8	36.1	27.7	31.0	23.4
<b>BORN WITH IT</b>							
YES.....	73.6	57.0	54.5	58.8	54.5	51.2	31.4
NO.....	39.3	28.0	19.2	36.3	28.0	31.2	23.9
<b>LOUD NOISE</b>							
YES.....	62.6	51.4	43.1	68.7	58.1	63.0	52.4
NO.....	37.7	26.3	17.6	33.7	25.7	20.7	21.5
<b>EAR SURGERY</b>							
YES.....	51.8	51.8	51.8	51.8	51.8	51.8	48.2
NO.....	39.6	28.1	19.3	36.4	28.1	31.2	23.7
<b>EAR INJURY</b>							
YES.....	58.4	36.0	28.7	57.6	37.2	49.2	37.2
NO.....	39.4	28.1	19.4	36.1	28.1	31.1	23.7
<b>OTHER</b>							
YES.....	61.7	50.7	43.1	58.4	53.4	54.5	48.1
NO.....	37.8	26.3	17.5	34.6	26.0	29.4	21.8



Table 3.115

Prevalence of Hearing Impairment (Under 7 Alternative Definitions) in the Left Ear by Causes of Hearing Problem: United States, 1971-1975

CAUSES OF HEARING PROBLEM	AVERAGE .5,1,2 KHZ			AVERAGE .5,1,2,4 KHZ		AVERAGE 1,2,4 KHZ	
	> 15	> 20	> 25	> 20	> 25	> 25	> 30
<b>EAR INFECTION</b>							
YES.....	51.2	40.2	31.9	51.9	37.0	45.8	35.1
NO.....	41.4	28.3	19.7	39.1	29.5	32.9	24.6
<b>BORN WITH IT</b>							
YES.....	77.2	75.4	44.4	73.5	62.3	71.0	38.7
NO.....	41.7	28.6	20.3	39.6	29.7	33.4	25.2
<b>LOUD NOISE</b>							
YES.....	62.4	50.6	37.7	69.9	56.2	63.3	49.8
NO.....	40.3	27.2	19.1	37.4	27.7	31.2	23.2
<b>EAR SURGERY</b>							
YES.....	90.4	75.1	63.0	90.4	71.7	71.7	55.5
NO.....	41.6	28.7	20.2	39.5	29.7	33.5	25.1
<b>EAR INJURY</b>							
YES.....	68.8	50.2	47.6	75.3	66.0	73.6	51.3
NO.....	41.6	28.7	20.1	39.3	29.4	33.1	24.9
<b>OTHER</b>							
YES.....	65.9	54.6	44.7	62.4	57.1	58.9	50.1
NO.....	39.9	26.8	18.4	38.0	27.6	31.6	23.1

Table 3.116

Prevalence of Hearing Impairment (Under 7 Alternative Definitions) in the Better Ear by Causes of Hearing Problem: United States, 1971-1975

CAUSES OF HEARING PROBLEM	AVERAGE .5,1,2 KHZ			AVERAGE .5,1,2,4 KHZ		AVERAGE 1,2,4 KHZ	
	> 15	> 20	> 25	> 20	> 25	> 25	> 30
<b>EAR INFECTION</b>							
YES.....	39.1	29.9	23.0	37.3	28.1	26.9	23.1
NO.....	31.0	20.4	12.6	29.7	21.5	19.9	14.3
<b>BORN WITH IT</b>							
YES.....	64.1	47.5	28.8	40.6	34.4	34.8	25.5
NO.....	31.2	20.8	13.1	30.1	21.8	20.3	14.7
<b>LOUD NOISE</b>							
YES.....	51.0	40.3	28.3	58.1	48.9	42.0	34.7
NO.....	29.9	19.4	12.0	27.8	19.6	18.5	13.1
<b>EAR SURGERY</b>							
YES.....	48.2	44.6	32.5	48.2	41.2	32.5	25.0
NO.....	31.4	20.8	13.1	30.0	21.8	20.3	14.7
<b>EAR INJURY</b>							
YES.....	51.5	33.7	26.3	54.2	32.7	30.4	22.8
NO.....	31.2	20.8	13.0	29.8	21.7	20.1	14.7
<b>OTHER</b>							
YES.....	55.1	41.6	33.4	50.9	44.8	40.9	32.8
NO.....	29.5	19.2	11.5	28.4	19.9	10.6	13.2

Table 3.117

Prevalence of Hearing Impairment (Under 7 Alternative Definitions) in the Worse Ear by Causes of Hearing Problem: United States, 1971-1975

CAUSES OF HEARING PROBLEM	AVERAGE .5,1,2 KHZ			AVERAGE .5,1,2,4 KHZ		AVERAGE 1,2,4 KHZ	
	> 15	> 20	> 25	> 20	> 25	> 25	> 30
<b>EAR INFECTION</b>							
YES.....	65.7	48.2	39.9	56.9	44.3	50.5	41.3
NO.....	55.8	35.3	25.9	45.5	35.7	39.4	29.9
<b>DORN WITH IT</b>							
YES.....	86.7	84.9	70.1	91.7	82.4	87.4	44.6
NO.....	56.1	35.7	26.4	45.8	35.8	39.6	30.5
<b>LOUD NOISE</b>							
YES.....	86.3	61.2	52.1	80.5	65.6	73.7	57.8
NO.....	53.8	34.0	24.6	43.3	33.8	37.2	28.3
<b>EAR SURGERY</b>							
YES.....	94.0	82.3	82.3	94.0	82.3	82.3	78.6
NO.....	56.1	35.8	26.4	45.8	35.9	39.8	30.3
<b>EAR INJURY</b>							
YES.....	75.6	52.4	49.8	78.5	70.1	75.6	61.9
NO.....	56.1	35.9	26.4	45.7	35.7	39.5	30.1
<b>OTHER</b>							
YES.....	83.0	63.6	54.3	69.9	65.5	66.7	59.4
NO.....	54.1	33.0	24.4	44.1	33.7	37.8	28.1

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Table 3.118

Prevalence of Hearing Impairment (Under 7 Alternative Definitions) in the Right Ear by Assessment of Speech and Sound Understanding: United States, 1974-1975

SELF ASSESSMENT	AVERAGE .5,1,2 KHZ			AVERAGE .5,1,2,4 KHZ		AVERAGE 1,2,4 KHZ	
	> 15	> 20	> 25	> 20	> 25	> 25	> 30
	UNDERSTAND WHISPER...	28.8	18.3	9.9	25.0	16.6	19.1
UNDERSTAND TALKING...	50.3	43.5	32.2	57.2	48.0	52.6	41.4
UNDERSTAND SHOUT.....	88.2	85.2	83.8	88.2	85.6	83.9	83.9
UNDERSTAND LOUD SPEECH.....	100.0	100.0	73.1	100.0	100.0	100.0	100.0
HEAR LOUD NOISE.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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Table 3.119

Prevalence of Hearing Impairment (Under 7 Alternative Definitions) in the Left Ear by Assessment of Speech and Sound Understanding: United States, 1974-1975

SELF ASSESSMENT	AVERAGE .5,1,2 KHZ			AVERAGE .5,1,2,4 KHZ		AVERAGE 1,2,4 KHZ	
	>15	>20	>25	>20	>25	>25	>30
UNDERSTAND WHISPER..	32.5	20.4	12.3	29.7	19.2	23.1	15.6
UNDERSTAND TALKING..	61.1	47.7	34.7	58.3	47.4	53.6	41.6
UNDERSTAND SHOUT....	87.8	81.4	76.1	88.7	83.1	83.1	80.2
UNDERSTAND LOUD SPEECH.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
HEAR LOUD NOISE.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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Table 3.120

Prevalence of Hearing Impairment (Under 7 Alternative Definitions) in the Better Ear by Assessment of Speech and Sound Understanding: United States, 1974-1975

SELF ASSESSMENT	AVERAGE .5,1,2 KHZ			AVERAGE .5,1,2,4 KHZ		AVERAGE 1,2,4 KHZ	
	≥ 15	≥ 20	≥ 25	≥ 20	≥ 25	≥ 25	≥ 30
	UNDERSTAND WHISPER...	21.0	13.6	6.1	19.7	12.8	12.0
UNDERSTAND TALKING...	50.2	37.8	21.1	51.7	39.0	41.1	28.8
UNDERSTAND SHOUT....	83.3	75.3	73.9	85.9	78.9	72.2	69.0
UNDERSTAND LOUD SPEECH.....	100.0	100.0	73.1	100.0	100.0	100.0	100.0
HEAR LOUD NOISE.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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Table 3.121

Prevalence of Hearing Impairment (Under 7 Alternative Definitions) in the Worse Ear by Assessment of Speech and Sound Understanding: United States, 1974-1975

SELF ASSESSMENT	AVERAGE .5,1,2 KHZ			AVERAGE .5,1,2,4 KHZ		AVERAGE 1,2,4 KHZ	
	>15	>20	>25	>20	>25	>25	>30
UNDERSTAND WHISPER...	40.3	25.2	16.1	35.0	22.9	27.2	18.2
UNDERSTAND TALKING...	69.2	53.3	45.7	63.8	56.4	59.1	50.9
UNDERSTAND SHOUT.....	97.3	90.9	85.7	90.9	89.6	89.6	86.7
UNDERSTAND LOUD SPEECH.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
HEAR LOUD NOISE.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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Table 3.122

MEAN SPEECH DISCRIMINATION SCORES AT 2000 SENSATION LEVEL  
IN THE RIGHT, LEFT, BETTER AND WORSE EARS BY SELECTED SELF  
REPORT ITEMS: UNITED STATES, 1974-1975

SELF REPORT ITEM	MEAN SCORE RIGHT EAR	MEAN SCORE LEFT EAR	MEAN SCORE BETTER EAR	MEAN SCORE WORSE EAR
TINNITUS				
YES.....	72.5	72.5	81.7	63.3
NO.....	86.1	86.7	92.4	80.4
RINGING, OTHER NOISE				
YES.....	81.3	81.7	88.6	74.4
NO.....	87.1	86.5	92.4	81.4
RUNNING, DISCHARGE				
YES.....	74.1	79.4	86.5	66.9
NO.....	82.9	82.2	89.1	76.1
DEAFNESS, TROUBLE HEARING				
YES.....	64.1	67.8	76.4	55.5
NO.....	87.1	86.4	92.8	80.8
OVERALL HEARING RATING				
BOTH EARS GOOD.....	87.1	86.3	92.7	80.7
ONE GOOD OTHER WORSE.....	68.6	74.1	82.7	60.0
ONE SOME IMPAIRMENT OTHER SAME OR WORSE	60.3	64.6	72.9	52.0
ONE SEVERE IMPAIRMENT OTHER SAME OR WORSE	36.3	38.1	49.2	25.2



Table 3.123

MEAN SPEECH DISCRIMINATION SCORES AT 2000 SENSATION LEVEL  
 IN THE RIGHT, LEFT, BETTER AND WORSE EARS BY CAUSES OF HEARING PROBLEM;  
 UNITED STATES, 1974-1975

CAUSE OF HEARING PROBLEM	MEAN SCORE RIGHT EAR	MEAN SCORE LEFT EAR	MEAN SCORE BETTER EAR	MEAN SCORE WORSE EAR
<b>EAR INFECTION</b>				
YES.....	74.4	71.6	82.5	63.4
NO.....	86.7	86.2	92.1	80.8
<b>BORN WITH IT</b>				
YES.....	53.2	77.9	83.0	48.1
NO.....	86.6	85.8	91.9	80.5
<b>LOUD NOISE</b>				
YES.....	73.6	73.9	82.4	64.6
NO.....	86.9	86.2	92.2	80.9
<b>EAR SURGERY</b>				
YES.....	97.7	60.1	97.7	60.1
NO.....	86.4	85.8	91.8	80.4
<b>EAR INJURY</b>				
YES.....	82.2	79.5	86.4	75.4
NO.....	86.5	85.8	91.9	80.4
<b>OTHER</b>				
YES.....	63.5	67.9	76.8	54.6
NO.....	87.1	86.3	92.3	81.2

Table 3.124

MEAN SPEECH DISCRIMINATION SCORES AT 20DB SENSATION LEVEL  
 IN THE RIGHT, LEFT, BETTER AND WORSE EARS BY ASSESSMENT OF SPEECH AND SOUND  
 UNDERSTANDING: UNITED STATES, 1974-1975

SELF ASSESSMENT	MEAN SCORE RIGHT EAR	MEAN SCORE LEFT EAR	MEAN SCORE BETTER EAR	MEAN SCORE WORSE EAR
UNDERSTAND WHISPER..	85.4	84.8	90.9	79.3
UNDERSTAND TALKING..	75.1	75.8	85.2	65.0
UNDERSTAND SHOUT....	39.5	56.7	60.8	35.4
UNDERSTAND LOUD SPEECH.....	56.0	10.0	56.0	10.0

Table 3.125

Significance Tests (F Statistics) of Differences in Air Conduction  
Hearing Levels at 500, 1000, 2000 and 4000 Hz in  
the Right and Left Ears by Self Assessment Categories  
United States 1971-1975

	Right Ear				Left Ear			
	500	1000	2000	4000	500	1000	2000	4000
Right Ear Rating	159.92***	209.56***	207.95***	215.62***	—	—	—	—
Left Ear Rating	—	—	—	—	117.39***	154.92***	222.63***	247.78***
Deafness or Trouble Hearing	203.82***	245.58***	302.75***	356.71***	171.62***	227.14***	323.07***	365.20***
<u>Causes:</u>								
Ear Infection	33.46***	33.06***	26.88***	23.57***	28.39***	43.15***	43.18***	41.39***
Born With It	9.30**	18.97***	16.50***	7.33**	11.70***	10.25**	17.85***	9.10***
Loud Noises	28.15***	45.51***	86.71***	125.19***	15.92***	35.74***	72.41***	133.66***
Ear Surgery	7.08**	8.33**	5.63*	6.11*	9.91**	11.21***	15.33***	17.35***
Ear Injury	12.45***	9.78**	5.92*	13.40***	27.66***	31.38***	21.26***	22.58***
Other	65.92***	62.60***	80.74***	104.82***	66.54***	60.98***	82.71***	85.02***
Ringing (Ever)	83.56***	77.02***	98.97***	72.31***	73.11***	75.21***	90.20***	86.61***
Ringing (Often)	33.77***	49.05***	75.80***	59.96***	34.89***	51.40***	79.17***	74.07***
Running	32.49***	30.33***	28.01***	26.48***	54.92***	48.04***	41.93***	28.39***
Ability to Understand Speech and Sounds	1173.74***	702.28***	79043.25***	21545.66***	769.16***	737.93***	1251.69***	651.63***

\*Significant at the .05 level.

\*\*Significant at the .01 level.

\*\*\*Significant at the .001 level.

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Table 3.126

Significance Tests (F Statistics) of Differences in Speech  
Discrimination Scores at 20 dB SL in the Right  
and Left Ears by Self Assessment Categories  
United States 1971-1975

	Speech Discrimination Score: Right Ear	Speech Discrimination Score: Left Ear
Right Ear Rating	31.09***	—
Left Ear Rating	—	490.05***
Deafness or Trouble Hearing	127.19***	84.16***
<u>Causes:</u>		
Ear Infection	7.32**	8.40**
Born With It	4.65*	.88
Loud Noises	17.21***	17.37***
Ear Surgery	30.30*	.70
Ear Injury	.21	.65
Other	29.36***	17.12***
Ringing (Ever)	25.61***	19.62***
Ringing (Often)	26.23***	18.23***
Running	21.37***	10.14**
Ability to Understand Speech and Sounds	1442.92***	2953.97***

\*Significant at the .05 level.

\*\*Significant at the .01 level.

\*\*\*Significant at the .001 level.

Table 3.127

Significance Tests (F Statistics) of Difference in the Prevalence of  
Hearing Impairment (Under 7 Definitions) in the Right  
Ear by Self-Assessment Categories

	Average of 500, 1000 and 2,000 Hz			Average of 500, 1000, 2000 and 4000 Hz		Average of 1000, 2000, and 4000 Hz	
	>15	>20	>25	>20	>25	>25	>30
Right Ear Rating	2582.17***	9046.23***	535.06***	259.76***	550.16***	520.86***	538.57***
Deafness or Trouble Hearing	243.33***	294.87***	327.40***	329.96***	375.52***	352.97***	378.02***
<u>Causes:</u>							
Ear Infection	13.76***	25.58***	32.01***	17.23***	25.26***	19.59***	19.45***
Born With It	19.33***	21.74***	23.26***	18.29***	20.16***	20.79***	9.81**
Loud Noises	53.46***	73.06***	71.61***	101.34***	88.62***	109.49***	83.44***
Ear Surgery	4.72*	8.29**	9.95**	5.67*	9.43**	7.75**	7.46**
Ear Injury	6.30*	4.37*	4.33*	11.62***	5.12*	7.95**	6.63**
Other	86.77***	80.90***	66.53***	103.47***	101.36***	97.23***	100.77***
Ringing (Ever)	104.15***	109.20***	105.21***	97.39***	129.96***	105.02***	89.69***
Ringing (Often)	67.79***	52.08***	55.99***	60.92***	70.06***	65.15***	54.30***
Running	24.67***	26.63***	25.24***	24.28***	32.73***	31.69***	23.51***
Ability to Understand Speech and Sounds	6645.23***	10281.45***	20861.93***	6669.81***	11340.14***	9079.29***	16810.46***

\*Significant at the .05 level.

\*\*Significant at the .01 level.

\*\*\*Significant at the .001 level.

Table 3.128

Significance Tests (F Statistics) of Difference in the Prevalence of  
Hearing Impairment (Under 7 Definitions) in the Left  
Ear by Self-Assessment Categories

	Average of 500, 1000 and 2,000 Hz			Average of 500, 1000, 2000 and 4000 Hz		Average of 1000, 2000, and 4000 Hz	
	>15	>20	>25	>20	>25	>25	>30
Left Ear Rating	678.47***	219.19***	223.80***	748.27***	276.80***	778.29***	306.20***
Deafness or Trouble Hearing	226.97***	278.03***	253.68***	286.80***	303.15***	322.83***	323.30***
<u>Causes:</u>							
Ear Infection	26.27***	24.84***	27.92***	32.40***	23.37***	30.14***	27.46***
Born With It	12.80***	10.79**	8.83**	10.01**	12.07***	12.90***	8.25**
Loud Noises	40.03***	68.41***	64.72***	92.79***	82.82***	103.08***	94.39***
Ear Surgery	21.90***	15.96***	7.01**	16.83***	9.37**	11.10***	5.26*
Ear Injury	24.61***	26.11***	24.23***	33.96***	35.40***	27.88***	21.03***
Other	65.92***	78.86***	56.92***	76.41***	82.02***	85.70***	80.75***
Ringing (Ever)	97.19***	95.04***	83.68***	95.05***	104.24***	91.56***	91.19***
Ringing (Often)	79.01***	56.70***	59.53***	97.85***	77.56***	85.51***	77.23***
Running	44.99***	28.61***	37.63***	25.39***	31.86***	18.67***	36.70***
Ability to Understand Speech and Sounds	5220.24***	11165.84***	21300.91***	5550.30***	12835.57***	8414.98***	15664.77***

\*Significant at the .05 level.

\*\*Significant at the .01 level.

\*\*\*Significant at the .001 level.

Table 4.1

Means, Standard Errors and Significance Tests (F Statistics)  
of Differences in Air Conduction Hearing Levels and Measures  
of Shift (Left Ear) by Occupational Noise Exposure  
MALES

Variable	< 70 dB X (s.e.)	71-75 dB X (s.e.)	76-80 dB X (s.e.)	81-85 dB X (s.e.)	86-90 dB X (s.e.)	91-95 dB X (s.e.)	≥ 96 dB X (s.e.)	F Statistic (Uncontrolled)	F Statistic (Controlling for age & race)
Hearing Level 500 Hz	6.30 (1.10)	10.99 (.51)	11.36 (.82)	11.56 (.72)	12.29 (.03)	12.33 (.99)	11.18 (1.58)	7.62**	7.70**
Hearing Level 1000 Hz	5.76 (1.10)	11.09 (.56)	10.45 (.82)	11.90 (.76)	12.40 (.71)	12.06 (.88)	10.85 (1.78)	8.48**	10.62**
Hearing Level 2000 Hz	9.90 (2.35)	14.08 (.73)	13.46 (.91)	16.49 (1.15)	19.36 (.92)	17.70 (1.21)	19.55 (2.72)	33.35**	40.60**
Hearing Level 4000 Hz	17.60 (5.27)	26.30 (1.17)	23.53 (1.23)	32.76 (1.45)	35.95 (1.35)	34.20 (2.07)	38.33 (3.98)	67.87**	82.19**
Average of 1000, 2000, & 4000 : 25 dB	17.66 (8.03)	21.65 (2.07)	17.56 (2.26)	29.50 (2.73)	35.35 (2.75)	30.54 (3.48)	37.93 (7.67)	34.37**	40.81**
Absolute Shift to 4000 Hz from 500, 1000 and 2000 Hz	10.28 (4.46)	14.24 (.88)	11.90 (1.00)	19.33 (1.17)	21.24 (1.22)	20.17 (1.77)	24.47 (3.38)	50.34***	55.96***
Absolute Shift to 4000 Hz from 500 and 1000 Hz	11.57 (5.01)	15.24 (.95)	12.76 (1.09)	20.95 (1.31)	23.57 (1.42)	22.00 (1.83)	27.32 (3.65)	55.15***	62.53***
Percentage Shift to 4000 Hz from 500, 1000 & 2000 Hz	.35 (.16)	.46 (.03)	.30 (.04)	.61 (.04)	.64 (.04)	.64 (.06)	.79 (.12)	37.37***	40.73***
Percentage Shift to 4000 Hz from 500 & 1000 Hz	.48 (.24)	.52 (.03)	.42 (.04)	.70 (.05)	.80 (.05)	.73 (.07)	.98 (.14)	44.24***	50.69***
Tinnitus	3.96 (2.58)	5.19 (0.95)	7.72 (1.79)	7.93 (1.59)	9.08 (1.51)	9.18 (2.33)	10.43 (3.48)	3.13	3.45

\*Significant at the .05 level.

\*\*Significant at the .01 level.

\*\*\*Significant at the .001 level.

Table 4.2  
 Regression Equations and Fitted Values for Regressions  
 of Air Conduction Hearing Levels at 500, 1000, 2000  
 and 4000 Hz with Age, Occupational Exposure and Race  
 MALES

Part A: Regression Equations

	<u>500 Hz</u>	<u>1000 Hz</u>	<u>2000 Hz</u>	<u>4000 Hz</u>
Intercept	.5762	1.4240	2.6503	-11.362
Age	.1472	.0255	-.0390	1.0442
Age <sup>2</sup>	.00107	.00327	.00585	-.00215
Noise Exposure	.4177	.2912	.1146	.816
Noise Exposure <sup>2</sup>	-.0089	-.00478	-.000218	-.00998
Age X Noise Exposure	-.000755	-.00206	.00635	.00665
Race	-.8051	-.3986	-1.869	-11.430

Part B: Fitted Values

<u>Age</u>	<u>Exposure</u>	<u>500 Hz</u>	<u>1000 Hz</u>	<u>2000 Hz</u>	<u>4000 Hz</u>
30	75	7.76	7.31	7.29	14.08
	80	8.63	7.40	8.49	17.35
	85	9.21	8.07	9.69	20.26
	90	9.51	8.52	10.88	22.88
	95	9.53	8.82	12.06	25.20
40	75	10.47	9.84	11.51	23.54
	80	11.31	9.99	12.96	27.07
	85	11.86	10.59	14.41	30.25
	90	12.13	11.03	15.86	33.13
	95	12.12	11.30	17.29	35.72
50	75	12.27	13.02	16.88	32.58
	80	13.08	13.16	18.59	36.38
	85	13.60	13.75	20.30	39.82
	90	13.84	14.17	21.99	42.97
	95	13.80	14.46	23.68	45.83
60	75	14.85	16.86	23.43	41.19
	80	15.63	16.99	25.39	45.25
	85	16.09	17.50	27.35	48.96
	90	16.33	17.99	29.30	52.38
	95	16.25	18.27	31.24	55.50
70	75	17.65	21.34	31.16	49.37
	80	18.40	21.40	33.33	53.70
	85	18.86	22.04	35.58	57.68
	90	19.04	22.45	37.78	61.35
	95	18.93	22.70	39.98	64.74



Table 4.3

Means, Standard Errors and Significance Tests (F Statistics)  
of Differences in Air Conduction Hearing Levels and Measures  
of Shift (Left Ear) by Occupational Noise Exposure  
FEMALES

Variable	< 70 dB $\bar{X}$ (s.e.)	71-75 dB $\bar{X}$ (s.e.)	76-80 dB $\bar{X}$ (s.e.)	81-85 dB $\bar{X}$ (s.e.)	86-90 dB $\bar{X}$ (s.e.)	91-95 dB $\bar{X}$ (s.e.)	≥ 96 dB $\bar{X}$ (s.e.)	F Statistic (Uncontrolled)	F Statistic (Controlling for age & race)
Hearing Level 500 Hz	10.46 (1.12)	10.91 (.57)	10.55 (.49)	10.12 (1.22)	13.39 (.90)	9.85 (1.65)	-	4.28*	1.57
Hearing Level 1000 Hz	9.62 (1.28)	9.70 (.45)	9.30 (.55)	8.74 (1.02)	11.50 (.78)	6.35 (1.67)	-	2.25	.50
Hearing Level 2000 Hz	11.12 (2.01)	10.05 (.48)	10.23 (.62)	10.02 (1.12)	12.51 (1.20)	10.38 (3.03)	-	3.53	1.68
Hearing Level 4000 Hz	13.08 (1.75)	12.78 (.66)	12.61 (.75)	13.64 (1.35)	14.46 (1.35)	14.07 (2.13)	-	3.14	1.27
Average of 1000, 2000, & 4000 > 25 db	7.82 (5.32)	7.46 (1.14)	6.88 (1.28)	5.12 (3.14)	7.57 (2.08)	5.74 (5.83)	-	.61	.12
Absolute Shift to 4000 Hz from 500, 1000 and 2000 Hz	2.67 (1.19)	2.60 (.57)	2.59 (.55)	4.09 (1.13)	1.99 (.98)	5.21 (2.25)	-	.76	.23
Absolute Shift to 4000 Hz from 500 and 1000 Hz	3.04 (1.59)	2.53 (.67)	2.69 (.61)	4.28 (1.18)	2.01 (1.12)	5.97 (2.34)	-	.83	.29
Percentage Shift to 4000 Hz from 500, 1000 & 2000 Hz	.08 (.04)	.09 (.02)	.09 (.02)	.16 (.05)	.07 (.03)	.20 (.09)	-	1.05	.49
Percentage Shift to 4000 Hz from 500 & 1000 Hz	.10 (.05)	.09 (.02)	.09 (.02)	.16 (.04)	.08 (.04)	.20 (.08)	-	.78	.28
Tinnitus	5.92 (4.15)	2.86 (0.70)	7.35 (1.59)	2.75 (1.34)	10.44 (4.72)	6.10 (4.56)	-	1.91	1.66

\*Significant at the .05 level.

\*\*Significant at the .01 level.

\*\*\*Significant at the .001 level.

Table 4.4

Regression Equations [Coefficients and Standard Errors]  
of Age, Sex, Race and Occupational Noise Exposure on Air  
Conduction Hearing Levels and Measures of Shift in the Left Ear by Sex

	MALES				FEMALES			
	Intercept	Age at Exam	Race (White)	Occupational Noise Exposure	Intercept	Age at Exam	Race (White)	Occupational Noise Exposure
Air Conduction Hearing Level at 500 Hz	.8057 (1.4174)	.2325*** (.0203)	.7569 (.9076)	.2371** (.0854)	1.4534 (1.5841)	.2196*** (.0238)	-.8478 (.8589)	.1463 (.1169)
Air Conduction Hearing Level at 1000 Hz	-4.3061** (1.3784)	.3145*** (.0213)	.4046 (.9390)	.2762** (.0847)	.0994 (1.3461)	.2381*** (.0216)	-1.237 (.8026)	.0737 (.1041)
Air Conduction Hearing Level at 2000 Hz	-15.6671*** (2.0897)	.5712*** (.0321)	1.9758 (1.2896)	.7504*** (.1178)	-3.4543* (1.5933)	.3254*** (.0230)	-1.3341 (.9265)	.2029 (.1563)
Air Conduction Hearing Level at 4000 Hz	-32.4548*** (2.4774)	.9473*** (.0418)	11.39*** (1.3188)	1.6408*** (.1770)	-11.1080*** (2.0726)	.5433*** (.0370)	-.3994 (1.1043)	.2242 (.1992)
Average of 1000, 2000 & 4000 > 25 dB	-.6033*** (.0470)	.0138*** (.0008)	.1404*** (.0277)	.0219*** (.0041)	-.1783*** (.0376)	.0050*** (.0007)	-.0128 (.0208)	.0013 (.0036)
Absolute Shift to 4000 Hz from 500, 1000 & 2000 Hz	-25.6523*** (2.1413)	.5814*** (.0375)	10.3471*** (1.0107)	1.1693*** (.1568)	-10.5294*** (1.7240)	.2839*** (.0333)	.7695 (.9495)	.0810 (.1698)
Absolute Shift to 4000 Hz from 500 and 1000 Hz	-30.0098*** (2.2322)	.6809*** (.0388)	10.8165*** (1.0946)	1.3340*** (.1687)	-11.9591*** (1.8496)	.3166*** (.0347)	.6757 (.9918)	.1110 (.2064)
Percentage Shift to 4000 Hz from 500, 1000 & 2000 Hz	-.5801*** (.0841)	.0136*** (.0014)	.3213*** (.0382)	.0338*** (.0053)	-.3061*** (.0619)	.0084*** (.0012)	.0278 (.0363)	.0040 (.0057)
Percentage Shift to 4000 Hz from 500 & 1000 Hz	-.8178*** (.0940)	.0184*** (.0016)	.3803*** (.0402)	.0433*** (.0061)	-.3508*** (.0610)	.0097*** (.0012)	-.0169 (.0350)	.0035 (.0066)
Tinnitus	-.1043*** (.0293)	.0024*** (.0006)	-.0454*** (.0118)	-.0045 (.0024)	-.0349 (.0373)	.0017** (.0006)	-.0163 (.0199)	.0056 (.0043)

\*Significant at the .05 level.

\*\*Significant at the .01 level.

\*\*\*Significant at the .001 level.

Table 4.5

Significant Findings: Relationships Between Hearing Measures and Demographic Characteristics and Physical Characteristics and Habits Controlling for Age and Race by Sex

	MALES					FEMALES				
	500Hz	1000Hz	2000Hz	4000Hz	Prev. <sup>a</sup>	500Hz	1000Hz	2000Hz	4000Hz	Prev. <sup>a</sup>
Noise Exposure	**	**	***	***	***					
<u>Demographic Characteristics</u>										
Income		*	***	***	***		*	*	**	**
Marital Status			***	***	***			*	*	
Size of Place			***	***	***			*	*	
SMSA			***	***	***					
Farm	*		*	**					***	
Region						**		***	***	**
Education	***	***	***	***	***	***	***	***	***	***
PIR			***	**	***	*			***	**
Internal Density										
<u>Physical Characteristics and Habits</u>										
Drugs for Infection		*	**		*					
Aspirin Use						**	**			
Birth Control Pills	n.a.	n.a.	n.a.	n.a.	n.a.					
Hyp. Medication			*	*		*				
Cigarette Smoking			***	***	***	*	*		***	***
Alcohol Use										
Activity (recreation)			**	***	**					
Activity (work)										
Eye Color				**		**	**	*	*	***
Skinfold						**	**	*	*	
Height	*	*								
Weight						**	**	**	**	

<sup>a</sup>Prevalence computed based on the average of hearing levels at 1000, 2000 and 4000 Hz > 25 dB.

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.

Table 4.6  
**Significant Findings: Relationships Between Indicators of  
 Noise Induced Hearing Loss and Demographic Characteristics,  
 Physical Characteristics and Habits Controlling for Age  
 and Race by Sex**

	MALES					FEMALES				
	Absolute Shifts		Percentage Shifts			Absolute Shifts		Percentage Shifts		
	.5,1,2 Base	.5,1 Base	.5,1,2 Base	.5,1 Base	Tinnitus	.5,1,2 Base	.5,1 Base	.5,1,2 Base	.5,1 Base	Tinnitus
Noise Exposure	***	***	***	***						
<u>Demographic Characteristics</u>										
Income	**	***		*						*
Marital Status	*		**	*		*	*	*		*
Size of Place	***	***	***	***	**					
SMSA	***	***	***	***	*					
Farm	**	**	**	***		**	*	**	*	
Region		*	*	**	*		*			
Education	***	***	***	***	**	*	*		*	
PIR	*	**		*		**	**	*	**	*
Internal Density										
<u>Physical Characteristics and Habits</u>										
Drugs for Infection										
Aspirin Use										
Birth Control Pills	n.a.	n.a.	n.a.	n.a.	n.a.					*
Hyp. Medication										
Cigarette Smoking										
Alcohol Use	**	***		**		***	***	***	***	***
Activity (recreation)										
Activity (work)	***	***	***	***						
Eye Color										***
Skinfold	***	***	***	***						*
Height										**
Weight										

\*Significant at .05 level.

\*\*Significant at .01 level.

\*\*\*Significant at .001 level.

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Table 4.7  
Regression Coefficients of Relationships Between  
Hearing Measures and Demographic Characteristics  
Within Sex Controlling for Age and Race

Demographic Characteristics	MALES					FEMALES					
	500	1000	2000	4000	Prev. <sup>a</sup>	500	1000	2000	4000	Prev. <sup>a</sup>	
Income	0	0*	0***	0***	0***	0	0*	0*	0**	0**	
1	-.668	-.869	.31	.066	.011	-.480	-1.677	-1.325	-2.625	-.0382	
2	-.851	-1.279	-2.418	-3.489	-.0233	-1.889	-1.344	-1.679	-3.211	-.0561	
3	-2.0298	-2.786	-5.929	-7.249	-.108	-1.454	-2.172	-2.578	-4.294	-.067	
Marital Status	-.800	-1.726	-2.229	1.070	-.0357	-.104	-.0873	-.576	-2.307*	-.0245	
Size of Place	-.0242	.0958	.548***	1.307***	.020***	.111	.110	.316*	.237	.00237	
MSA	0	0	0***	0***	0***	0	0	0	0	0	
1	-.688	-1.619	-3.363	-5.641	-.103	.0998	-.0484	-1.339	-1.122	-.0237	
2	-.382	-.601	-3.236	-6.434	-.111	-.526	-.0741	-1.839	-1.456	-.0179	
Farm	-1.712*	-.234	4.151*	5.565**	.0606	-1.242	.462	.830	-3.880***	-.0371	
Region	NE	1.168	.153	.549	-2.361	-.0344	1.977**	.955	.499***	.963***	.0165**
MW	1.0258	.298	.737	-1.571	-.0184	1.927	1.00865	2.299	2.984	.0281	
S	.491	.808	2.732	1.0621	-.00775	2.297	1.888	4.212	4.246	.0627	
W	0	0	0	0	0	0	0	0	0	0	
Years of Education	-.397***	-.444***	-.941***	-1.626***	-.0238***	-.455***	-.460***	-.633***	-.785***	-.0123***	
Poverty Index	-.196	-.198	-1.0198***	-1.032**	-.0217***	-.221*	-.182	-.392	-.676***	-.0105**	

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.

<sup>a</sup>Prevalence computed based on the average of hearing levels at 1000, 2000 and 4000 Hz > 25 dB.

NOTE: On this and other tables reporting regression coefficients, in the case of categorical variables with more than two categories, significant results are indicated by asterisks accompanying the first coefficient shown.

Table 4.8  
 Regression Coefficients of Relationships Between  
 Hearing Measures and Physical Characteristics  
 Within Sex Controlling for Age and Race

		MALES					FEMALES				
		500	1000	2000	4000	Prev.	500	1000	2000	4000	Prev.
<b>Physical Characteristics</b>											
Drugs for Infection		-1.0787	-1.749*	-3.663**	-.964	-.0581	-.403	-.580	.978	-.166	-.0267
Aspirin Use		.109	-.771	-.168	-.643	-.0423*	-1.517**	-1.470**	-.640	-.733	-.0177
Birth Control Pills		na	na	na	na	na	.308	-.180	-.428	-.159	.0117
Cigarette Smoking											
	0	0	0	0*	0*	0	0*	0	0	0	0
	1	.0462	-.222	-.543	1.408	-.0551	-.219	.731	-.512	-.513	.00857
	2	1.214	.576	1.603	3.581	.0534	1.624	.795	.434	.196	.000409
Alcohol Use											
	0	0	0	0***	0***	0***	0*	0*	0	0***	0***
	1	.346	.594	-2.154	-3.231	-.0485	1.687	-2.301	-3.0176	-3.693	.0731
	2	1.769	1.805	-.271	-2.499	-.0312	-4.466	-5.516	-6.527	-6.699	.0821
	3	1.395	1.964	-2.181	-2.272	-.0612	1.0331	1.343	-3.0622	-2.137	-.122
Activity Level (Work)		-.179	.466	2.152**	4.420***	.0717**	-.118	-.328	-.305	.281	-.0176
Eye Color											
	Brown	0	0	0	0	0	0**	0	0	0*	0***
	Blue	.348	.241	-.006	2.298	.032	-.434	-1.194	-.451	.145	-.046
	Green, Grey, Hazel	.594	.762	-.106	1.671	.004	-.274	-.609	-1.906	.459	-.029
	Other	1.796	2.657	.0100	2.777	.176	-4.806	-3.727	-1.371	-4.789	-.158
Skinfold		.0212	.0336	-.0490	-.129**	-.00113	.0484**	.0452**	.0375*	.0484*	.000402
Height		-.0987*	-.118*	-.0951	-.0258	-.000786	.00974	-.0535	-.0881	-.0820	-.00239
Weight		.0106	.0109	-.0303	-.0200	.000474	.0593**	.0610**	.0659**	.0732**	.00107

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.

Table 4.9  
 Regression Coefficients of Relationships Between  
 Indicators of Noise Induced Hearing Loss and Demographic  
 Characteristics Within Sex Controlling for Age and Race

Demographic Characteristic	MALES					FEMALES					
	Absolute Shifts		Percentage Shifts			Absolute Shifts		Percentage Shifts			
	.5,1,2 Base	.5,1 Base	.5,1,2 Base	.5,1 Base	Tinnitus	.5,1,2 Base	.5,1 Base	.5,1,2 Base	.5,1 Base	Tinnitus	
Income	0	0**	0***	0	0*	0	0	0	0	0*	
	1	.833	1.149	.0501	.048	.0497	-1.426	-1.506	-.04545	-.0526	.0558
	2	-1.489	-1.971	-.01334	-.0315	.0475	-1.57	-1.588	-.0415	-.0362	.08078
	3	-3.279	-4.525	-.0183	-.102	.0623	-2.164	-2.405	-.0522	-.0631	.0756
Marital Status		3.069*	2.703	.130**	.107*	-.00343	-2.011*	-2.164*	-.0602*	-.0558	.0419*
Size of Place		1.131***	1.291***	.0362***	.0482***	-.00693**	.0516	.119	.00212	.00483	-.00203
SMSA	0	0***	0***	0***	0***	0*	0	0	0	0	0
	1	-3.796	-4.502	-.108	-.166	.0260	-.621	-1.0664	-.00412	-.0286	.0117
	2	-5.033	-5.940	-.161	-.229	.0391	-.640	-1.153	-.0254	-.0520	.0234
Farm		4.856**	6.526**	.156**	.267***	-.0308	-3.938**	-3.537*	-.123**	-.106*	-.0467
Region	NE	-3.0655	-3.0683*	-.130*	-.158**	.00659*	-.160	-.475*	.00257	-.00952	.0312
	Mid	-2.282	-2.255	-.0862	-.117	-.00894	1.201	1.477	.0411	.0467	-.00437
	S	-.265	.421	-.0326	-.0258	-.0492	1.413	2.119	.0450	.0613	.00872
	W	0	0	0	0	0	0	0	0	0	0
Years of Education		-1.0271***	-1.210***	-.0252***	-.0318***	.00695**	-.269*	-.327*	-.00775	-.00948*	.00521
Poverty Index		-.584*	-.854**	-.00865	-.0264*	.00152	-.410**	-.473**	-.0123*	-.0153**	.00835*

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.

Table 4.10

Regression Coefficients of Relationships Between Indicators of Noise Induced Hearing Loss and Physical Characteristics Within Sex Controlling for Age and Race

	MALES					FEMALES				
	Absolute Shifts		Percentage Shifts			Absolute Shifts		Percentage Shifts		
	.5,1,2 Base	.5,1 Base	.5,1,2 Base	.5,1. Base	Tinnitus	.5,1,2 Base	.5,1 Base	.5,1,2 Base	.5,1. Base	Tinnitus
<b>Physical Characteristics</b>										
Drugs for Infection	1.196	.441	.0661	-.0159	.00304	-.196	.290	-.00957	.0289	-.0186
Aspirin Use	-.205	-.141	.0108	.00652	-.0142	.429	.698	.0299	.0387	.0000456
Birth Control Pills	n.a.	n.a.	n.a.	n.a.	n.a.	-.0792	-.242	-.00773	-.00906	.0317*
Cigarette Smoking										
1	0	0	0	0	0	0	0	0	0	0
2	1.936	1.763	.0548	.0621	-.00967	-.443	-.665	.000432	-.00102	.0243
3	2.651	2.874	.0625	.0759	-.0244	-.706	-.966	-.0193	-.0280	-.0155
Alcohol Use										
0	0**	0***	0	0**	0	0***	0***	0***	0***	0***
1	-2.747	-3.612	-.0057	-.1096	.0337	1.392	-1.723	-.0221	-.0323	.0289
2	-3.614	-4.301	-.1515	-.171	.0226	-.805	-1.537	-.0078	-.056	-.0501
3	-2.435	-3.708	-.0385	-.143	.0573	-1.947	-3.360	-.0643	-.122	-.0791
Activity Level (work)	-3.611***	-4.294***	-.116***	-.161***	-.00185	-.578	-.512	-.0232	-.0185	.00168
Eye Color										
Brown	0	0	0	0	0	0	0	0	0	0***
Blue	2.069	1.956	.0835	.0776	.0156	.0816	.918	.0268	.03	.0455
Green, Grey, Hazel	2.016	2.242	.0062	.124	.0181	1.328	.812	.0482	.112	-.0134
Other	1.088	.329	.0709	.0739	-0.801	-1.587	-.650	.0687	.0673	.0575
Skinfold	-.132***	-.158***	-.00471***	-.00581***	-.0000693	.00451	.00177	.000188	.000296	.000854*
Height	.0882	.0907	.00315	.00429	-.000946	-.0435	-.0672	-.000890	-.00195	-.00461**
Weight	-.0146	-.0299	-.000872	-.00115	-.000273	.0101	.0120	.0000332	.000424	.000548

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.



Table 4.11

Results of Multiple Regression Models Examining the Relationship of Occupational Noise Exposure and Air Conduction Hearing Level at 500 Hz in the Presence of Background Characteristics (MAJES)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13
Noise Exposure	.1186**	.1203**	.1223**	.1257**	.1149**	.05320	.1225**	.1220**	.1123**	.1317**	.1270**	.1255**	.1121**
Age	.2325***	.2340***	.2329***	.2372***	.2307***	.2057***	.2329***	.2319***	.2394***	.2317***	.2339***	.2323***	.2226***
Race	.7569	.0223	.8092	.8507	.7238	1.4548	.7716	.7060	.8817	1.2484	.6907	.8006	.8964
Marital Status		-.9057											
Size of Place			-.0620										
Farm				-2.0610*									
Region NE					1.0893								
MW					.8557								
S					.3490								
W					0								
Years of Education							-.3549***						
Drugs for Infection								-1.3387					
Aspirin Use									.1470				
Cig. Smok.										0			
0										-.0203			
1										1.4068			
2													
Alcohol Use											0		
0											.562		
1											1.993		
2											1.433		
3													
Activity Level (Work)											.4593		
Skinfold												.0200	
Height													-.0921

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.



Table 4.13

Results of Multiple Regression Models Examining the Relationship of Occupational Noise Exposure and Air Conduction Hearing Level at 2000 Hz in the Presence of Background Characteristics (MALS)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13
Noise Exposure	.3752***	.3610***	.3406***	.3642***	.3696***	.2360***	.3895***	.3674***	.3640**	.3896***	.3584***	.3681***	.3701***
Age	.5712***	.5750***	.5604***	.5641***	.5700***	.5141***	.5700***	.5703***	.5845***	.5732***	.5733***	.5714***	.5633***
Race	1.9750	2.1563	1.6061	1.833	2.4494*	3.5034**	2.043	1.8410	2.1931	2.6159*	2.1475	1.9200	2.0849
Marital Status		-2.5430*											
Size of Place			.4417**										
Farm				3.134									
Region NE					.3223								
M					.1903								
S					2.2780								
W					0								
Years of Education													
Years of Education													
Years of Education													
Years of Education													
Years of Education													
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Table 4.14

Results of Multiple Regression Models Examining the Relationship of Occupational Noise Exposure and Air Conduction Hearing Level at 4000 Hz in the Presence of Background Characteristics (HNL/ES)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13
Noise Exposure	.8024***	.8014***	.736***	.790***	.811***	.593***	.813***	.793***	.792***	.793***	.770***	.781***	.8036***
Age	.9473***	.947***	.941***	.940***	.952***	.862***	.950***	.950***	.957***	.939***	.952***	.948***	.949***
Race	11.39***	11.361***	10.490***	11.237***	11.731***	13.506***	11.402***	11.338***	11.542***	11.733***	11.719***	11.224***	11.36***
Marital Status		.4100											
Size of Place			1.0779***										
Farm				3.371									
Region NE					-2.837								
Mid					-2.770								
S					.0397								
W					0								
Years of Education						-1.164***							
Days for Infection							-2.705						
Aspirin Use								-1.3609					
Cig. Smk.									0				
1									.919				
2									2.425				
Alcohol Use										0			
1										-1.914			
2										-1.068			
3										-1.973			
Activity level (Work)											-2.7013*		
Skinfold												-1.0870**	
Height													.0187

\*Significant .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.

Table 4.15

Results of Multiple Regression Models Examining the Relationship of Occupational Noise Exposure and Prevalence of Hearing Impairment (1000, 2000 and 4000 > 25 db) in the Presence of Background Characteristics (MALES)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13
Noise Exposure	.0110***	.0110***	.00989***	.0100***	.0110***	.00774***	.0112***	.0157***	.0109***	.0112***	.0103***	.0100***	.0109***
Age	.0130***	.0130***	.0137***	.0137***	.0130***	.0125***	.0130***	.0136***	.0137***	.0137***	.0130***	.0130***	.0137***
Race	.1404***	.1436***	.1262***	.1390***	.1434***	.1765***	.1409***	.1305***	.1304***	.1509***	.1461***	.1393***	.1407***
Marital Status		-.0440											
Size of Place			.0170***										
Farm				.0305									
Region NE					-.0409								
MI					-.0347								
S					-.0062								
W					0								
Years of Education						-.0170***							
Drugs for Infection							-.0029						
Aspirin Use								-.0305					
Cig. Sirk.									0				
0									.0404				
1									.0375				
2													
Alcohol Use										0			
0										-.0299			
1										-.0111			
2										-.0576			
3													
Activity Level (Work)											-.0406*		
Skinfold												-.00056	
Height													-.00018

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.

Table 4.16

Results of Multiple Regression Models Examining the Relationship of Occupational Noise Exposure and Absolute Shift from 500, 1000 and 2000 Hz to 4000 Hz in the Presence of Background Characteristics (MAJSE)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13
Noise Exposure	.5897***	.5704***	.5254***	.5733***	.5979***	.4682***	.5894***	.5772***	.5784***	.5621***	.5550***	.5595***	.5920***
Age	.5814***	.5769***	.5740***	.5741***	.5874***	.5340***	.5845***	.5854***	.5812***	.5700***	.5849***	.5823***	.5944***
Race	10.3471***	10.1631***	9.5345***	10.1984***	10.5027***	11.4826***	10.3216***	10.3661***	10.3472***	10.1978***	10.6332***	10.1584***	10.1623***
Marital Status		2.5620*											
Size of Place			.96614***										
Farm				3.2759									
Region NE					-3.4594*								
Mid					-3.1678								
S					-1.0249								
W					0								
Years of Education													
Drugs for Infection													
Aspirin Use													
0													
1													
2													
Alcohol Use													
0													
1													
2													
3													
Activity Level (Work)													
0													
1													
2													
3													
Skinfold													
0													
1													
2													
3													
Height													
0													
1													
2													
3													

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.

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Table 4.17

Results of Multiple Regression Models Examining the Relationship of Occupational Noise Exposure and Absolute Shift from 500 and 1000 Hz to 4000 Hz in the Presence of Background Characteristics (MALES)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13
Noise Exposure	.667***	.662***	.599***	.651***	.679***	.526***	.673***	.658***	.660***	.645***	.6303***	.636***	.676***
Age	.601***	.677***	.673***	.6703***	.687***	.624***	.684***	.685***	.683***	.670***	.685***	.682***	.695***
Race	10.817***	10.644***	9.888***	10.6016***	11.1099***	12.2481***	10.806***	10.806***	10.856***	10.7404***	11.160***	10.587***	10.6207***
Marital Status		2.123											
Size of Place			1.103***										
Farm				4.734*									
Region NE					-3.516*								
Mid					-3.261								
S					-1.443								
W					0								
Years of Education						-1.795***							
Days for Infection							-1.989						
Aspirin Use								.0660					
Cig. Use													
0									0				
1									1.3405				
2									1.877				
Alcohol Use													
0										0			
1										-2.56			
2										-3.139			
3										-3.5203			
Activity level (Walk)											-2.881*		
ENInfold												-1.123***	
Height													.129

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.

Table 4.18

Results of Multiple Regression Models Examining the Relationship of Occupational Noise Exposure and Percentage Shift from 500 and 1000 Hz to 4000 Hz in the Presence of Background Characteristics (Males)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13
Noise Exposure	.0216***	.0214***	.0190***	.0209***	.0223***	.0187***	.0219***	.0214***	.0215***	.02106***	.0201***	.02049***	.02203***
Age	.0184***	.0183***	.0181***	.0179***	.0187***	.0172***	.0185***	.0186***	.0183***	.01802***	.0185***	.0184***	.0190***
Race	.3803***	.374***	.345***	.371***	.387***	.311***	.316***	.3803***	.379***	.376***	.395***	.372***	.372***
Marital Status		.0807											
Size of Place			.0423***										
Farm				.209**									
Region NE					-.173**								
M					-.150								
S					-.0535								
W					0								
Years of Education						-.0171**							
Drops for Infection							-.0623						
Aspirin Use								.0136					
Cig. Smk. 0									0				
1									.0483				
2									.0434				
Alcohol Use 0										0			
1										-.0755			
2										-.134			
3										-.137			
Activity level (rank)											-.115**		
Skinfold												-.00470***	
Height													.00553*

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.



Table 4.19

Results of Multiple Regression Models Examining the Relationship of Occupational Noise Exposure and Percentage Shift from 500, 1000 and 2000 Hz to 4000 Hz in the Presence of Background Characteristics (MALS)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13
Noise Exposure	.0169***	.0166***	.0150***	.0165***	.0174***	.0145***	.0169***	.0160***	.0160***	.0159***	.0150***	.0159***	.0172***
Age	.0136***	.0134***	.0134***	.0133***	.0130***	.0126***	.0137***	.0130***	.0135***	.01300***	.0137***	.0136***	.0140J***
Race	.321***	.0313***	.295***	.316***	.323***	.344***	.3201***	.323***	.320***	.314***	.331***	.314***	.315***
Marital Status		.116**											
Size of Place			.0316***										
Farm				.1101*									
Region NE					-.141*								
Mid					-.112								
South					-.0547								
West					0								
Years of Education						-.0137**							
Drugs for Infection							.03007						
Aspirin Use								.0161					
Cig. Sack.									0				
1									.04405				
2									.0372				
Alcohol Use										0			
1										-.0454			
2										-.123			
3										-.0339			
Activity Level (Walk)											-.0007*		
Skinfold												-.00305***	
Height													.00412

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.

Table 5.1  
 Means, Standard Errors and Significance Tests  
 (F Statistics) of Differences in Hypertension  
 by Occupational Noise Exposure  
 (MMES)

Variable	< 70 db X̄ (s.e.)	71-75 db X̄ (s.e.)	76-80 db X̄ (s.e.)	81-85 db X̄ (s.e.)	86-90 db X̄ (s.e.)	91-95 db X̄ (s.e.)	≥ 96 db X̄ (s.e.)	F Statistic (Uncontrolled)	F Statistic (Controlling for age & race)
Mean Systolic Blood Pressure	123.5 (2.1)	130.4 (.9)	130.8 (1.1)	132.4 (1.2)	133.1 (1.1)	131.7 (1.2)	130.9 (1.9)	3.43	3.52
Mean Diastolic Blood Pressure	79.7 (1.5)	84.8 (.5)	84.9 (.8)	86.2 (.8)	86.6 (.6)	85.9 (.8)	85.4 (1.6)	6.25*	5.18*
Mean Average Blood Pressure	94.3 (1.6)	100.0 (.6)	100.2 (.8)	101.6 (.8)	102.1 (.7)	101.2 (.9)	100.6 (1.5)	5.77*	5.41*
Shift in Systolic Blood Pressure	8.3 (1.2)	8.1 (.4)	7.8 (.4)	8.5 (.5)	8.4 (.5)	8.4 (.5)	8.6 (1.0)	.70	.56
Shift in Diastolic Blood Pressure	7.5 (.9)	5.7 (.2)	5.5 (.3)	5.6 (.3)	6.2 (.4)	6.0 (.4)	6.0 (1.0)	.15	.04
Shift in Average Blood Pressure	6.9 (.8)	5.5 (.3)	5.4 (.3)	5.4 (.3)	5.5 (.3)	5.4 (.3)	6.1 (.9)	.88	.16
History of Hypertension	15.3 (5.6)	16.2 (2.1)	19.0 (2.2)	16.7 (1.8)	15.8 (2.0)	16.0 (2.7)	13.5 (5.6)	.45	.78
Hypertension using Physician's diagnosis	6.4 (5.1)	11.6 (1.9)	14.6 (2.3)	17.9 (2.3)	17.0 (2.3)	18.9 (2.6)	17.7 (6.7)	3.89*	3.33
Hypertension based on Blood Pressure Readings									
(A) Normotensive	67.5 (7.9)	50.1 (2.7)	50.5 (3.4)	46.0 (3.4)	40.1 (2.9)	44.2 (3.7)	47.4 (7.8)	6.00*	6.12*
(B) Borderline	17.0 (6.7)	16.2 (1.9)	14.5 (2.0)	16.4 (2.3)	19.3 (2.3)	19.3 (3.2)	14.7 (5.8)	2.11	2.10
(C) Labile	10.1 (4.7)	17.8 (1.9)	16.1 (2.7)	19.6 (2.6)	21.3 (2.6)	15.2 (2.3)	27.9 (8.7)	.88	.92
(D) Definite	1.1 (.9)	10.5 (1.6)	13.2 (2.2)	11.7 (1.8)	13.9 (2.0)	13.8 (2.0)	8.2 (3.3)	2.82	2.40
(E) Medication	4.3 (2.0)	5.4 (1.2)	5.8 (1.3)	6.3 (1.4)	5.4 (1.0)	7.5 (2.2)	1.9 (1.4)	.06	.14

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.

Table 5.2  
 Means, Standard Errors and Significance Tests  
 (F Statistics) of Differences in Hypertension  
 by Occupational Noise Exposure  
 (FHM:LS)

Variable	≤ 70 dB X̄ (s.e.)	71-75 dB X̄ (s.e.)	76-80 dB X̄ (s.e.)	81-85 dB X̄ (s.e.)	86-90 dB X̄ (s.e.)	91-95 dB X̄ (s.e.)	≥ 96 dB X̄ (s.e.)	F Statistic (Uncontrolled)	F Statistic (Controlling for age & race)
Mean Systolic Blood Pressure	125.2 (3.6)	125.0 (1.1)	126.7 (1.2)	129.3 (3.9)	129.2 (2.0)	132.1 (4.0)	-	3.46	.81
Mean Diastolic Blood Pressure	80.5 (2.4)	80.3 (.7)	81.2 (.7)	81.6 (1.9)	83.6 (1.1)	86.3 (2.6)	-	8.34**	5.98*
Mean Average Blood Pressure	95.4 (2.7)	95.5 (.8)	96.4 (.8)	97.5 (2.5)	98.5 (1.4)	101.6 (2.8)	-	6.57*	3.51
Shift in Systolic Blood Pressure	6.4 (1.0)	0.5 (.4)	0.4 (.4)	0.7 (.8)	0.7 (.9)	0.9 (4.1)	-	.03	.53
Shift in Diastolic Blood Pressure	5.6 (.8)	5.9 (.4)	5.9 (.3)	6.3 (.6)	6.0 (.6)	4.5 (1.2)	-	.13	.02
Shift in Average Blood Pressure	4.0 (.7)	5.7 (.3)	5.4 (.3)	6.2 (.5)	5.7 (.5)	5.5 (.8)	-	.44	.19
History of Hypertension	15.2 (6.7)	18.1 (1.9)	21.2 (2.2)	19.1 (4.4)	23.4 (3.4)	12.2 (7.2)	-	2.19	.85
Hypertension using Physician's diagnosis	11.6 (4.6)	10.4 (1.5)	15.3 (2.2)	13.2 (4.3)	14.6 (3.0)	10.0 (8.0)	-	.88	.05
Hypertension Based on Blood Pressure Readings									
(A) Nontensive	67.0 (7.0)	61.4 (2.0)	61.3 (2.9)	58.4 (5.4)	49.2 (4.1)	55.0 (11.6)	-	6.82**	3.17
(B) Borderline	10.9 (5.6)	12.3 (1.8)	10.4 (2.0)	10.1 (2.8)	16.5 (3.4)	7.5 (5.9)	-	.56	.33
(C) Labile	7.2 (3.2)	9.3 (1.7)	10.1 (1.9)	12.8 (3.5)	17.8 (3.6)	17.0 (13.0)	-	6.74**	5.66*
(D) Definite	8.9 (4.3)	8.8 (1.7)	9.0 (1.6)	9.5 (3.5)	5.3 (1.9)	20.6 (8.6)	-	.42	.99
(E) Medication	6.0 (5.7)	8.2 (1.4)	9.2 (1.7)	9.2 (3.2)	11.2 (2.4)	0 (0)	-	.41	.01

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.

Table 5.1  
 Regression Equations (Coefficients and Standard Errors)  
 of Age, Race and Occupational Noise Exposure on  
 Hypertension by Sex

Variable	MALES					FEMALES				
	Intercept	Age at Exam	Race (White)	Race (Black)	Occupational Noise Exposure	Intercept	Age at Exam	Race (White)	Race (Black)	Occupational Noise Exposure
Mean Systolic Blood Pressure	99.356*** (4.137)	.535*** (.0319)	6.699 (3.017)	13.304** (4.150)	.121 (.064)	88.623*** (5.327)	.903*** (.0533)	-3.027 (3.943)	5.770 (4.102)	.112 (.125)
Mean Diastolic Blood Pressure	73.856*** (2.588)	.193*** (.0202)	1.550 (2.317)	7.195** (2.631)	.0855* (.0376)	65.842*** (3.343)	.341*** (.0251)	-2.156 (2.921)	4.219 (3.059)	.188* (.0765)
Mean Average Blood Pressure	82.357*** (2.965)	.307*** (.0219)	3.271 (2.704)	9.231** (3.0022)	.097* (.0418)	73.436*** (3.770)	.528*** (.0313)	-2.446 (3.0353)	4.736 (3.180)	.162 (.0865)
Shift in Systolic Blood Pressure	.139 (.958)	.0810*** (.0145)	4.263*** (.885)	4.931*** (.950)	.0238 (.0320)	2.151 (1.668)	.0927*** (.0212)	1.656 (1.253)	2.627 (1.411)	.0525 (.0725)
Shift in Diastolic Blood Pressure	4.544** (1.381)	.0068 (.00988)	.851 (1.266)	1.823 (1.435)	.00425 (.0202)	3.976** (1.434)	.0512*** (.0152)	-.221 (1.316)	-.908 (1.358)	.00525 (.0379)
Shift in Average Blood Pressure	2.560** (.935)	.0258** (.00877)	1.877* (.778)	2.452** (.947)	-.0085 (.0209)	1.501 (1.308)	.0621*** (.0130)	1.325 (1.227)	1.0355 (1.210)	.0173 (.0394)
History of Hypertension	.0187 (.114)	.00462*** (.000748)	-.0436 (.104)	.0013*** (.110)	-.00140 (.00158)	-.128 (.150)	.00858*** (.00105)	-.0979 (.125)	.124 (.128)	.00246 (.00265)
Hypertension Physician's Diagnosis	-.0734 (.0913)	.00492*** (.000656)	-.0270 (.0813)	.108 (.0917)	.00245 (.00134)	-.127 (.106)	.00726*** (.000959)	-.0824 (.109)	.0704 (.112)	.000370 (.00166)
Hypertension Based on Blood Pressure Readings										
(A) Nontensive	1.249*** (.121)	-.0117*** (.000860)	-.191 (.106)	-.329** (.117)	-.0055* (.00069)	1.136*** (.113)	-.0167*** (.00105)	.277*** (.0801)	.0233 (.0878)	-.0057 (.00316)
(B) Borderline	.0494 (.0492)	-.00045 (.000671)	.112** (.0431)	-.0674 (.0524)	.00249 (.0055)	.152 (.127)	.00190* (.000883)	-.129 (.122)	-.144 (.123)	.00148 (.00260)
(C) Labile	-.110* (.0492)	.00387*** (.000762)	.106* (.0429)	.107 (.0553)	.00141 (.00140)	-.0244 (.108)	.00358 (.00900)	-.0903 (.110)	-.0595 (.112)	.0061* (.00255)
(D) Definite	-.0528 (.0906)	.00447*** (.000632)	-.0572 (.0833)	.0687 (.0885)	.00188 (.00122)	-.161*** (.0427)	.00440*** (.000843)	.0588** (.0197)	.198*** (.0360)	-.00175 (.00173)
(E) Medication	-.136*** (.0263)	.00378*** (.000490)	.0306* (.0145)	-.0857** (.0318)	.000375 (.00101)	-.103 (.118)	.00684*** (.000755)	-.116 (.109)	-.0179 (.111)	-.00018 (.00157)

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.

Table 5.4

**Significant Findings: Relationships Between Hypertension  
Measures and Background Characteristics Within  
Sex Controlling for Age and Race**

	MALES				FEMALES			
	Mean Diastolic BP	Mean Average BP	Nomo- tensive	Labile	Mean Diastolic BP	Mean Average BP	Nomo- tensive	Labile
<u>Noise Exposure</u>	*	*	*		*			*
<u>Demographic Characteristics</u>								
Income					*	*	**	*
Marital Status							*	*
Size of Place				*		*		
SMSA					*			
Farm Region								
Education		*	*	**				
PIR					**	**	**	
Internal Density								
<u>Physical Character- istics and Habits</u>								
Drugs for Infection								**
Aspirin Use								
Birth Control Pills	na	na	na	na				
Hyp. Medication	***	***	na	na	***	***	na	na
Cigarette Smoking	*				*	*		
Alcohol Use	**	**	*			*	**	***
Activity (recreation)								
Activity (work)								
Skinfold	***	***	***	**	***	***	***	*
Height	**	*						
Weight	***	***	***	***	***	***	***	***

\*Significant at .05 level.

\*\*Significant at .01 level.

\*\*\*Significant at .001 level.

Table 5.5

Regression Coefficients of Relationships between  
Hypertension Measures and Background Characteristics  
Within Sex Controlling for Age and Race

	MALES				FEMALES			
	Mean Diastolic BP	Mean Average BP	Normotensive	Labile	Mean Diastolic BP	Mean Average BP	Normotensive	Labile
<u>Demographic Characteristics</u>								
Income	0	0	0	0	0*	0*	0**	0*
1	-1.039	-1.913	.0192	.00882	-1.627	-1.427	.0713	-.0546
2	.2409	-2.414	-.0149	.0448	-1.01	.868	.02	-.0243
3	.178	-1.546	.0309	-.00988	-3.201	-3.837	.147	-.0988
Size of Place	.143	.118	-.00763	.00743*	.294	.249*	-.0118	.00363
Marital Status	-.848	-1.542	.00791	.0209	-.628	-1.299	.0696*	-.0432*
MSA	0	0	0	0	0	0	0	0
1	-.162	-.246	.0382	-.0267	-1.311	-1.264	.0587	-.0254
2	-.631	-.0946	.0214	-.0324	-2.959	-2.616	.0529	-.0415
Farm	.0267	-.312	-.0234	.0249	1.638	.424	.00949	-.0230
Region	NE	.439	-.00371	-.0122	.185	.520	-.0747	.0422
MW	.478	.622	-.0460	.00856	1.0263	1.272	-.0541	.0265
S	.915	1.141	-.0871	.00582	1.332	1.619	-.0430	.0110
W	0	0	0	0	0	0	0	0
Education	-.159	-.201*	.00897*	-.00640**	.192	-.237	.00266	-.00503
PIR	.0434	-.0575	.00521	-.00177	-.662**	-.691**	.00651**	-.0132
Internal Density	-.691	-1.580	.0250	.0114	1.982	.598	.0944	-.0567
<u>Physical Characteristics and Habits</u>								
Days for Infection	-1.473	-2.00084	.0907	-.00353	1.768	2.228	-.176	-.0729**
Aspirin Use	.846	.459	-.0204	.0229	-.279	-.458	.0324	-.00432
Birth Control Pills	na	na	na	na	-.350	-.633	.00881	-.000078
Hypertension Medication	10.0979***	11.209***	na	na	5.659***	9.358***	na	na
Cigarette Smoking	0	0	0	0	0*	0*	0	0
1	.423	.341	-.0220	-.00469	-2.591	-2.261	.0425	-.0297
2	-1.190	-.848	.0218	.00121	-1.854	-2.126	.0760	-.00766
Alcohol Use	0	0**	0*	0	0	0*	0**	0***
1	.691	.811	-.0114	-.0635	-1.615	-1.898	.054	-.002
2	3.846	4.304	.134	.01769	-2.736	-3.318	.032	.008
3	3.473	4.230	-.0590	.0169	20.223	25.390	-.364	-.114
Activity (Rec.)	.216	.445	-.0205	.0286	-1.207	-1.631	.0383	-.0285
Activity (Work)	-.210	-.0777	-.0193	.0346	-.0460	-.616	.0464	-.0295
Skinfold	.206***	.234***	-.00704***	.00231**	.228***	.261***	-.00687***	.00158*
Height	.113**	.0919*	-.00161	-.00047	.0272	.0192	.00032	-.00101
Weight	.278***	.298***	-.00898***	.00272***	.146***	.191***	-.0103***	.00333***

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.

Table 5.6

Results of Multiple Regression Models Examining the Relationship of Occupational Noise Exposure and Mean Diastolic Blood Pressure in the Presence of Background Characteristics--MMES

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Noise Exposure	.133***	.108**	.112**	.144***	.102**	.101*	.111**	.066	.0775
Age	.153***	.164***	.164***	.167***	.155***	.155***	.159***	.142***	.147***
Race									
White	.035***	-2.790***	-2.617***	-.478***	-2.160***	-2.170***	-2.0420***	-2.570***	-2.437***
Black	5.743	1.891	2.0671	4.609	2.366	2.353	2.296	1.674	1.631
Other	0	0	0	0	0	0	0	0	0
Hypertension Medication	9.351***	8.990***	8.965***	9.558***	8.762***	8.762***	8.768***	8.886***	8.914***
Skinfold	.201***		.0226	.201***		.00280			
Weight		.269***	.254***		.260***	.291***	.281***	.289***	.283***
Height				.136***	-.0958*	-.0975*	-.0997*	-.0860*	-.0909*
Alcohol Use									
0							0**		0**
1							.764		.945
2							3.764		3.879
3							3.450		3.558
Education								-.194*	-.184
Overall F	37.79***	56.67***	49.64***	33.04***	49.10***	44.21***	35.25***	43.72***	32.17***

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.

Table 5.7

Results of Multiple Regression Models Examining the Relationship of Occupational Noise Exposure and Mean Average Blood Pressure in the Presence of Background Characteristics--MALES

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Noise Exposure	.151***	.121**	.130**	.160***	.112**	.116**	.124**	.0695	.0865
Age	.263***	.274***	.273***	.275***	.262***	.262***	.268***	.245***	.254***
Race	2.461***	-1.306***	-1.00767***	1.334***	-.487***	-.429***	-.305***	-.967**	-.740**
White	7.605	3.527	3.911	6.632	4.206	4.282	4.264	3.405	3.544
Black	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0
Hypertension Medication	10.359***	10.0272***	9.972***	10.537***	9.702***	9.708***	9.254***	9.853***	9.425***
Skinfold	.228***		.0493	.228***		.0163			
Weight		.287***	.255***		.315***	.302***	.311***	.317***	.313***
Height				.117***	-.137**	-.127**	-.146***	-.126**	-.138**
Alcohol Use	0						0***		0***
1							.89		1.049
2							4.269		4.3881
3							4.206		4.315
Education								-.230*	-.206*
Overall F	52.75***	69.56***	60.65***	45.65***	60.40***	54.12***	44.88***	54.70***	

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.



Table 5.B

Results of Multiple Regression Models Examining the Relationship of Occupational Noise Exposure and Prevalence of Nonotension in the Presence of Background Characteristics--Males

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Noise Exposure	-.00705***	-.00605**	-.00635**	-.0072***	-.00665**	-.0057**	-.0058**	-.0043*	-.00465*
Age	-.0115***	-.0119***	-.0118***	-.0118***	-.0112***	-.0112***	-.0113***	-.0107***	-.0108***
Race									
White	-.175**	-.0537*	-.0600*	-.156**	-.0948*	-.0957*	-.129*	-.0796	-.115
Black	-.305	-.1760	-.1903	-.289	-.2061	-.2073	-.238	-.1806	-.215
Other	0	0	0	0	0	0	0	0	0
Skinfold	-.00739***		-.00186	-.00739***		-.00026			
Weight		-.00907***	-.00787***		-.01033***	-.01012***	-.00997***	-.01035***	-.00999***
Height				-.00201	.06627**	.00610**	.00708***	.00584**	.00672**
Alcohol Use									
0							0**		0**
1							-.0181		-.0238
2							-.1367		-.1401
3							-.0690		-.0724
Education								.00720	.00633
Overall F	74.51***	92.08***	75.97***	63.05***	75.55***	64.63***	45.59***	64.09***	40.10***

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.

Table 5.9

Results of Multiple Regression Models Examining  
the Relationship of Occupational Noise Exposure  
and Mean Diastolic Blood Pressure in the Presence  
of Background Characteristics--FEMALES

	Model 1	Model 2	Model 3
Noise Exposure	.190**	.162*	.168*
Age	.255***	.248***	.244***
Race 1	-.546**	-2.819*	-2.230*
2	3.300	.838	1.240
3	0	0	0
Hypertension Medication	4.405**	4.00156*	3.939*
Skinfold	.223***		.0728*
Weight		.336***	.265***
Overall F	50.43***	54.71***	50.50***

\*Significant at .05 level.

\*\*Significant at .01 level.

\*\*\*Significant at .001 level.

Table 5.10

Results of Multiple Regression Models Examining  
the Relationship of Occupational Noise Exposure  
and Prevalence of Labile Hypertension in the  
Presence of Background Characteristics--FEMALES

	Model 1	Model 2	Model 3	Model 4	Model 5
Noise Exposure	.0061*	.0058*	.00575*	.0635*	.0060*
Age	.00318***	.00294**	.00298**	.00227*	.00211*
Race					
white	-.0826	-.1014	-.1065	-.136	-.0438
black	-.0666	-.0931	-.0965	-.129	-.0510
other	0	0	0	0	0
Skinfold	.00158*		-.00061		
Weight		.00327***	.00387**	.00395***	.00389***
Alcohol Use					
0				0***	0***
1				.0221	.0408
2				.0386	.0676
3				-.1362	-.1471
Income					
0					0*
1					-.044
2					-.0108
3					-.0890
Overall F	5.49***	7.54***	6.48***	5.01***	5.21***

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level

Table 5.11  
 Means, Standard Errors and Significance Tests (F Statistics)  
 of Differences in Overall Health and Stress by Occupational Noise Exposure  
 (MALS)

Variable	< 70 db $\bar{X}$ (s.e.)	71-75 db $\bar{X}$ (s.e.)	76-80 db $\bar{X}$ (s.e.)	81-85 db $\bar{X}$ (s.e.)	86-90 db $\bar{X}$ (s.e.)	91-95 db $\bar{X}$ (s.e.)	≥ 96 db $\bar{X}$ (s.e.)	F Statistic (Uncontrolled)	F Statistic (Controlling for age & race)
Physician's Diag- nostic Impression	34.76 (9.64)	54.55 (3.05)	56.85 (3.00)	61.46 (3.09)	64.15 (3.00)	61.49 (3.57)	54.76 (7.33)	5.35*	5.63*
General Well Being Score	80.61 (2.27)	86.24 (.68)	84.17 (.82)	84.42 (.94)	83.78 (.96)	83.53 (1.09)	83.26 (2.20)	6.39*	6.08*
Relaxed Tense Subscore	16.95 (.66)	18.42 (.24)	18.68 (.27)	18.88 (.26)	19.01 (.30)	18.57 (.38)	18.97 (.65)	3.22	3.17
Use of Drugs for Stress	4.53 (2.61)	9.68 (1.53)	10.55 (1.81)	9.31 (1.96)	11.56 (1.81)	11.52 (2.55)	17.81 (7.09)	1.17	1.25
Physician's Diag- nosis of Mental Conditions	.00 (.00)	.75 (.43)	.00 (.00)	1.71 (.84)	.01 (.50)	.95 (.79)	2.52 (2.65)	1.12	1.17

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.

continued

Table 5.11 continued

Means, Standard Errors and Significance Tests (F Statistics)  
of Differences in Other Health Conditions by Occupational Noise Exposure  
(MALES)

Variable	< 70 dB X̄ (s.e.)	71-75 dB X̄ (s.e.)	76-80 dB X̄ (s.e.)	81-85 dB X̄ (s.e.)	86-90 dB X̄ (s.e.)	91-95 dB X̄ (s.e.)	> 96 dB X̄ (s.e.)	F Statistic (Uncontrolled)	F Statistic (Controlling for age & race)
Cardiovascular Conditions <u>Self Report</u>	2.25 (2.14)	3.34 (.79)	4.63 (1.11)	2.96 (.76)	4.50 (1.12)	1.80 (.69)	.0 (.0)	.26	.17
<u>Physician</u>	40.03 (16.03)	42.64 (3.34)	46.04 (3.91)	51.02 (3.81)	46.93 (3.98)	43.51 (4.13)	65.80 (9.63)	.78	1.01
Heart Disease <u>Self Report</u>	2.25 (2.14)	2.66 (.66)	3.67 (.85)	2.88 (.71)	4.21 (1.08)	1.58 (.66)	.00 (.00)	.09	.05
<u>Physician</u>	21.53 (10.37)	18.68 (2.52)	20.76 (2.96)	24.37 (2.97)	21.79 (3.18)	18.33 (3.12)	34.78 (10.15)	.99	1.66
Respiratory Conditions <u>Self Report</u>	25.14 (6.81)	15.07 (1.72)	8.56 (1.60)	11.68 (1.69)	10.72 (1.58)	11.10 (2.14)	19.79 (7.85)	.15	.11
<u>Physician</u>	24.18 (9.88)	11.94 (2.12)	16.19 (3.34)	16.27 (2.60)	12.09 (2.67)	13.62 (3.60)	10.31 (4.68)	.23	.41
Muscular-Skeletal Conditions <u>Self Report</u>	9.64 (4.63)	13.77 (1.66)	13.38 (1.93)	14.99 (2.02)	18.67 (2.32)	11.14 (2.08)	12.24 (4.95)	.14	.21
<u>Physician</u>	43.40 (11.45)	33.25 (3.38)	31.81 (3.28)	28.77 (3.77)	34.66 (3.80)	34.39 (4.43)	45.42 (11.46)	.45	.68
Gastrointestinal Conditions <u>Self Report</u>	3.45 (3.40)	8.41 (1.37)	9.72 (2.21)	7.83 (1.65)	11.23 (1.81)	10.52 (1.75)	14.30 (5.22)	1.05	1.12
<u>Physician</u>	7.90 (6.26)	5.43 (1.31)	8.55 (2.38)	6.21 (1.97)	4.85 (1.41)	6.92 (2.30)	7.03 (4.34)	.00	.00
Metabolic Conditions <u>Self Report</u>	16.70 (7.60)	4.88 (1.21)	6.62 (1.72)	5.64 (1.54)	7.41 (2.05)	4.19 (1.50)	1.75 (1.77)	.52	.35
<u>Physician</u>	22.64 (10.35)	15.43 (2.67)	10.47 (2.57)	12.81 (3.15)	8.71 (1.99)	9.09 (2.44)	12.72 (5.81)	3.84	3.30
Infections <u>Self Report</u>	.00 (.00)	1.59 (.68)	1.20 (.85)	.13 (.11)	1.38 (.86)	.41 (.30)	.00 (.00)	2.13	2.38
<u>Physician</u>	6.13 (6.12)	1.79 (.71)	1.80 (1.23)	3.00 (1.11)	2.86 (1.23)	2.58 (1.36)	2.73 (2.75)	.03	.02
Neoplasms <u>Self Report</u>	.00 (.00)	2.61 (.69)	2.69 (.92)	1.27 (.64)	1.20 (.60)	.99 (.59)	4.28 (3.06)	.60	.59
<u>Physician</u>	.00 (.00)	1.66 (.50)	1.67 (.77)	3.68 (1.39)	.55 (.32)	4.86 (2.03)	.00 (.00)	.34	.56
Nervous System <u>Physician</u>	8.79 (7.36)	13.89 (2.33)	14.28 (2.42)	17.68 (3.03)	11.83 (2.36)	10.67 (2.88)	16.49 (7.32)	.05	.00
Genito-Urinary Conditions <u>Physician</u>	2.42 (2.44)	1.30 (.76)	.15 (.15)	.70 (.48)	1.54 (.70)	1.26 (.94)	.00 (.00)	.22	.25
Accidents <u>Physician</u>	7.62 (7.40)	3.24 (.93)	5.29 (1.81)	2.91 (1.10)	7.85 (2.13)	2.89 (1.03)	5.69 (3.91)	3.11	2.83
Skin Conditions <u>Physician</u>	4.93 (4.98)	5.49 (1.31)	10.33 (2.11)	7.44 (2.00)	9.97 (2.29)	9.25 (2.69)	3.62 (2.62)	.31	.34

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.

Table 5.12

Means, Standard Errors and Significance Tests (F Statistics)  
of Differences in Overall Health and Stress by Occupational Noise Exposure  
(FEMALES)

Variable	< 70 db $\bar{X}$ (s.e.)	71-75 db $\bar{X}$ (s.e.)	76-80 db $\bar{X}$ (s.e.)	81-85 db $\bar{X}$ (s.e.)	86-90 db $\bar{X}$ (s.e.)	91-95 db $\bar{X}$ (s.e.)	$\geq$ 96 db $\bar{X}$ (s.e.)	F Statistic (Uncontrolled)	F Statistic (Controlling for age & race)
Physician's Diagnostic Impression	54.82 (10.42)	54.60 (3.10)	52.01 (3.67)	48.88 (6.00)	61.28 (5.05)	50.87 (19.27)	- -	.82	.00
General Well Being Score	77.50 (2.69)	79.56 (.96)	78.25 (.88)	78.67 (1.92)	72.19 (1.52)	67.66 (6.20)	- -	17.38***	18.12***
Relaxed Tense Subscore	16.50 (.81)	17.26 (.26)	16.99 (.29)	17.28 (.54)	15.82 (.45)	14.93 (2.08)	- -	5.92*	6.56*
Use of Drugs for Stress	27.58 (8.18)	13.66 (1.66)	15.08 (2.05)	11.71 (3.19)	17.35 (3.67)	16.23 (13.03)	- -	.00	.14
Physician's Diagnosis of Mental Condition	.00 (.00)	.59 (.37)	1.91 (.77)	.00 (.00)	1.64 (1.27)	.00 (.00)	- -	.47	.53

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.

continued

Table 5.12 continued  
 Means, Standard Errors and Significance Tests (F Statistics)  
 of Differences in Other Health Conditions by Occupational Noise Exposure  
 (FEMALES)

Variable	≤ 70 dB X̄ (s.e.)	71-75 dB X̄ (s.e.)	76-80 dB X̄ (s.e.)	81-85 dB X̄ (s.e.)	86-90 dB X̄ (s.e.)	91-95 dB X̄ (s.e.)	≥ 96 dB X̄ (s.e.)	F Statistic (Uncontrolled)	F Statistic (Controlling for age & race)
Cardiovascular Conditions	.00	1.55	4.01	.59	3.02	3.16	-	.58	.14
<u>Self Report</u>	(.00)	(.57)	(1.13)	(.58)	(1.42)	(3.36)	-		
<u>Physician</u>	40.16 (10.58)	39.83 (3.47)	51.49 (4.04)	47.63 (8.38)	47.36 (4.92)	52.13 (18.15)	-	.27	.11
Heart Disease	.00	1.16	2.89	.59	2.83	3.16	-	.31	.01
<u>Self Report</u>	(.00)	(.52)	(.79)	(.58)	(1.41)	(3.36)	-		
<u>Physician</u>	18.16 (6.05)	19.89 (2.91)	26.83 (3.52)	28.31 (7.61)	27.25 (4.91)	23.87 (12.92)	-	1.33	.62
Respiratory Conditions	18.90	17.42	16.55	12.69	13.77	10.34	-	2.28	1.88
<u>Self Report</u>	(6.58)	(1.94)	(2.24)	(3.36)	(3.10)	(8.31)	-		
<u>Physician</u>	6.84 (4.34)	13.89 (2.56)	15.78 (3.32)	4.13 (3.29)	13.80 (3.53)	14.63 (13.56)	-	1.45	1.76
Muscular-Skeletal Conditions	19.81	20.63	21.84	22.77	24.45	14.33	-	1.27	.22
<u>Self Report</u>	(6.50)	(2.02)	(2.72)	(4.52)	(3.82)	(7.70)	-		
<u>Physician</u>	44.40 (10.96)	45.58 (3.89)	38.13 (3.89)	39.25 (7.95)	41.48 (6.08)	67.96 (17.20)	-	.10	.03
Gastrointestinal Conditions	14.52	9.77	9.06	11.48	13.35	13.97	-	.85	.52
<u>Self Report</u>	(5.79)	(1.80)	(1.56)	(3.28)	(3.11)	(8.42)	-		
<u>Physician</u>	11.12 (5.29)	3.12 (.94)	7.04 (2.54)	3.13 (1.91)	4.51 (1.99)	.00 (.00)	-	2.21	1.84
Metabolic Conditions	16.45	15.30	14.71	8.63	19.93	25.08	-	.00	.01
<u>Self Report</u>	(8.76)	(2.61)	(3.05)	(2.84)	(4.63)	(14.92)	-		
<u>Physician</u>	24.13 (9.68)	22.43 (3.14)	19.95 (3.58)	25.85 (7.38)	21.94 (4.07)	23.92 (15.73)	-	.09	.15
Infections	.00	.17	.68	.80	.00	.00	-	.03	.00
<u>Self Report</u>	(.00)	(.17)	(.39)	(.79)	(.00)	(.00)	-		
<u>Physician</u>	.00 (.00)	2.42 (.89)	4.02 (1.35)	.00 (.00)	.00 (.00)	6.21 (6.29)	-	5.32*	5.31*
Neoplasms	7.10	4.92	6.16	2.42	8.09	7.15	-	.07	.07
<u>Self Report</u>	(5.68)	(1.02)	(1.18)	(1.13)	(2.71)	(5.53)	-		
<u>Physician</u>	2.54 (2.48)	2.73 (1.07)	1.12 (.91)	5.75 (5.49)	1.23 (.89)	.00 (.00)	-	.18	.13
Nervous System	9.23	7.14	10.58	12.75	14.01	20.84	-	3.46	2.38
<u>Physician</u>	(6.78)	(2.15)	(2.38)	(5.07)	(3.06)	(14.60)	-		
Genito-Urinary Conditions	8.78	1.64	.06	.34	1.31	.00	-	2.03	1.70
<u>Physician</u>	(6.06)	(.68)	(.61)	(.35)	(.94)	(.00)	-		
Accidents	.00	.81	3.53	5.75	.74	.00	-	.13	.21
<u>Physician</u>	(.00)	(.43)	(1.58)	(5.49)	(.75)	(.00)	-		
Burn Conditions	6.19	2.02	3.03	5.03	6.34	6.55	-	4.04*	4.05*
<u>Physician</u>	(4.52)	(.76)	(1.37)	(3.14)	(2.13)	(6.61)	-		

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.

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Table 5.13

Regression Coefficients and Standard Errors of  
Differences in Selected Health Conditions by Occupational  
Exposure Within Sex Controlling for Age and Race

Health Condition	MALES					FEMALES				
	Intercept	Age at Exam	Race (White)	Race (Black)	Occupational Noise Exposure	Intercept	Age at Exam	Race (White)	Race (Black)	Occupational Noise Exposure
Physician's Diagnostic Inquisition	-.115 (.133)	.013*** (.001)	.072 (.133)	.179 (.139)	.005* (.002)	.259* (.119)	.011*** (.001)	-.226* (.097)	-.169 (.105)	.001 (.003)
General Well Being Score	79.551*** (4.801)	.029 (.0285)	5.917 (4.965)	3.142 (5.068)	-.142* (.0575)	70.339*** (5.308)	.075 (.048)	10.427* (4.408)	4.364 (4.747)	-.474*** (.112)
Relaxat-Tonus Subscore	14.990*** (1.587)	.046*** (.008)	1.176 (1.597)	1.531 (1.652)	.033 (.0185)	13.793*** (2.197)	.037** (.013)	2.560 (2.003)	2.091 (2.156)	-.0825** (.032)
Skin Condition Physician	.072 (.066)	-.0006 (.0007)	.023 (.060)	-.014 (.064)	.001 (.0015)	-.049 (.053)	-.0005 (.0007)	.061** (.021)	.024 (.017)	.005* (.0025)
Infectious Diseases Physician	.050 (.053)	-.00005 (.0003)	-.029 (.051)	-.013 (.053)	.0001 (.0005)	.026 (.022)	-.00008* (.0004)	.019** (.006)	.015 (.019)	-.0015* (.00065)

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.



Table 5.14

Significant Findings: Relationships Between Health Conditions and Background Characteristics Within Sex Controlling for Age and Race

	MALES				FEMALES			
	Physician's Diagnostic Impression	Diagnosis of Skin Condition	General Well Being Score	Relaxed-Tense Subscore	Physician's Diagnostic Impression	Diagnosis of Skin Condition	General Well Being Score	Relaxed-Tense Subscore
<u>Noise Exposure</u>	*		*			*	***	*
<u>Demographic Characteristics</u>								
Income				*			***	**
Marital Status					*		**	*
Size of Place								
EMSA								
FAIM								
Region								
Education			*	*			***	***
PIR		**		*				
Internal Density								
<u>Physical Characteristics and Habits</u>								
Drugs for Infection								
Aspirin Use			***	***				*
Birth Control Pills	na	na	na	na				
Cigarette Smoking			***	**			**	*
Alcohol Use		*			**			
Activity (Work)			***	**				
Activity (Rec.)			***	***			***	***
Skinfold	***				***			
Height								
Weight	***				***			

\*Significant at .05 level.

\*\*Significant at .01 level.

\*\*\*Significant at .001 level.

Table 5.15

Regression Coefficients of Selected Relationships Between Health Characteristics and Background Characteristics Within Sex Controlling for Age and Race

	MALES				FEMALES			
	Physician's Diagnostic Impression	Diagnosis of Skin Condition	General Well Being Score	Relaxed-Tense Subscore	Physician's Diagnostic Impression	Diagnosis of Skin Condition	General Well Being Score	Relaxed-Tense Subscore
<u>Demographic Characteristics</u>								
Income 0	0	0	0	0*	0	0	0***	0**
1	-.0493	-.0345	2.782	-.0651	-.0736	-.00063	5.452	1.334
2	-.0419	-.0655	3.24	.3041	-.119	.0260	6.78	1.697
3	-.0483	-.0644	3.904	.000062	-.117	-.00715	9.224	1.826
Marital Status	-.03613	-.00940	1.822	-.198	-.0790*	.0230	3.295**	.788*
Years of Education	-.00562	-.00417	.256*	-.0780*	-.00523	-.00465	1.139***	.221***
PIR	-.00740	-.0134**	-.00362	-.162*	-.0125	-.00129	.325	.0757
<u>Physical Characteristics</u>								
Aspirin Use	.04500	.0214	-3.635***	-.943***	-.0105	-.00111	-1.827	-.838*
Cigarette Smoking 0	0	0	0***	0**	0	0	0**	0*
1	.04608	.00941	-1.6501	-.522	-.0142	.00733	-1.242	-.749
2	.0658	.0269	-2.958	-.786	.0180	.00898	-4.0513	-1.158
Alcohol Use 0	0	0*	0	0	0	0**	0	0
1	-.0458	-.0005	1.363	.273	-.035	-.0405	-.715	-.464
2	.0553	-.0337	-1.425	-.436	-.137	-.0631	-2.419	-2.35
3	-.00856	-.0541	.283	.126	.295	-.0594	-13.829	-2.607
Activity (Work)	-.0212	-.00801	3.119***	.796**	-.0385	.00490	2.277	.195
Activity (Rec.)	-.0189	-.00582	4.0135***	1.0223***	-.0132	-.0117	6.391***	1.384***
Skintold	.00397***	.00017	-.00967	-.00664	.00512***	-.0000071	.00590	.00662
Weight	.00440***	.00042	-.00531	-.00631	.00755***	-.00053	-.0177	.00528

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.

Table 5.16

Results of Multiple Regression Models Examining the Relationship of Occupational Noise Exposure to Physician's Diagnostic Impression, Physician's Diagnosis of Skin Conditions and Relaxed/Tense Subscale in the Presence of Background Characteristics

Part A: Physician's Diagnostic Impression - Males

	<u>Model 1</u>	<u>Model 2</u>	<u>Model 3</u>
Noise Exposure	.0063**	.00565**	.0060**
Age	.0127***	.0129***	.0129***
Race (White)	-.0995*	-.0950*	-.0949*
Skinfold	.00430***		.00198
Weight		.00450***	.00321***
Overall F	43.52***	51.24***	41.09***

Part B: Physician's Diagnosis of Skin Conditions - Females

	<u>Model 1</u>
Noise Exposure	.00605
Age	-.00068
Race (White)	.0433**
Alcohol Use 0	0*
1	-.0321
2	-.0460
3	-.0825
Overall F	2.09*

Part C: Relaxed/Tense Subscale - Females

	<u>Model 1</u>
Noise Exposure	-.0478
Age	.0493***
Race (White)	.248
Education	.195**
Overall F	5.95**

\*Significant at .05 level.  
 \*\*Significant at .01 level.  
 \*\*\*Significant at .001 level.

Table 5.17

Results of Multiple Regression Models Examining the Relationship of Occupational Noise Exposure to General Well Being Score in the Presence of Background Characteristics

Part A: Model

	Model 1
Noise Exposure	-.126
Age	.0405
Race (White)	2.620*
Education	.157
Overall F	4.09**

Part B: Models

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11
Noise Exposure	-.311**	-.408***	-.477***	-.289*	-.321**	-.417***	-.295**	-.453***	-.460***	-.452***	-.290**
Age	.124*	.101*	.0981*	.131**	.138**	.105*	.137**	.0918	.0643	.0743	.1205**
Race (White)	4.956**	4.962**	5.537***	4.409**	4.476**	4.903**	4.347**	5.502**	5.738***	5.183**	3.730*
Education	.967***			.833**	.949***		.873**				.733**
Income											
0		0***		0**		0**	0				0**
1		5.526		4.98		5.163	4.392				5.158
2		6.588		5.649		5.783	4.426				5.413
3		8.573		6.955		7.682	5.695				7.255
Currently Married			3.412**		3.328**	1.589	2.102				
Activity (Recreation)								6.154***		6.219***	5.700***
Cigarette Smoking											
0									0**	0**	0*
1									-1.554	-1.711	-1.764
2									-4.0246**	-4.0910**	-3.527*
Overall F	10.73***	9.79***	10.41***	9.50***	10.05***	8.71***	8.90***	12.96***	10.35***	11.26***	8.81***

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.

Table 5.18  
Significant Findings: Relationships between Hearing  
Measures and Health Conditions, Controlling  
for Age and Race by Sex

	MALES					FEMALES				
	500Hz	1000Hz	2000Hz	4000Hz	Prev. <sup>a</sup>	500Hz	1000Hz	2000Hz	4000Hz	Prev. <sup>a</sup>
<u>Health Conditions</u>										
<u>Physician's Diagnostic</u>										
<u>Impression</u>	***	*					*	**	***	
<u>Cardiovascular</u>										
Self Report										*
Physician										*
<u>Heart Disease</u>										
Self Report										*
Physician										*
<u>Respiratory</u>										
Self Report										
Physician							*	*	**	
<u>Muscular/Skeletal</u>										
Self Report										*
Physician								*		*
<u>Gastrointestinal</u>										
Self Report										
Physician						*		***	***	**
<u>Metabolic</u>										
Self Report										
Physician										
<u>Infections</u>										
Self Report						***				
Physician										
<u>Nephritis</u>										
Self Report										
Physician	*									
<u>Nervous System</u>										
Physician	***	***	**		*					
<u>Genitourinary</u>										
Physician	*	***	**	*	**					
<u>Accidents</u>										
Physician										
<u>Skin</u>										
Physician										
<u>Signs and Symptoms</u>										
<u>of Stress</u>										
General Well Being							*	**		*
Relaxed/Tense										
Drugs for Stress										
Phys. Mental Condition			*	**	***					

<sup>a</sup>Prevalence computed based on the average of hearing levels at 1000, 2000 and 4000 Hz > 25dB

\*Significant at .05 level.   \*\*Significant at .01 level.   \*\*\*Significant at .001 level.

**Significant Findings: Relationships Between Indicators of  
Noise Induced Hearing Loss and Health Conditions  
Controlling for Age and Race by Sex (cont.)**

	MALES					FEMALES				
	Absolute Shifts .5, 1, 2 Base	.5, 1 Base	Percentage Shifts .5, 1, 2 Base	.5, 1 Base	Tinnitus	Absolute Shifts .5, 1, 2 Base	.5, 1 Base	Percentage Shifts .5, 1, 2 Base	.5, 1 Base	Tinnitus
<u>Health Conditions</u>										
<u>Physician's Diagnostic Impression</u>										
<u>Cardiovascular</u>										
Self Report	*	*	*	**	**					
Physician						*	*	*	*	*
<u>Heart Disease</u>										
Self Report						*	*	*	*	*
Physician										
<u>Respiratory</u>										
Self Report										*
Physician					*					
<u>Muscular/Skeletal</u>										
Self Report					*					
Physician										
<u>Gastrointestinal</u>										
Self Report										
Physician					*	*	*	*	*	*
<u>Metabolic</u>										
Self Report										
Physician										
<u>Infections</u>										
Self Report										***
Physician										***
<u>Nephrology</u>										
Self Report										*
Physician										***
<u>Nervous System</u>										
Physician	*	*	***	**						
<u>Genitourinary</u>										
Physician								*		***
<u>Accidents</u>										
Physician										
<u>Skin</u>										
Physician										
<u>Signs and Symptoms of Stress</u>										
General Well Being					***					***
Relaxed/Tense					***					**
Index for Stress					*					*
Phys. Mental Condition	*	*								

\*Significant at .05 level.

\*\*Significant at .01 level.

\*\*\*Significant at .001 level.

Table 5.19  
Regression Coefficients of Relationships Between  
Hearing Measures and Health Conditions Within  
Sex Controlling for Age and Race

Health Conditions	MEN					WOMEN				
	500	1000	2000	4000	Prev.	500	1000	2000	4000	Prev.
<u>Physician's Diagnostic</u>										
<u>Ingressica</u>	1.017***	1.101*	.200	-.971	-.00023	1.0127	1.356*	1.975**	2.404***	.0210
<u>Cardiovascular</u>										
Self Report	1.231	.611	-.350	1.340	.0424	.940	1.561	3.0960	5.632	.0535*
Physician	-.529	-.133	.0499	-1.449	.0216	.527	-.109	.517	1.571	.0242
<u>Heart Disease</u>										
Self Report	.092	.205	.141	1.069	.0705	-.717	.500	.509	4.529	.0357
Physician	-.996	-1.267	1.0461	-.553	.0317	1.0730	.993	1.576	3.359	.0601*
<u>Respiratory</u>										
Self Report	-.0500	.134	-.425	-.176	-.0427	-.712	.346	.969	1.0374	.0177
Physician	.300	.049	1.119	.900	-.00454	-1.698	-1.742*	-2.393*	-2.662**	-.0421
<u>Muscular Skeletal</u>										
Self Report	-.117	.600	1.374	1.696	.0359	-.366	.227	.407	1.127	-.0237
Physician	.651	.0375	1.130	2.0223	.0225	-1.366	-1.149	-2.171*	-2.0439	-.0578*
<u>Gastrointestinal</u>										
Self Report	1.602	.497	.760	1.304	.0359	1.0732*	1.100	.930***	1.915***	.0347**
Physician	-.0602	-.274	.794	2.620	.0574	-2.015	-.897	-3.425	-4.471	-.0605
<u>Metabolic</u>										
Self Report	-1.0772	-1.0060	-2.366	-.533	-.0406	-.0017	.049	1.739	.189	.0211
Physician	.026	1.460	-.230	-.021	.0373	.397	1.0059	.821	.0300	-.0109
<u>Infectious</u>										
Self Report	-1.424	2.450	-1.095	.512	-.0759	-2.493***	-3.660	-2.706	-2.696	-.0394
Physician	1.799	1.470	3.0975	3.0474	.0256	-2.0567	-1.260	-1.269	-3.243	-.0539
<u>Neoplasms</u>										
Self Report	-1.093	.0734	.302	-.203	.0299	1.231	.644	.671	.876	.0196
Physician	5.0226*	5.690	4.0599	1.015	.00691	.119	.624	.211	-1.042	-.0247
<u>Nervous System</u>										
Physician	5.444***	5.004***	6.340**	2.650	.0753*	-.250	-.356	.834	1.456	.0242
<u>Genitourinary</u>										
Physician	-2.400*	-5.517***	-9.256**	-11.0946*	-.190**	-1.141	.259	-.536	-2.200	.0660
<u>Accidents</u>										
Physician	1.00506	2.736	2.512	4.261	.0769	.519	-.407	-.300	-.00525	-.0112
<u>Skin</u>										
Physician	.403	.251	.0404	3.459	.0355	-2.472	-1.369	0.0751	4.423	-.0187
<u>Signs and Symptoms of Stress</u>										
General Well Being	-.0140	-.00042	-.0170	-.0604	-.00040	-.0290	-.0370*	-.0520**	-.0184	-.00077*
<u>Relaxation/Tense Subscore</u>										
Physician	.0500	.0942	.0900	-.0326	.00165	-.0270	-.0633	-.132	-.0756	-.00241
<u>Use of Drugs for Stress</u>										
Physician	1.0976	1.0700	.0083	.933	.0292	-.294	-.140	-.776	-1.033	-.0275
<u>Physician's Diagnosis of Mental Condition</u>										
Physician	1.175	.433	8.613*	14.996**	.344***	-1.702	-.129	5.161	.514	.0546

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.

Table 5.20  
 Regression Coefficients of Relationships Between  
 Indicators of Noise-Induced Hearing Loss and Health Conditions  
 Within Sex Controlling for Age and Race

Health Condition	MALES					FEMALES				
	Absolute Shifts		Percentage Shifts		Tinnitus	Absolute Shifts		Percentage Shifts		Tinnitus
	.5, 1, 2 Base	.5, 1 Base	.5, 1, 2 Base	.5, 1. Base		.5, 1, 2 Base	.5, 1 Base	.5, 1, 2 Base	.5, 1 Base	
Physician's Diagnostic Impression	-2.0458*	-2.447*	-.0006*	-.116**	-.0342**	1.0117	1.266	.0235	.0272	-.00174
<u>Cardiovascular</u>										
Self Report	.714	.274	-.0103	-.0438	-.0350	3.721*	4.327*	.0658	.112	-.150*
Physician	-1.396	-1.318	-.0609	-.0626	.0104	1.297	1.401	.0581*	.0615*	-.0215
<u>Heart Disease</u>										
Self Report	1.298	1.136	.0121	-.00640	-.0567	4.360	4.582	.0698	.135	-.0975
Physician	-.265	.425	-.0292	-.00684	.0219	2.231*	2.415*	.0730*	.0911*	-.0187
<u>Respiratory</u>										
Self Report	-.101	-.263	-.00630	-.0150	-.0375	.887	1.305	.00807	.0273	-.0505*
Physician	.597	.804	-.0219	.0183	-.0491*	-.737	-.962	-.0140	-.0210	-.0380
<u>Muscular/Skeletal</u>										
Self Report	.950	1.285	.00760	-.0103	-.0615*	1.0532	1.233	.0273	.0382	-.0159
Physician	1.262	1.555	.0296	.0532	-.0105	-.526	-.832	-.0109	-.0295	.00273
<u>Gastrointestinal</u>										
Self Report	.498	.361	.00749	.0174	-.0490	.815	.745	.0263	.0244	-.0545
Physician	2.406	2.702	.0388	.0342	-.0823*	-2.115*	-2.639*	-.0692	-.0922*	-.0137
<u>Metabolic</u>										
Self Report	.064	.415	.00907	.00716	-.0715	-.701	-.258	-.0217	-.00367	-.00919
Physician	-1.575	-2.062	-.0668	-.0999	-.0128	-.762	-.736	-.0333	-.0203	.0422
<u>Infectious</u>										
Self Report	.462	-.0830	.0209	.0187	.00663	.233	.356	.0185	.0211	.0426***
Physician	.874	1.341	-.0361	.0278	-.0227	-1.734	-1.605	-.0746	-.0575	.0608***
<u>Neoplasms</u>										
Self Report	.198	.596	-.0119	-.00536	-.0343	-.00126	-.0942	-.0153	-.0209	-.134*
Physician	-3.227	-3.683	-.132	-.148	-.0638	-2.179	-2.233	-.0849	0.0760	.0649***
<u>Nervous System</u>										
Physician	-3.317*	-3.119*	-.143***	-.163**	-.00264	1.344	1.723	.0272	0.295	-.0325
<u>Genitourinary</u>										
Physician	-5.333	-7.0849	-.115	-.183	.0261	-1.734	-1.766	-.0939*	-.0700	.0634***
<u>Accidents</u>										
Physician	2.128	2.322	.0597	.0737	-.00987	.0788	-.0355	-.0139	-.00374	-.116
<u>Skin</u>										
Physician	3.147	3.0187	.0815	.0592	-.0406	5.706	6.321	.195	.179	.00042
<u>Signs and Symptoms of Hearing Loss</u>										
General Well Being	-.0584	-.0621	-.00148	-.00113	.00230***	.0215	.0151	.00101	.00087	.00182***
Tinnitus/Pain	-.112	-.105	-.00467	-.00244	.00645***	-.0000074	-.0288	.00037	.00011	.00517**
Subscore										
Use of Drugs for Stress	.101	-.243	.0204	-.00353	-.0695*	-.769	-1.0109	-.0218	-.0264	-.0642*
Physician's Diagnosis of Mental Condition	11.531*	14.113*	.255	.459	.0233	-.611	1.415	-.0311	.0602	-.160

\*Significant at .05 level. \*\*Significant at .01 level. \*\*\*Significant at .001 level.