

7. Heidelberg Retina Tomograph II

The Heidelberg Retina Tomograph is a confocal laser scanning microscope for acquisition and analysis of three-dimensional images of the posterior segment. It enables the quantitative assessment of the retinal topography and precise follow-up of topographic changes. In the NLS-LSA, the topographic description of the optic nerve head was assessed.

HRT cup/disc area ratio - Right Eye

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80 - yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.20	0.12	262	0.21	0.12	327	0.20	0.12	282	0.23	0.14	239	0.21	0.13	29	0.21	0.12	1139
Female	0.18	0.12	294	0.20	0.12	279	0.21	0.14	279	0.21	0.13	233	0.21	0.15	26	0.20	0.13	1111
Total	0.19	0.12	556	0.20	0.12	606	0.21	0.13	561	0.22	0.14	472	0.21	0.14	55	0.20	0.13	2250

HRT cup/disc area ratio - Left Eye

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80 - yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.21	0.12	259	0.22	0.12	323	0.22	0.14	283	0.25	0.15	224	0.28	0.19	28	0.22	0.14	1117
Female	0.19	0.11	292	0.22	0.12	280	0.22	0.14	272	0.22	0.13	232	0.26	0.16	25	0.21	0.13	1101
Total	0.20	0.12	551	0.22	0.12	603	0.22	0.14	555	0.24	0.14	456	0.27	0.17	53	0.22	0.13	2218

HRT mean cup depth - Right Eye (mm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80 - yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.19	0.08	262	0.19	0.08	327	0.18	0.08	282	0.19	0.08	239	0.18	0.06	29	0.19	0.08	1139
Female	0.19	0.08	294	0.18	0.07	279	0.18	0.08	279	0.17	0.08	233	0.18	0.07	26	0.18	0.08	1111
Total	0.19	0.08	556	0.19	0.07	606	0.18	0.08	561	0.18	0.08	472	0.18	0.07	55	0.18	0.08	2250

HRT mean cup depth - Left Eye (mm)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80 - yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.19	0.08	259	0.20	0.08	323	0.18	0.08	283	0.18	0.07	224	0.18	0.08	28	0.19	0.08	1117
Female	0.19	0.07	292	0.19	0.08	280	0.19	0.08	272	0.18	0.08	232	0.19	0.07	25	0.19	0.08	1101
Total	0.19	0.08	551	0.19	0.08	603	0.18	0.08	555	0.18	0.08	456	0.19	0.08	53	0.19	0.08	2218

Auditory system

1. Pure-tone audiometry (Audiometer RION AA-73A)

Air conduction threshold of right ear at 125Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	23.1	8.0	266	26.0	9.6	331	30.4	11.7	297	35.8	13.8	266	40.2	13.1	43	29.1	12.1	1203
Female	22.9	7.0	294	26.2	9.2	285	30.5	11.9	284	37.1	12.7	275	39.4	14.8	34	29.4	11.9	1172
Total	23.0	7.5	560	26.1	9.4	616	30.4	11.8	581	36.4	13.3	541	39.9	13.8	77	29.2	12.0	2375

Air conduction threshold of right ear at 250Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	19.5	7.7	266	22.3	10.4	331	25.9	11.9	297	31.9	15.8	266	36.7	15.1	43	25.2	12.9	1203
Female	19.0	6.8	294	22.4	9.0	285	26.6	13.4	284	32.9	14.1	275	37.6	18.1	34	25.5	12.7	1172
Total	19.2	7.2	560	22.4	9.7	616	26.2	12.7	581	32.4	15.0	541	37.1	16.4	77	25.3	12.8	2375

Air conduction threshold of right ear at 500Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	14.5	6.8	266	17.8	11.2	331	21.3	11.8	297	28.4	16.0	266	34.0	15.1	43	20.9	13.2	1203
Female	14.6	6.9	294	17.2	9.0	285	23.2	14.7	284	29.8	14.7	275	36.5	22.4	34	21.5	13.7	1172
Total	14.6	6.9	560	17.5	10.2	616	22.3	13.4	581	29.1	15.4	541	35.1	18.6	77	21.2	13.5	2375

Air conduction threshold of right ear at 1000Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	10.0	7.8	266	13.3	11.4	331	17.8	12.9	297	26.9	17.8	266	36.4	15.8	43	17.5	14.8	1203
Female	8.7	7.6	294	12.3	9.1	285	18.6	15.2	284	26.3	15.1	275	35.6	22.6	34	16.9	14.5	1172
Total	9.3	7.7	560	12.9	10.4	616	18.2	14.1	581	26.6	16.5	541	36.0	19.0	77	17.2	14.7	2375

Air conduction threshold of right ear at 2000Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	13.6	9.9	266	17.9	12.2	331	25.8	15.0	297	36.2	18.1	266	47.6	18.4	43	24.0	17.0	1203
Female	11.9	8.9	294	15.9	9.7	285	24.0	14.6	284	31.7	14.4	275	42.1	21.8	34	21.3	15.0	1172
Total	12.7	9.4	560	17.0	11.1	616	24.9	14.8	581	33.9	16.5	541	45.1	20.0	77	22.7	16.1	2375

Air conduction threshold of right ear at 4000Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	16.8	14.0	266	25.8	17.5	331	37.5	18.4	297	50.0	19.1	266	59.8	19.1	43	33.3	21.7	1203
Female	9.9	10.6	294	15.3	11.5	285	25.2	17.1	284	36.0	17.2	275	46.6	25.0	34	22.1	18.2	1172
Total	13.2	12.8	560	20.9	15.9	616	31.5	18.7	581	42.9	19.5	541	54.0	22.7	77	27.8	20.8	2375

Air conduction threshold of right ear at 8000Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	23.4	18.0	266	33.8	18.9	331	49.5	21.0	297	66.1	18.8	266	76.4	17.4	43	44.1	25.4	1203
Female	19.2	14.6	294	28.0	15.5	285	42.9	20.1	284	58.7	21.1	275	72.8	18.5	34	37.9	24.0	1172
Total	21.2	16.4	560	31.1	17.6	616	46.3	20.8	581	62.4	20.3	541	74.8	17.9	77	41.0	24.9	2375

Bone conduction threshold of right ear at 250Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	19.5	6.4	266	21.0	7.4	331	24.1	9.4	297	29.6	12.0	266	33.6	12.4	43	23.8	10.0	1203
Female	17.9	6.3	294	20.7	7.6	285	24.3	9.4	283	30.8	11.2	274	34.6	12.9	34	23.6	10.2	1170
Total	18.6	6.4	560	20.8	7.5	616	24.2	9.4	580	30.2	11.6	540	34.0	12.6	77	23.7	10.1	2373

Bone conduction threshold of right ear at 500Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	13.3	6.7	266	15.6	8.1	331	18.9	10.1	297	26.1	13.7	266	31.7	14.6	43	18.8	11.4	1203
Female	12.9	6.8	294	15.4	8.7	285	19.8	10.3	283	27.2	12.2	274	33.4	17.2	34	19.1	11.5	1170
Total	13.1	6.8	560	15.5	8.4	616	19.4	10.2	580	26.6	13.0	540	32.5	15.7	77	19.0	11.4	2373

Bone conduction threshold of right ear at 1000Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	9.8	7.1	266	12.4	8.9	331	17.2	11.9	297	25.7	15.2	266	35.6	14.6	43	16.8	13.2	1203
Female	8.9	7.5	294	13.4	9.3	285	18.1	10.9	283	26.3	13.3	274	34.0	16.9	34	17.0	12.7	1170
Total	9.4	7.3	560	12.8	9.1	616	17.6	11.4	580	26.0	14.3	540	34.9	15.6	77	16.9	12.9	2373

Bone conduction threshold of right ear at 2000Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	13.6	9.0	266	17.1	10.7	331	24.5	14.0	297	34.5	16.6	266	45.3	17.8	43	23.0	15.7	1203
Female	11.8	8.0	294	16.3	9.8	285	23.0	12.6	283	31.1	13.6	274	39.7	16.7	34	20.9	13.8	1170
Total	12.7	8.5	560	16.8	10.3	616	23.8	13.3	580	32.8	15.2	540	42.9	17.4	77	22.0	14.8	2373

Bone conduction threshold of right ear at 4000Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	17.3	12.2	266	25.4	14.8	331	36.2	16.1	297	46.8	15.3	266	53.5	13.6	43	32.0	18.5	1203
Female	10.3	9.0	294	15.9	10.9	285	24.6	14.2	283	34.9	15.1	274	41.9	16.7	34	21.8	15.9	1170
Total	13.6	11.2	560	21.0	13.9	616	30.5	16.3	580	40.7	16.3	540	48.4	16.0	77	27.0	18.0	2373

Air conduction threshold of left ear at 125Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	20.7	8.5	266	23.4	9.5	331	26.9	11.8	297	32.9	13.8	266	35.8	12.8	43	26.2	12.0	1203
Female	20.8	6.2	294	23.0	9.9	285	27.7	10.7	284	34.9	12.9	275	33.5	12.3	34	26.7	11.6	1172
Total	20.7	7.4	560	23.2	9.7	616	27.3	11.3	581	33.9	13.4	541	34.8	12.6	77	26.5	11.8	2375

Air conduction threshold of left ear at 250Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	16.8	8.7	266	19.3	10.3	331	23.0	13.4	297	29.2	15.9	266	33.1	13.8	43	22.4	13.3	1203
Female	16.5	6.2	294	19.2	10.9	285	23.0	12.3	284	31.6	15.0	275	32.1	12.7	34	22.7	12.9	1172
Total	16.7	7.5	560	19.2	10.6	616	23.0	12.8	581	30.4	15.5	541	32.7	13.3	77	22.5	13.1	2375

Air conduction threshold of left ear at 500Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	13.1	8.3	266	15.9	11.0	331	19.5	13.6	297	26.4	16.6	266	31.0	14.9	43	19.0	13.8	1203
Female	12.4	5.8	294	15.9	11.3	285	20.0	13.3	284	27.7	15.6	275	30.7	13.9	34	19.2	13.4	1172
Total	12.7	7.1	560	15.9	11.1	616	19.8	13.5	581	27.1	16.1	541	30.9	14.4	77	19.1	13.6	2375

Air conduction threshold of left ear at 1000Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	9.8	8.7	266	13.3	11.8	331	18.8	15.5	297	26.4	18.7	266	36.2	16.1	43	17.6	15.8	1203
Female	6.9	7.0	294	11.4	11.8	285	15.9	13.8	284	23.7	15.5	275	29.1	16.4	34	14.7	14.1	1172
Total	8.3	7.9	560	12.4	11.8	616	17.4	14.7	581	25.1	17.2	541	33.1	16.5	77	16.2	15.0	2375

Air conduction threshold of left ear at 2000Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	13.3	9.8	266	18.4	12.7	331	27.4	17.5	297	37.1	18.7	266	47.9	18.2	43	24.7	18.0	1203
Female	10.7	8.9	294	16.1	12.3	285	22.5	14.2	284	31.4	16.2	275	38.4	19.6	34	20.5	15.7	1172
Total	11.9	9.4	560	17.3	12.6	616	25.0	16.2	581	34.2	17.7	541	43.7	19.3	77	22.6	17.0	2375

Air conduction threshold of left ear at 4000Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	16.4	13.5	266	27.0	17.7	331	38.1	19.5	297	51.4	19.0	266	59.9	16.2	43	34.0	22.0	1203
Female	9.0	9.3	294	16.6	14.0	285	25.2	15.7	284	36.7	19.0	275	47.4	21.0	34	22.4	18.6	1172
Total	12.5	12.0	560	22.2	16.9	616	31.8	18.9	581	43.9	20.4	541	54.4	19.4	77	28.3	21.2	2375

Air conduction threshold of left ear at 8000Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	20.2	15.0	266	30.8	19.5	331	47.5	20.6	297	65.3	18.4	266	74.8	18.4	43	41.8	25.5	1203
Female	14.6	11.7	294	26.5	17.0	285	39.8	18.8	284	57.0	19.4	275	69.6	18.8	34	35.2	23.8	1172
Total	17.3	13.7	560	28.8	18.5	616	43.8	20.1	581	61.1	19.3	541	72.5	18.6	77	38.5	24.9	2375

Bone conduction threshold of left ear at 250Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	17.6	6.8	266	19.5	7.2	331	22.3	9.6	297	28.2	12.2	266	33.3	13.0	43	22.2	10.2	1203
Female	16.3	6.1	294	18.8	7.8	285	22.7	9.6	283	29.8	10.7	274	31.5	12.3	34	22.1	10.2	1170
Total	16.9	6.5	560	19.2	7.4	616	22.5	9.6	580	29.0	11.5	540	32.5	12.7	77	22.1	10.2	2373

Bone conduction threshold of left ear at 500Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	12.3	7.3	266	14.7	7.9	331	17.9	10.2	297	25.1	13.8	266	31.6	14.3	43	17.9	11.5	1203
Female	11.5	5.9	294	14.8	8.6	285	18.6	10.3	283	25.8	11.9	274	30.4	13.9	34	17.9	11.1	1170
Total	11.9	6.6	560	14.7	8.2	616	18.3	10.2	580	25.5	12.9	540	31.1	14.1	77	17.9	11.3	2373

Bone conduction threshold of left ear at 1000Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	8.9	7.5	266	12.0	8.9	331	17.0	12.1	297	25.1	16.2	266	35.7	15.9	43	16.3	13.6	1203
Female	7.5	7.3	294	11.4	9.5	285	16.0	11.0	283	23.9	13.0	274	30.3	16.9	34	15.0	12.4	1170
Total	8.2	7.4	560	11.7	9.2	616	16.6	11.5	580	24.5	14.6	540	33.3	16.5	77	15.7	13.0	2373

Bone conduction threshold of left ear at 2000Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	14.8	9.3	266	19.1	11.6	331	27.2	14.6	297	37.0	17.2	266	47.1	17.6	43	25.1	16.4	1203
Female	12.6	7.8	294	18.2	10.9	285	23.5	12.1	283	32.2	14.0	274	38.7	16.7	34	21.9	13.8	1170
Total	13.7	8.7	560	18.6	11.3	616	25.4	13.6	580	34.6	15.8	540	43.4	17.6	77	23.5	15.3	2373

Bone conduction threshold of left ear at 4000Hz (dBHL)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	17.3	13.1	266	26.6	15.2	331	36.6	16.3	297	48.3	15.1	266	54.7	11.1	43	32.8	18.9	1203
Female	10.2	8.1	294	17.5	11.8	285	25.2	13.4	283	35.9	15.5	274	45.4	16.4	34	22.7	16.2	1170
Total	13.6	11.3	560	22.4	14.5	616	31.0	16.0	580	42.0	16.5	540	50.6	14.4	77	27.8	18.3	2373

2. Impedance Audiometry

Tympanometric peak pressure in the single frequency tympanogram at 226Hz for right ear (daPa)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	2.9	14.1	263	-2.5	31.2	326	-6.1	38.0	287	-10.3	43.7	255	-14.1	50.4	40	-4.2	34.5	1171
Female	1.6	17.2	291	-1.1	26.1	281	-4.9	41.7	279	-12.8	47.3	263	-9.4	34.8	31	-4.3	35.2	1145
Total	2.2	15.8	554	-1.8	29.0	607	-5.5	39.8	566	-11.6	45.5	518	-12.0	44.1	71	-4.2	34.8	2316

Static compliance in the single frequency tympanogram at 226Hz for right ear (ml)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.92	0.85	263	0.93	0.84	326	1.00	0.93	287	0.84	0.80	255	0.76	0.58	40	0.92	0.85	1171
Female	0.66	0.46	291	0.76	0.76	281	0.73	0.76	279	0.63	0.63	263	0.63	0.56	31	0.70	0.66	1145
Total	0.79	0.69	554	0.85	0.81	607	0.87	0.86	566	0.73	0.72	518	0.71	0.57	71	0.81	0.77	2316

Tympanometric peak pressure in the single frequency tympanogram at 226Hz for left ear (daPa).

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	3.9	15.3	263	-4.1	33.0	318	-4.8	35.8	290	-7.3	42.2	260	-11.8	47.3	40	-3.4	33.9	1171
Female	3.5	21.7	294	-0.8	27.1	278	-9.6	41.3	277	-8.2	38.2	266	-16.3	51.3	31	-3.9	33.9	1146
Total	3.7	19.0	557	-2.5	30.4	596	-7.1	38.6	567	-7.7	40.2	526	-13.7	48.8	71	-3.7	33.9	2317

Static compliance in the single frequency tympanogram at 226Hz for left ear (ml)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.87	0.80	263	0.85	0.67	318	0.97	0.85	290	0.84	0.75	260	0.78	0.48	40	0.88	0.76	1171
Female	0.67	0.50	294	0.71	0.66	278	0.67	0.61	277	0.60	0.56	266	0.59	0.56	31	0.66	0.58	1146
Total	0.76	0.66	557	0.79	0.67	596	0.82	0.76	567	0.72	0.67	526	0.69	0.52	71	0.77	0.69	2317

Middle ear resonance frequency for right ear (Hz)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	851.2	243.1	260	825.7	236.7	313	819.9	239.1	274	860.9	486.0	233	861.8	247.0	38	838.8	307.7	1118
Female	912.5	246.7	287	848.7	239.7	271	876.0	258.1	271	880.1	285.6	246	939.3	268.5	28	881.3	258.3	1103
Total	883.4	246.7	547	836.4	238.2	584	847.8	250.1	545	870.8	395.6	479	894.7	257.2	66	859.9	285.0	2221

Middle ear resonance frequency for left ear (Hz)

	40-49yr			50-59yr			60-69yr			70-79yr			80-89yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	837.3	208.4	255	830.0	231.8	303	814.6	233.9	271	815.6	250.9	237	810.8	237.2	37	824.2	231.4	1103
Female	906.3	243.3	286	852.6	254.6	268	884.6	261.6	265	886.0	287.1	240	889.3	280.7	28	882.9	261.9	1087
Total	873.8	229.9	541	840.6	242.8	571	849.2	250.2	536	851.0	271.7	477	844.6	257.7	65	853.3	248.7	2190

IX. Physiological Examinations

IX. Physiological Examinations

1) Cardiovascular system

1. Blood pressure and pulse rate
2. Electrocardiography
3. Ultrasonic cardiography
4. Intima-media thickness of carotid artery

1) Cardiovascular system

1. Blood pressure and pulse rate

(Automatic blood pressure analyzer, BP-204RV, Colin, Inc.,)

Systolic Blood Pressure (mmHg)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	118.4	15.9	266	122.8	16.3	331	123.6	17.2	295	127.9	20.0	267	126.0	18.5	43	123.3	17.7	1202
Female	110.3	17.1	294	116.2	18.9	285	121.0	19.5	285	128.0	20.4	275	124.3	21.9	34	118.9	20.1	1173
Total	114.2	17.1	560	119.7	17.9	616	122.3	18.4	580	127.9	20.2	542	125.2	19.9	77	121.1	19.0	2375

Diastolic Blood Pressure (mmHg)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	74.6	9.8	266	77.9	10.3	331	76.8	10.0	295	76.7	11.4	267	73.9	10.0	43	76.5	10.4	1202
Female	68.0	10.7	294	72.0	11.0	285	73.6	11.2	285	75.3	11.7	275	71.4	11.9	34	72.2	11.5	1173
Total	71.1	10.7	560	75.1	11.0	616	75.3	10.7	580	76.0	11.6	542	72.8	10.9	77	74.3	11.2	2375

Pulse Rate (/min)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	66.6	10.5	266	68.6	10.9	331	68.8	11.0	295	70.9	11.9	267	72.6	12.1	43	68.8	11.2	1202
Female	72.2	11.0	294	71.3	9.8	285	71.7	10.1	286	74.7	9.8	275	72.4	11.0	34	72.5	10.3	1174
Total	69.5	11.1	560	69.8	10.4	616	70.2	10.7	581	72.8	11.0	542	72.5	11.5	77	70.6	10.9	2375

2. Electrocardiography

(Automatic EKG analyzer, Kartizer5500, NEC Corp..)

Heart Rate (/min)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	62.0	9.6	266	63.1	10.7	331	63.2	11.4	297	66.1	13.2	265	66.8	12.3	43	63.7	11.4	1202
Female	65.2	10.6	294	64.5	9.3	285	65.0	9.4	286	68.1	10.3	275	66.1	9.5	34	65.7	10.0	1174
Total	63.7	10.3	560	63.7	10.1	616	64.1	10.5	583	67.2	11.8	540	66.5	11.1	77	64.7	10.8	2376

PR-interval (msec)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	156.2	22.4	265	161.8	23.0	327	163.2	21.6	294	166.1	23.8	250	169.8	25.8	42	162.1	23.1	1178
Female	147.0	19.1	293	156.1	20.4	283	157.9	21.4	284	159.1	24.7	271	159.2	28.4	33	155.1	22.2	1164
Total	151.4	21.2	558	159.2	22.0	610	160.6	21.6	578	162.5	24.5	521	165.1	27.3	75	158.6	22.9	2342

QRS-width (msec)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	91.4	9.4	266	92.4	11.3	331	93.2	14.7	297	94.6	17.2	265	92.3	16.6	43	92.8	13.6	1202
Female	83.1	10.5	294	85.0	11.4	285	84.8	10.9	286	86.0	13.0	275	82.7	12.8	34	84.6	11.5	1174
Total	87.0	10.8	560	88.9	11.9	616	89.1	13.6	583	90.2	15.8	540	88.1	15.7	77	88.8	13.3	2376

QT-interval (msec)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	394.2	28.5	266	394.4	28.0	331	399.0	29.4	297	398.7	34.6	265	399.0	31.2	43	396.6	30.2	1202
Female	397.3	28.7	294	400.7	28.8	285	404.2	29.3	285	398.9	30.6	275	405.4	29.7	34	400.4	29.4	1173
Total	395.9	28.6	560	397.3	28.5	616	401.6	29.5	582	398.8	32.6	540	401.8	30.5	77	398.5	29.9	2375

QTc-interval (msec)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	397.4	20.8	266	400.9	19.8	331	405.5	22.2	297	413.5	24.2	265	416.7	28.6	43	404.6	22.8	1202
Female	410.7	20.6	294	412.2	21.2	285	417.4	22.5	285	421.7	21.7	275	423.5	21.7	34	415.6	21.9	1173
Total	404.4	21.7	560	406.1	21.2	616	411.3	23.1	582	417.6	23.3	540	419.7	25.9	77	410.1	23.0	2375

S (V1) -height (mV)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	-0.878	0.412	265	-0.818	0.432	329	-0.779	0.418	291	-0.784	0.404	253	-0.661	0.402	43	-0.809	0.419	1181
Female	-0.835	0.351	293	-0.770	0.361	285	-0.748	0.396	282	-0.768	0.456	263	-0.810	0.601	34	-0.782	0.400	1157
Total	-0.855	0.381	558	-0.796	0.401	614	-0.764	0.407	573	-0.776	0.431	516	-0.727	0.502	77	-0.795	0.410	2338

R (V5) -height (mV)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	1.653	0.488	266	1.723	0.587	331	1.762	0.623	297	1.801	0.723	265	1.796	0.798	43	1.737	0.619	1202
Female	1.273	0.402	294	1.428	0.470	285	1.570	0.489	286	1.637	0.600	274	1.706	0.591	34	1.481	0.516	1173
Total	1.454	0.484	560	1.587	0.555	616	1.668	0.569	583	1.718	0.668	539	1.756	0.711	77	1.610	0.585	2375

QRS-axis (degree)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	51.8	28.2	266	41.4	30.5	330	37.4	34.9	296	35.1	36.3	264	37.9	34.5	42	41.2	33.1	1198
Female	54.9	27.3	294	47.4	29.0	285	38.6	28.3	285	30.9	30.7	274	25.6	33.6	34	42.6	30.4	1172
Total	53.4	27.8	560	44.2	29.9	615	38.0	31.8	581	33.0	33.6	538	32.4	34.5	76	41.9	31.8	2370

P-axis (degree)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	50.1	26.1	262	51.5	27.3	324	48.3	31.0	290	55.6	28.2	247	56.4	26.0	42	51.4	28.2	1165
Female	49.7	27.6	291	52.1	24.7	283	47.5	28.4	283	50.1	26.1	267	42.6	34.6	31	49.6	27.0	1155
Total	49.9	26.9	553	51.8	26.1	607	47.9	29.7	573	52.8	27.3	514	50.5	30.5	73	50.5	27.6	2320

T-axis (degree)

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	40.0	26.8	265	40.4	28.1	327	40.9	34.3	295	44.7	35.6	260	49.8	35.8	43	41.7	31.5	1190
Female	39.5	22.3	292	36.4	27.8	281	37.0	29.0	281	40.9	29.7	268	41.8	32.6	34	38.5	27.4	1156
Total	39.8	24.5	557	38.6	28.0	608	39.0	31.8	576	42.7	32.8	528	46.3	34.4	77	40.1	29.6	2346

CV of R-R

	40 - 49yr			50 - 59yr			60 - 69yr			70 - 79yr			80yr -			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	3.6	1.4	243	3.0	1.2	297	2.9	1.3	255	2.6	1.3	198	2.6	1.6	31	3.0	1.3	1024
Female	3.5	1.4	277	3.0	1.2	268	2.7	1.1	253	2.6	1.2	227	2.3	1.5	26	3.0	1.3	1051
Total	3.6	1.4	520	3.0	1.2	565	2.8	1.2	508	2.6	1.2	425	2.4	1.6	57	3.0	1.3	2075

Minnesota Code

		40 - 49yr		50 - 59yr		60 - 69yr		70 - 79yr		80yr -		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
Minnesota Code 1-0-0	Male	53	19.9	67	20.2	44	14.8	32	12.0	7	16.3	203	16.9
	Female	65	22.1	63	22.1	32	11.2	24	8.7	5	14.7	189	16.1
	Total	118	21.1	130	21.1	76	13.0	56	10.3	12	15.6	392	16.5
Minnesota Code 1-1-1	Male	0	0.0	0	0.0	0	0.0	4	1.5	1	2.3	5	0.4
	Female	0	0.0	0	0.0	1	0.3	1	0.4	1	2.9	3	0.3
	Total	0	0.0	0	0.0	1	0.2	5	0.9	2	2.6	8	0.3
Minnesota Code 1-1-2	Male	0	0.0	1	0.3	0	0.0	1	0.4	0	0.0	2	0.2
	Female	0	0.0	1	0.4	1	0.3	0	0.0	0	0.0	2	0.2
	Total	0	0.0	2	0.3	1	0.2	1	0.2	0	0.0	4	0.2
Minnesota Code 1-1-3	Male	0	0.0	1	0.3	2	0.7	0	0.0	0	0.0	3	0.2
	Female	0	0.0	0	0.0	1	0.3	1	0.4	0	0.0	2	0.2
	Total	0	0.0	1	0.2	3	0.5	1	0.2	0	0.0	5	0.2
Minnesota Code 1-1-4	Male	0	0.0	2	0.6	1	0.3	1	0.4	0	0.0	4	0.3
	Female	1	0.3	0	0.0	0	0.0	5	1.8	0	0.0	6	0.5
	Total	1	0.2	2	0.3	1	0.2	6	1.1	0	0.0	10	0.4
Minnesota Code 1-1-5	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Female	0	0.0	0	0.0	0	0.0	1	0.4	0	0.0	1	0.1
	Total	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0	1	0.0
Minnesota Code 1-1-6	Male	0	0.0	1	0.3	0	0.0	2	0.7	0	0.0	3	0.2
	Female	0	0.0	0	0.0	0	0.0	1	0.4	0	0.0	1	0.1
	Total	0	0.0	1	0.2	0	0.0	3	0.6	0	0.0	4	0.2
Minnesota Code 1-1-7	Male	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	1	0.1
	Female	0	0.0	0	0.0	0	0.0	1	0.4	0	0.0	1	0.1
	Total	0	0.0	1	0.2	0	0.0	1	0.2	0	0.0	2	0.1
Minnesota Code 1-2-1	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Minnesota Code 1-2-2	Male	0	0.0	0	0.0	0	0.0	1	0.4	0	0.0	1	0.1
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0	1	0.0
Minnesota Code 1-2-3	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Female	0	0.0	0	0.0	2	0.7	1	0.4	0	0.0	3	0.3
	Total	0	0.0	0	0.0	2	0.3	1	0.2	0	0.0	3	0.1

(Continued)

Minnesota Code

		40 - 49yr		50 - 59yr		60 - 69yr		70 - 79yr		80yr -		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
Minnesota Code 1-2-4	Male	1	0.4	3	0.9	1	0.3	1	0.4	1	2.3	7	0.6
	Female	0	0.0	1	0.4	0	0.0	3	1.1	0	0.0	4	0.3
	Total	1	0.2	4	0.6	1	0.2	4	0.7	1	1.3	11	0.5
Minnesota Code 1-2-5	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Minnesota Code 1-2-6	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Minnesota Code 1-2-7	Male	0	0.0	1	0.3	0	0.0	1	0.4	0	0.0	2	0.2
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	1	0.2	0	0.0	1	0.2	0	0.0	2	0.1
Minnesota Code 1-2-8	Male	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
	Female	2	0.7	1	0.4	1	0.3	0	0.0	0	0.0	4	0.3
	Total	3	0.5	1	0.2	1	0.2	0	0.0	0	0.0	5	0.2
Minnesota Code 1-3-1	Male	0	0.0	0	0.0	1	0.3	0	0.0	0	0.0	1	0.1
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	0	0.0	1	0.2	0	0.0	0	0.0	1	0.0
Minnesota Code 1-3-2	Male	1	0.4	1	0.3	2	0.7	3	1.1	0	0.0	7	0.6
	Female	3	1.0	0	0.0	2	0.7	2	0.7	0	0.0	7	0.6
	Total	4	0.7	1	0.2	4	0.7	5	0.9	0	0.0	14	0.6
Minnesota Code 1-3-3	Male	0	0.0	2	0.6	1	0.3	3	1.1	2	4.7	8	0.7
	Female	0	0.0	1	0.4	2	0.7	0	0.0	0	0.0	3	0.3
	Total	0	0.0	3	0.5	3	0.5	3	0.6	2	2.6	11	0.5
Minnesota Code 1-3-4	Male	1	0.4	1	0.3	1	0.3	1	0.4	0	0.0	4	0.3
	Female	1	0.3	5	1.8	2	0.7	3	1.1	0	0.0	11	0.9
	Total	2	0.4	6	1.0	3	0.5	4	0.7	0	0.0	15	0.6
Minnesota Code 1-3-5	Male	0	0.0	1	0.3	0	0.0	0	0.0	0	0.0	1	0.1
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	1	0.2	0	0.0	0	0.0	0	0.0	1	0.0
Minnesota Code 1-3-6	Male	1	0.4	3	0.9	7	2.4	6	2.2	1	2.3	18	1.5
	Female	1	0.3	8	2.8	5	1.7	12	4.4	4	11.8	30	2.6
	Total	2	0.4	11	1.8	12	2.1	18	3.3	5	6.5	48	2.0

(Continued)

Minnesota Code

		40 - 49yr		50 - 59yr		60 - 69yr		70 - 79yr		80yr -		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
Minnesota Code 2-1	Male	4	1.5	5	1.5	8	2.7	9	3.4	1	2.3	27	2.2
	Female	1	0.3	1	0.4	3	1.0	6	2.2	1	2.9	12	1.0
	Total	5	0.9	6	1.0	11	1.9	15	2.8	2	2.6	39	1.6
Minnesota Code 2-2	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Minnesota Code 2-3	Male	12	4.5	1	0.3	2	0.7	2	0.7	0	0.0	17	1.4
	Female	8	2.7	4	1.4	3	1.0	2	0.7	0	0.0	17	1.4
	Total	20	3.6	5	0.8	5	0.9	4	0.7	0	0.0	34	1.4
Minnesota Code 2-4	Male	0	0.0	0	0.0	0	0.0	1	0.4	0	0.0	1	0.1
	Female	1	0.3	1	0.4	0	0.0	0	0.0	0	0.0	2	0.2
	Total	1	0.2	1	0.2	0	0.0	1	0.2	0	0.0	3	0.1
Minnesota Code 2-5	Male	0	0.0	1	0.3	1	0.3	0	0.0	0	0.0	2	0.2
	Female	0	0.0	0	0.0	1	0.3	0	0.0	0	0.0	1	0.1
	Total	0	0.0	1	0.2	2	0.3	0	0.0	0	0.0	3	0.1
Minnesota Code 3-1	Male	10	3.8	24	7.3	26	8.8	39	14.6	4	9.3	103	8.6
	Female	3	1.0	7	2.5	8	2.8	19	6.9	1	2.9	38	3.2
	Total	13	2.3	31	5.0	34	5.8	58	10.7	5	6.5	141	5.9
Minnesota Code 3-2	Male	1	0.4	0	0.0	0	0.0	1	0.4	0	0.0	2	0.2
	Female	0	0.0	0	0.0	1	0.3	1	0.4	0	0.0	2	0.2
	Total	1	0.2	0	0.0	1	0.2	2	0.4	0	0.0	4	0.2
Minnesota Code 3-3-1	Male	3	1.1	2	0.6	4	1.3	2	0.7	0	0.0	11	0.9
	Female	1	0.3	1	0.4	4	1.4	2	0.7	0	0.0	8	0.7
	Total	4	0.7	3	0.5	8	1.4	4	0.7	0	0.0	19	0.8
Minnesota Code 3-3-2	Male	10	3.8	13	3.9	13	4.4	9	3.4	2	4.7	47	3.9
	Female	5	1.7	3	1.1	9	3.1	14	5.1	2	5.9	33	2.8
	Total	15	2.7	16	2.6	22	3.8	23	4.2	4	5.2	80	3.4
Minnesota Code 3-4	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Minnesota Code 4-1-1	Male	0	0.0	0	0.0	0	0.0	1	0.4	0	0.0	1	0.1
	Female	0	0.0	0	0.0	2	0.7	1	0.4	1	2.9	4	0.3
	Total	0	0.0	0	0.0	2	0.3	2	0.4	1	1.3	5	0.2

(Continued)

Minnesota Code

		40 - 49yr		50 - 59yr		60 - 69yr		70 - 79yr		80yr -		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
Minnesota Code 4-1-2	Male	1	0.4	4	1.2	6	2.0	12	4.5	2	4.7	25	2.1
	Female	5	1.7	5	1.8	7	2.4	5	1.8	0	0.0	22	1.9
	Total	6	1.1	9	1.5	13	2.2	17	3.1	2	2.6	47	2.0
Minnesota Code 4-2	Male	5	1.9	10	3.0	19	6.4	12	4.5	4	9.3	50	4.2
	Female	3	1.0	8	2.8	23	8.0	18	6.5	1	2.9	53	4.5
	Total	8	1.4	18	2.9	42	7.2	30	5.5	5	6.5	103	4.3
Minnesota Code 4-3	Male	8	3.0	15	4.5	24	8.1	33	12.4	9	20.9	89	7.4
	Female	20	6.8	24	8.4	44	15.4	63	22.9	5	14.7	156	13.3
	Total	28	5.0	39	6.3	68	11.7	96	17.7	14	18.2	245	10.3
Minnesota Code 4-4	Male	3	1.1	4	1.2	1	0.3	2	0.7	0	0.0	10	0.8
	Female	2	0.7	2	0.7	5	1.7	8	2.9	0	0.0	17	1.4
	Total	5	0.9	6	1.0	6	1.0	10	1.8	0	0.0	27	1.1
Minnesota Code 5-1	Male	2	0.8	2	0.6	2	0.7	4	1.5	0	0.0	10	0.8
	Female	0	0.0	0	0.0	1	0.3	0	0.0	0	0.0	1	0.1
	Total	2	0.4	2	0.3	3	0.5	4	0.7	0	0.0	11	0.5
Minnesota Code 5-2	Male	7	2.6	11	3.3	12	4.0	17	6.4	2	4.7	49	4.1
	Female	6	2.0	12	4.2	23	8.0	18	6.5	4	11.8	63	5.4
	Total	13	2.3	23	3.7	35	6.0	35	6.5	6	7.8	112	4.7
Minnesota Code 5-3	Male	4	1.5	8	2.4	9	3.0	8	3.0	3	7.0	32	2.7
	Female	4	1.4	12	4.2	13	4.5	26	9.5	4	11.8	59	5.0
	Total	8	1.4	20	3.2	22	3.8	34	6.3	7	9.1	91	3.8
Minnesota Code 5-4	Male	6	2.3	15	4.5	13	4.4	20	7.5	2	4.7	56	4.7
	Female	6	2.0	20	7.0	22	7.7	25	9.1	3	8.8	76	6.5
	Total	12	2.1	35	5.7	35	6.0	45	8.3	5	6.5	132	5.6
Minnesota Code 5-5	Male	17	6.4	30	9.1	28	9.4	32	12.0	3	7.0	110	9.1
	Female	16	5.4	35	12.3	40	14.0	42	15.3	5	14.7	138	11.8
	Total	33	5.9	65	10.6	68	11.7	74	13.7	8	10.4	248	10.4
Minnesota Code 6-1	Male	0	0.0	1	0.3	0	0.0	1	0.4	0	0.0	2	0.2
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	1	0.2	0	0.0	1	0.2	0	0.0	2	0.1
Minnesota Code 6-2-1	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Female	0	0.0	0	0.0	1	0.3	0	0.0	0	0.0	1	0.1
	Total	0	0.0	0	0.0	1	0.2	0	0.0	0	0.0	1	0.0

(Continued)

Minnesota Code

		40 - 49yr		50 - 59yr		60 - 69yr		70 - 79yr		80yr -		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
Minnesota Code 6-2-3	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Minnesota Code 6-3	Male	3	1.1	4	1.2	6	2.0	5	1.9	0	0.0	18	1.5
	Female	0	0.0	0	0.0	5	1.7	5	1.8	1	2.9	11	0.9
	Total	3	0.5	4	0.6	11	1.9	10	1.8	1	1.3	29	1.2
Minnesota Code 6-4-1	Male	1	0.4	3	0.9	3	1.0	1	0.4	0	0.0	8	0.7
	Female	2	0.7	0	0.0	0	0.0	0	0.0	0	0.0	2	0.2
	Total	3	0.5	3	0.5	3	0.5	1	0.2	0	0.0	10	0.4
Minnesota Code 6-5	Male	5	1.9	1	0.3	0	0.0	3	1.1	1	2.3	10	0.8
	Female	14	4.8	5	1.8	6	2.1	7	2.5	3	8.8	35	3.0
	Total	19	3.4	6	1.0	6	1.0	10	1.8	4	5.2	45	1.9
Minnesota Code 6-8	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Female	0	0.0	0	0.0	0	0.0	1	0.4	0	0.0	1	0.1
	Total	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0	1	0.0
Minnesota Code 7-1-1	Male	0	0.0	1	0.3	1	0.3	1	0.4	0	0.0	3	0.2
	Female	1	0.3	1	0.4	0	0.0	0	0.0	0	0.0	2	0.2
	Total	1	0.2	2	0.3	1	0.2	1	0.2	0	0.0	5	0.2
Minnesota Code 7-2-1	Male	2	0.8	6	1.8	12	4.0	20	7.5	4	9.3	44	3.7
	Female	1	0.3	3	1.1	5	1.7	11	4.0	1	2.9	21	1.8
	Total	3	0.5	9	1.5	17	2.9	31	5.7	5	6.5	65	2.7
Minnesota Code 7-3	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Minnesota Code 7-4	Male	0	0.0	0	0.0	1	0.3	1	0.4	0	0.0	2	0.2
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	0	0.0	1	0.2	1	0.2	0	0.0	2	0.1
Minnesota Code 7-5	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Minnesota Code 7-6	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

(Continued)

Minnesota Code

		40 - 49yr		50 - 59yr		60 - 69yr		70 - 79yr		80yr -		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
Minnesota Code 7-7	Male	0	0.0	1	0.3	0	0.0	3	1.1	0	0.0	4	0.3
	Female	0	0.0	1	0.4	0	0.0	0	0.0	0	0.0	1	0.1
	Total	0	0.0	2	0.3	0	0.0	3	0.6	0	0.0	5	0.2
Minnesota Code 7-8	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Minnesota Code 8-1-1	Male	0	0.0	0	0.0	0	0.0	1	0.4	0	0.0	1	0.1
	Female	0	0.0	0	0.0	0	0.0	3	1.1	0	0.0	3	0.3
	Total	0	0.0	0	0.0	0	0.0	4	0.7	0	0.0	4	0.2
Minnesota Code 8-1-2	Male	2	0.8	2	0.6	4	1.3	6	2.2	2	4.7	16	1.3
	Female	0	0.0	2	0.7	0	0.0	3	1.1	0	0.0	5	0.4
	Total	2	0.4	4	0.6	4	0.7	9	1.7	2	2.6	21	0.9
Minnesota Code 8-1-3	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Minnesota Code 8-2-2	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Minnesota Code 8-2-3	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Minnesota Code 8-3-1	Male	0	0.0	3	0.9	2	0.7	13	4.9	1	2.3	19	1.6
	Female	0	0.0	2	0.7	2	0.7	4	1.5	1	2.9	9	0.8
	Total	0	0.0	5	0.8	4	0.7	17	3.1	2	2.6	28	1.2
Minnesota Code 8-3-2	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Minnesota Code 8-4-1	Male	0	0.0	0	0.0	1	0.3	2	0.7	0	0.0	3	0.2
	Female	2	0.7	0	0.0	3	1.0	0	0.0	0	0.0	5	0.4
	Total	2	0.4	0	0.0	4	0.7	2	0.4	0	0.0	8	0.3
Minnesota Code 8-4-2	Male	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Female	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Total	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

(Continued)