

Minnesota code 8-1-2

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	1	0.6	0	0	0	0	3	2.2	4	0.7
	Female	0	0	0	0	1	0.7	0	0	1	0.2
	Total	1	0.3	0	0	1	0.4	3	1.1	5	0.4
negative	Male	154	99.4	149	100.0	134	100.0	135	97.8	572	99.3
	Female	145	100.0	135	100.0	138	99.3	135	100.0	553	99.8
	Total	299	99.7	284	100.0	272	99.6	270	98.9	1125	99.6

Minnesota code 8-1-3

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
negative	Male	155	100.0	149	100.0	134	100.0	138	100.0	576	100.0
	Female	145	100.0	135	100.0	139	100.0	135	100.0	554	100.0
	Total	300	100.0	284	100.0	273	100.0	273	100.0	1130	100.0

Minnesota code 8-2-2

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
negative	Male	155	100.0	149	100.0	134	100.0	138	100.0	576	100.0
	Female	145	100.0	135	100.0	139	100.0	135	100.0	554	100.0
	Total	300	100.0	284	100.0	273	100.0	273	100.0	1130	100.0

Minnesota code 8-2-3

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
negative	Male	155	100.0	149	100.0	134	100.0	138	100.0	576	100.0
	Female	145	100.0	135	100.0	139	100.0	135	100.0	554	100.0
	Total	300	100.0	284	100.0	273	100.0	273	100.0	1130	100.0

Minnesota code 8-3-1

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	0	0	0	0	0	0	2	1.4	2	0.3
	Female	0	0	0	0	0	0	1	0.7	1	0.2
	Total	0	0	0	0	0	0	3	1.1	3	0.3
negative	Male	155	100.0	149	100.0	134	100.0	136	98.6	574	99.7
	Female	145	100.0	135	100.0	139	100.0	134	99.3	553	99.8
	Total	300	100.0	284	100.0	273	100.0	270	98.9	1127	99.7

Minnesota code 8-3-2

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
negative	Male	155	100.0	149	100.0	134	100.0	138	100.0	576	100.0
	Female	145	100.0	135	100.0	139	100.0	135	100.0	554	100.0
	Total	300	100.0	284	100.0	273	100.0	273	100.0	1130	100.0

Minnesota code 8-4-1

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	0	0	0	0	0	0	0	0	0	0
	Female	0	0	0	0	1	0.7	0	0	1	0.2
	Total	0	0	0	0	1	0.4	0	0	1	0.1
negative	Male	155	100.0	149	100.0	134	100.0	138	100.0	576	100.0
	Female	145	100.0	135	100.0	138	99.3	135	100.0	553	99.8
	Total	300	100.0	284	100.0	272	99.6	273	100.0	1129	99.9

Minnesota code 8-4-2

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
negative	Male	155	100.0	149	100.0	134	100.0	138	100.0	576	100.0
	Female	145	100.0	135	100.0	139	100.0	135	100.0	554	100.0
	Total	300	100.0	284	100.0	273	100.0	273	100.0	1130	100.0

Minnesota code 8-5-2

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
negative	Male	155	100.0	149	100.0	134	100.0	138	100.0	576	100.0
	Female	145	100.0	135	100.0	139	100.0	135	100.0	554	100.0
	Total	300	100.0	284	100.0	273	100.0	273	100.0	1130	100.0

Minnesota code 8-7

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	0	0	0	0	0	0	0	0	0	0
	Female	1	0.7	0	0	0	0	1	0.7	2	0.4
	Total	1	0.3	0	0	0	0	1	0.4	2	0.2
negative	Male	155	100.0	149	100.0	134	100.0	138	100.0	576	100.0
	Female	144	99.3	135	100.0	139	100.0	134	99.3	552	99.6
	Total	299	99.7	284	100.0	273	100.0	272	99.6	1128	99.8

Minnesota code 8-8

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	7	4.5	6	4.0	3	2.2	0	0	16	2.8
	Female	3	2.1	2	1.5	2	1.4	0	0	7	1.3
	Total	10	3.3	8	2.8	5	1.8	0	0	23	2.0
negative	Male	148	95.5	143	96.0	131	97.8	138	100.0	560	97.2
	Female	142	97.9	133	98.5	137	98.6	135	100.0	547	98.7
	Total	290	96.7	276	97.2	268	98.2	273	100.0	1107	98.0

Minnesota code 8-9

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	3	1.9	4	2.7	2	1.5	10	7.2	19	3.3
	Female	2	1.4	0	0	1	0.7	7	5.2	10	1.8
	Total	5	1.7	4	1.4	3	1.1	17	6.2	29	2.6
negative	Male	152	98.1	145	97.3	132	98.5	128	92.8	557	96.7
	Female	143	98.6	135	100.0	138	99.3	128	94.8	544	98.2
	Total	295	98.3	280	98.6	270	98.9	256	93.8	1101	97.4

Minnesota code 9-1

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	0	0	1	0.7	2	1.5	7	5.1	10	1.7
	Female	4	2.8	1	0.7	1	0.7	4	3.0	10	1.8
	Total	4	1.3	2	0.7	3	1.1	11	4.0	20	1.8
negative	Male	155	100.0	148	99.3	132	98.5	131	94.9	566	98.3
	Female	141	97.2	134	99.3	138	99.3	131	97.0	544	98.2
	Total	296	98.7	282	99.3	270	98.9	262	96.0	1110	98.2

Minnesota code 9-2

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	8	5.2	2	1.3	3	2.2	2	1.4	15	2.6
	Female	0	0	0	0	0	0	1	0.7	1	0.2
	Total	8	2.7	2	0.7	3	1.1	3	1.1	16	1.4
negative	Male	147	94.8	147	98.7	131	97.8	136	98.6	561	97.4
	Female	145	100.0	135	100.0	139	100.0	134	99.3	553	99.8
	Total	292	97.3	282	99.3	270	98.9	270	98.9	1114	98.6

Minnesota code 9-3-1

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	0	0	0	0	0	0	0	0	0	0
	Female	0	0	0	0	0	0	1	0.7	1	0.2
	Total	0	0	0	0	0	0	1	0.4	1	0.1
negative	Male	155	100.0	149	100.0	134	100.0	138	100.0	576	100.0
	Female	145	100.0	135	100.0	139	100.0	134	99.3	553	99.8
	Total	300	100.0	284	100.0	273	100.0	272	99.6	1129	99.9

Minnesota code 9-3-2

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	0	0	0	0	0	0	0	0	0	0
	Female	0	0	0	0	1	0.7	0	0	1	0.2
	Total	0	0	0	0	1	0.4	0	0	1	0.1
negative	Male	155	100.0	149	100.0	134	100.0	138	100.0	576	100.0
	Female	145	100.0	135	100.0	138	99.3	135	100.0	553	99.8
	Total	300	100.0	284	100.0	272	99.6	273	100.0	1129	99.9

Minnesota code 9-4-1

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	39	25.2	41	27.5	29	21.6	28	20.3	137	23.8
	Female	46	31.7	25	18.5	32	23.0	28	20.7	131	23.6
	Total	85	28.3	66	23.2	61	22.3	56	20.5	268	23.7
negative	Male	116	74.8	108	72.5	105	78.4	110	79.7	439	76.2
	Female	99	68.3	110	81.5	107	77.0	107	79.3	423	76.4
	Total	215	71.7	218	76.8	212	77.7	217	79.5	862	76.3

Minnesota code 9-4-2

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	1	0.6	3	2.0	3	2.2	5	3.6	12	2.1
	Female	0	0	4	3.0	2	1.4	1	0.7	7	1.3
	Total	1	0.3	7	2.5	5	1.8	6	2.2	19	1.7
negative	Male	154	99.4	146	98.0	131	97.8	133	96.4	564	97.9
	Female	145	100.0	131	97.0	137	98.6	134	99.3	547	98.7
	Total	299	99.7	277	97.5	268	98.2	267	97.8	1111	98.3

Minnesota code 9-5

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	12	7.7	7	4.7	1	0.7	2	1.4	22	3.8
	Female	0	0	0	0	0	0	0	0	0	0
	Total	12	4.0	7	2.5	1	0.4	2	0.7	22	1.9
negative	Male	143	92.3	142	95.3	133	99.3	136	98.6	554	96.2
	Female	145	100.0	135	100.0	139	100.0	135	100.0	554	100.0
	Total	288	96.0	277	97.5	272	99.6	271	99.3	1108	98.1

Minnesota code 9-8-1

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
negative	Male	155	100.0	149	100.0	134	100.0	138	100.0	576	100.0
	Female	145	100.0	135	100.0	139	100.0	135	100.0	554	100.0
	Total	300	100.0	284	100.0	273	100.0	273	100.0	1130	100.0

4. Ultrasonic cardiography

(Ultrasonic tomography, EUB-655, Hitachi Medical Corp.)

Aortic dimension (AOD) (mm)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	27.16	3.38	137	28.29	3.49	135	27.95	3.68	103	28.55	3.98	121	27.97	3.65	496
Female	23.78	3.67	126	24.20	3.03	121	25.08	3.53	114	25.55	3.61	111	24.61	3.53	472
Total	25.54	3.90	263	26.36	3.86	256	26.44	3.87	217	27.11	4.08	232	26.33	3.96	968

Left atrium dimension (LAD) (mm)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	32.19	4.12	137	32.89	4.47	135	32.40	4.49	103	33.52	7.10	121	32.75	5.17	496
Female	29.71	4.74	126	30.39	4.32	121	31.23	4.87	114	32.77	5.77	111	30.97	5.05	472
Total	31.00	4.59	263	31.71	4.57	256	31.79	4.72	217	33.16	6.49	232	31.88	5.18	968

LAD/AOD ratio

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	1.20	0.18	137	1.17	0.16	135	1.17	0.17	103	1.18	0.26	121	1.18	0.19	496
Female	1.27	0.28	126	1.36	1.09	121	1.25	0.20	114	1.29	0.24	111	1.29	0.59	472
Total	1.23	0.24	263	1.26	0.76	256	1.21	0.19	217	1.24	0.26	232	1.24	0.44	968

E-wave amplitude (mm)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	20.61	4.43	138	19.76	4.14	135	17.92	3.91	104	17.08	3.60	118	18.97	4.28	495
Female	19.07	3.66	126	17.87	3.96	121	16.84	4.07	113	16.13	4.08	111	17.54	4.08	471
Total	19.88	4.15	264	18.87	4.16	256	17.36	4.02	217	16.62	3.86	229	18.27	4.24	966

A-wave amplitude (mm)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	15.90	4.49	138	16.30	3.77	135	15.07	4.44	104	14.98	3.55	118	15.62	4.11	495
Female	14.16	3.79	125	13.71	4.08	121	13.62	3.88	113	14.06	3.72	111	13.89	3.87	470
Total	15.07	4.26	263	15.08	4.12	256	14.32	4.21	217	14.53	3.65	229	14.78	4.08	965

Diastolic descent rate (DDR) (mm/s)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	87.2	26.8	138	79.8	25.9	135	65.2	25.5	104	56.4	21.8	118	73.2	27.9	495
Female	78.7	21.6	126	71.4	23.7	121	59.9	22.3	113	51.7	19.2	111	66.0	24.1	471
Total	83.2	24.8	264	75.9	25.2	256	62.5	24.0	217	54.1	20.7	229	69.7	26.3	966

A/E ratio

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.767	0.149	138	0.823	0.113	135	0.830	0.161	104	0.877	0.140	118	0.822	0.146	495
Female	0.728	0.134	126	0.750	0.145	121	0.805	0.146	113	0.875	0.144	111	0.786	0.153	471
Total	0.748	0.143	264	0.788	0.134	256	0.817	0.154	217	0.876	0.141	229	0.805	0.150	966

Left ventricular end-diastolic dimension (LVEdd) (mm)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	48.88	4.70	138	48.76	5.02	132	47.68	4.89	95	47.44	7.04	103	48.29	5.44	468
Female	43.98	4.46	124	44.79	4.25	120	45.54	5.32	110	46.35	5.96	103	45.10	5.06	457
Total	46.56	5.19	262	46.87	5.07	252	46.54	5.23	205	46.89	6.53	206	46.71	5.49	925

Left ventricular end-systolic dimension (LVEsD) (mm)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	31.86	4.29	138	31.35	5.52	132	30.35	4.92	95	30.28	6.75	103	31.06	5.41	468
Female	27.74	4.30	124	27.76	4.31	120	28.25	5.78	110	28.86	6.78	103	28.12	5.32	457
Total	29.91	4.76	262	29.64	5.29	252	29.22	5.49	205	29.57	6.79	206	29.61	5.56	925

Left ventricular posterior wall thickness at end-diastole (LVPWd) (mm)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	10.57	2.18	138	10.57	2.24	132	10.98	2.44	95	10.90	2.10	103	10.73	2.23	468
Female	9.64	1.94	124	9.94	2.40	120	9.98	1.94	110	9.80	2.47	103	9.84	2.19	457
Total	10.13	2.12	262	10.27	2.33	252	10.44	2.23	205	10.35	2.35	206	10.29	2.26	925

Left ventricular posterior wall thickness at end-systole (LVPWs) (mm)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	16.15	2.43	138	16.90	2.85	132	17.31	3.58	95	17.08	3.00	103	16.80	2.96	468
Female	15.22	2.69	124	15.99	3.17	120	16.38	3.14	110	15.83	3.53	103	15.84	3.15	457
Total	15.71	2.59	262	16.47	3.03	252	16.81	3.37	205	16.45	3.33	206	16.33	3.09	925

Interventricular septum diastolic thickness (IVSd) (mm)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	9.90	2.10	137	10.40	2.06	132	10.08	2.08	95	10.48	2.79	103	10.21	2.26	467
Female	9.02	1.92	124	9.25	2.17	120	9.37	2.00	110	10.13	2.23	103	9.41	2.11	457
Total	9.48	2.06	261	9.85	2.19	252	9.70	2.06	205	10.31	2.53	206	9.81	2.22	924

Interventricular septum systolic thickness (IVSs) (mm)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	12.64	2.54	137	13.33	2.78	132	12.85	2.94	95	12.64	2.94	103	12.88	2.79	467
Female	11.30	2.27	124	11.71	2.54	120	11.86	2.81	110	12.96	2.87	103	11.91	2.68	457
Total	12.00	2.50	261	12.56	2.78	252	12.32	2.91	205	12.80	2.90	206	12.40	2.77	924

Left ventricular end-diastolic volume (LVEDV) (ml)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	113.72	24.65	138	112.78	27.98	132	107.37	25.10	95	106.48	35.54	103	110.58	28.47	468
Female	88.47	21.58	124	92.31	20.60	120	96.79	26.88	110	101.23	32.14	103	94.35	25.74	457
Total	101.77	26.42	262	103.03	26.74	252	101.69	26.54	205	103.85	33.91	206	102.56	28.33	925

Left ventricular end-systolic volume (LVEsV) (ml)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	41.99	12.53	138	40.90	20.34	132	37.47	15.22	95	38.90	23.58	103	40.08	18.25	468
Female	29.99	11.76	124	30.04	11.64	120	32.25	17.36	110	34.90	22.48	103	31.65	16.18	457
Total	36.31	13.55	262	35.73	17.60	252	34.67	16.57	205	36.90	23.07	206	35.92	17.76	925

Stroke volume (SV) (ml)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	72.10	16.24	138	72.15	16.57	132	70.03	16.56	95	68.88	20.71	103	70.99	17.47	468
Female	59.38	14.33	124	62.13	14.51	120	64.58	16.60	110	66.54	17.68	104	62.98	15.92	458
Total	66.08	16.60	262	67.38	16.38	252	67.11	16.76	205	67.71	19.23	207	67.03	17.18	926

Cardiac output (CO) (l/min)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	4.617	1.338	138	5.426	7.784	132	4.601	1.396	95	4.871	5.007	103	4.898	4.849	468
Female	4.033	1.710	124	5.244	10.31	120	4.458	2.329	110	4.488	1.384	104	4.556	5.512	458
Total	4.341	1.550	262	5.339	9.056	252	4.524	1.950	205	4.679	3.662	207	4.729	5.188	926

Ejection fraction (EF) (%)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	63.30	6.49	138	64.73	9.38	132	65.53	8.85	95	65.39	9.28	103	64.61	8.51	468
Female	66.69	7.98	124	68.01	8.43	120	67.44	10.47	110	67.26	11.55	104	67.34	9.60	458
Total	64.90	7.41	262	66.29	9.07	252	66.56	9.77	205	66.33	10.50	207	65.96	9.16	926

Fractional shortening (FS) (%)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	34.61	4.94	138	35.82	6.86	132	36.47	6.70	95	36.36	7.02	103	35.71	6.38	468
Female	37.02	6.18	124	38.07	6.57	120	38.19	8.02	110	37.96	8.54	104	37.79	7.32	458
Total	35.75	5.68	262	36.90	6.81	252	37.39	7.47	205	37.17	7.84	207	36.74	6.93	926

Heart rate (HR) (/min)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	63.1	10.6	135	62.2	10.1	124	64.2	11.2	98	63.0	10.6	108	63.1	10.6	465
Female	67.1	10.2	126	62.6	9.0	116	65.8	9.3	114	67.1	10.7	109	65.7	10.0	465
Total	65.0	10.6	261	62.4	9.6	240	65.1	10.2	212	65.1	10.8	217	64.4	10.4	930

5. Intima-media thickness of carotid artery

(Ultrasonic tomography, EUB-655, Hitachi Medical Corp.,)

Intima-media thickness of left common carotid artery (the thickest point) (mm)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.68	0.48	137	0.75	0.23	135	0.83	0.32	104	0.94	0.41	122	0.80	0.39	498
Female	0.62	0.19	129	0.70	0.23	121	0.78	0.27	115	0.86	0.26	112	0.74	0.25	477
Total	0.65	0.37	266	0.73	0.23	256	0.81	0.29	219	0.90	0.35	234	0.77	0.33	975

Intima-media thickness of left common carotid artery (the thinnest point) (mm)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.53	0.10	137	0.61	0.15	135	0.65	0.17	104	0.71	0.20	122	0.62	0.17	498
Female	0.51	0.15	129	0.57	0.15	121	0.63	0.17	114	0.68	0.17	112	0.59	0.17	476
Total	0.52	0.13	266	0.59	0.15	256	0.64	0.17	218	0.70	0.19	234	0.61	0.17	974

Intima-media thickness of left carotid sinus (the thickest point) (mm)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.83	0.25	134	1.03	0.48	132	1.05	0.40	103	1.26	0.55	120	1.03	0.46	489
Female	0.79	0.25	129	0.85	0.31	118	0.97	0.39	114	1.22	0.60	113	0.95	0.43	474
Total	0.81	0.25	263	0.95	0.42	250	1.01	0.39	217	1.24	0.57	233	0.99	0.45	963

Intima-media thickness of left carotid sinus (the thinnest point) (mm)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.62	0.15	134	0.71	0.18	132	0.75	0.21	103	0.83	0.24	120	0.72	0.21	489
Female	0.60	0.20	129	0.65	0.23	118	0.68	0.18	114	0.84	0.31	113	0.69	0.25	474
Total	0.61	0.17	263	0.68	0.21	250	0.71	0.20	217	0.84	0.28	233	0.71	0.23	963

Intima-media thickness of right common carotid artery (the thickest point) (mm)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.64	0.40	137	0.71	0.19	134	0.76	0.22	104	0.91	0.39	123	0.75	0.33	498
Female	0.57	0.13	129	0.65	0.17	121	0.74	0.22	116	0.84	0.31	114	0.70	0.24	480
Total	0.61	0.30	266	0.69	0.18	255	0.75	0.22	220	0.88	0.36	237	0.72	0.29	978

Intima-media thickness of right common carotid artery (the thinnest point) (mm)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.50	0.11	137	0.58	0.14	134	0.62	0.14	104	0.70	0.23	123	0.59	0.17	498
Female	0.48	0.10	129	0.54	0.11	121	0.58	0.13	116	0.66	0.16	113	0.56	0.14	479
Total	0.49	0.11	266	0.56	0.12	255	0.59	0.14	220	0.68	0.20	236	0.58	0.16	977

Intima-media thickness of right carotid sinus (the thickest point) (mm)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.89	0.60	135	1.03	0.47	133	1.02	0.48	104	1.25	0.64	123	1.04	0.57	495
Female	0.81	0.23	129	0.88	0.27	119	1.00	0.35	114	1.11	0.52	112	0.94	0.37	474
Total	0.85	0.46	264	0.96	0.39	252	1.01	0.42	218	1.18	0.59	235	1.00	0.48	969

Intima-media thickness of right carotid sinus (the thinnest point) (mm)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.63	0.17	134	0.66	0.16	133	0.71	0.18	104	0.83	0.31	123	0.70	0.22	494
Female	0.59	0.18	129	0.66	0.18	118	0.70	0.25	113	0.78	0.27	111	0.68	0.23	471
Total	0.61	0.18	263	0.66	0.17	251	0.70	0.22	217	0.80	0.29	234	0.69	0.23	965

2) Respiratory system

1. Pulmonary functions

(Electropirometer, Chestgraph HI701, Chest, Inc.,)

Vital capacity (VC) (L)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	4.309	0.615	154	3.930	0.602	149	3.466	0.526	132	3.097	0.667	139	3.723	0.761	574
Female	2.976	0.442	144	2.745	0.440	133	2.402	0.407	137	2.066	0.428	128	2.559	0.550	542
Total	3.665	0.857	298	3.371	0.796	282	2.924	0.710	269	2.602	0.765	267	3.158	0.885	1116

Inspiratory capacity (IC) (L)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	2.742	0.614	151	2.582	0.622	145	2.254	0.583	122	1.966	0.588	121	2.414	0.671	539
Female	1.954	0.409	141	1.809	0.452	129	1.687	0.414	122	1.424	0.368	111	1.735	0.455	503
Total	2.362	0.656	292	2.218	0.670	274	1.970	0.579	244	1.707	0.564	232	2.086	0.669	1042

Tidal volume (TV) (L)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.838	0.357	151	0.698	0.285	145	0.681	0.351	122	0.653	0.298	121	0.723	0.332	539
Female	0.538	0.242	141	0.500	0.304	129	0.511	0.233	122	0.512	0.276	111	0.516	0.264	503
Total	0.693	0.341	292	0.605	0.310	274	0.596	0.309	244	0.585	0.296	232	0.623	0.319	1042

Expiratory reserve volume (ERV) (L)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	1.564	0.551	151	1.329	0.499	145	1.220	0.491	122	1.131	0.482	121	1.326	0.533	539
Female	1.019	0.359	141	0.940	0.369	129	0.710	0.297	122	0.606	0.335	111	0.833	0.380	503
Total	1.301	0.542	292	1.146	0.483	274	0.965	0.479	244	0.880	0.493	232	1.088	0.527	1042

Inspiratory reserve volume (IRV) (L)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	1.891	0.556	151	1.887	0.598	145	1.573	0.562	122	1.313	0.574	121	1.688	0.619	539
Female	1.412	0.401	141	1.309	0.459	129	1.185	0.430	122	0.935	0.331	111	1.225	0.445	503
Total	1.659	0.542	292	1.615	0.609	274	1.379	0.536	244	1.132	0.509	232	1.465	0.589	1042

Forced vital capacity (FVC) (L)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	3.917	0.595	154	3.446	0.597	149	3.026	0.525	132	2.629	0.596	139	3.278	0.754	574
Female	2.701	0.432	144	2.455	0.435	133	2.085	0.445	137	1.781	0.418	126	2.270	0.556	540
Total	3.330	0.801	298	2.978	0.723	282	2.547	0.676	269	2.226	0.669	265	2.789	0.835	1114

One second forced expiratory volume (FEV1.0) (L)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	3.391	0.486	154	2.939	0.515	149	2.510	0.461	132	2.125	0.535	139	2.764	0.690	574
Female	2.394	0.360	144	2.130	0.379	133	1.801	0.346	136	1.494	0.366	126	1.969	0.496	539
Total	2.909	0.658	298	2.557	0.609	282	2.150	0.539	268	1.825	0.559	265	2.379	0.723	1113

Percentage of one second forced expiratory volume (Gaensler) (FEV1.0%G) (%)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	86.83	5.82	154	85.54	7.17	149	83.00	7.02	132	81.34	10.36	139	84.28	8.00	574
Female	88.76	6.98	144	86.98	7.19	133	86.73	7.12	136	84.80	9.90	126	86.88	7.94	539
Total	87.76	6.47	298	86.22	7.20	282	84.89	7.30	268	82.99	10.27	265	85.54	8.08	1113

Percentage of one second forced expiratory volume (Tiffeneau) (FEV1.0%T) (L)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	78.91	6.42	154	74.90	7.78	149	72.24	8.39	132	69.28	11.25	139	74.00	9.27	574
Female	80.68	6.42	144	77.51	7.94	133	75.07	8.20	136	72.66	10.94	126	76.61	8.94	539
Total	79.76	6.47	298	76.13	7.95	282	73.67	8.40	268	70.89	11.21	265	75.26	9.20	1113

Maximal midexpiratory flow (MMF) (L/s)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	4.147	1.017	154	3.501	1.085	149	2.753	0.944	132	2.284	0.985	139	3.208	1.238	574
Female	3.120	0.892	144	2.738	0.860	133	2.311	0.735	137	1.933	0.858	126	2.544	0.948	540
Total	3.651	1.086	298	3.141	1.055	282	2.528	0.871	269	2.117	0.942	265	2.886	1.155	1114

Peak flow (PEF) (L/s)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	8.079	1.713	154	7.254	1.705	149	6.229	1.633	132	5.107	1.865	139	6.720	2.059	574
Female	5.246	1.351	144	4.666	1.386	133	4.087	1.124	136	3.485	1.270	126	4.399	1.441	539
Total	6.710	2.098	298	6.033	2.027	282	5.142	1.760	268	4.336	1.800	265	5.596	2.130	1113

V75 (L/s)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	7.589	1.816	154	6.809	1.795	149	5.764	1.711	132	4.696	1.969	139	6.266	2.126	574
Female	4.960	1.444	144	4.436	1.444	133	3.797	1.282	137	3.263	1.310	126	4.140	1.513	540
Total	6.319	2.106	298	5.690	2.021	282	4.762	1.799	269	4.015	1.831	265	5.236	2.137	1114

V50 (L/s)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	4.858	1.245	154	4.171	1.342	149	3.508	1.251	132	2.871	1.234	139	3.888	1.470	574
Female	3.693	1.014	144	3.347	1.041	133	2.821	0.876	137	2.390	1.015	126	3.083	1.103	540
Total	4.295	1.278	298	3.782	1.275	282	3.158	1.128	269	2.642	1.159	265	3.498	1.366	1114

V25 (L/s)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	2.019	0.718	154	1.626	0.653	149	1.209	0.512	132	1.052	0.605	139	1.497	0.736	574
Female	1.606	0.672	144	1.336	0.590	133	1.108	0.538	137	0.966	0.588	126	1.264	0.646	540
Total	1.819	0.725	298	1.489	0.639	282	1.157	0.527	269	1.011	0.598	265	1.384	0.703	1114

Peak flow time (sec)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0.163	0.367	154	0.154	0.327	149	0.135	0.117	132	0.146	0.117	139	0.150	0.265	574
Female	0.209	0.370	144	0.161	0.102	133	0.180	0.222	136	0.219	0.412	126	0.192	0.302	539
Total	0.185	0.369	298	0.158	0.247	282	0.158	0.179	268	0.181	0.298	265	0.170	0.284	1113

Extrap V(%)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	3.93	1.83	154	4.08	1.69	149	4.60	2.67	132	5.21	3.30	139	4.43	2.48	574
Female	4.91	3.42	144	5.15	2.68	133	6.08	4.64	136	6.03	3.86	126	5.53	3.74	539
Total	4.40	2.75	298	4.59	2.28	282	5.35	3.86	268	5.60	3.60	265	4.96	3.20	1113

2. Blood oxygen saturation

(Pulse oxymeter, Model 9500 Oximeter, Nonin Medical, Inc.,)

O₂ saturation (%O₂)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	96.1	1.6	155	95.8	1.8	149	95.7	1.7	134	95.7	1.8	139	95.8	1.7	577
Female	96.8	1.4	145	96.1	1.5	134	95.5	2.0	139	95.7	1.8	135	96.0	1.7	553
Total	96.4	1.6	300	96.0	1.6	283	95.6	1.8	273	95.7	1.8	274	95.9	1.7	1130

3) Skin sensory system

1. Current perception thresholds of peripheral nerves

(Quantitative sensory test device, Neurometer, Neurotron, Inc.,)

Neurometer is a quantitative sensory test device for measuring neuro-selective current perception thresholds (CPT).

CPT at 2000, 250 and 5Hz are assumed to represent A β , A δ and C fiber functions.

Neurometer (2000Hz) (x10 μ Amp)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	229.8	62.2	154	232.0	60.1	147	237.6	60.2	133	252.2	72.0	138	237.6	64.2	572
Female	224.0	62.1	143	233.8	64.0	134	233.6	57.5	139	242.3	67.0	134	233.3	62.8	550
Total	227.0	62.1	297	232.9	61.9	281	235.5	58.8	272	247.3	69.6	272	235.5	63.5	1122

Neurometer (250Hz) (x10 μ Amp)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	93.5	42.4	154	96.4	43.6	147	99.8	43.1	133	108.3	55.6	138	99.3	46.6	572
Female	80.5	43.5	143	89.8	49.7	134	90.2	44.0	139	95.7	42.3	134	88.9	45.2	550
Total	87.3	43.3	297	93.2	46.7	281	94.9	43.8	272	102.1	49.8	272	94.2	46.2	1122

Neurometer (5Hz) (x10 μ Amp)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	72.7	43.3	154	66.4	39.8	147	60.7	35.1	133	64.8	49.5	138	66.4	42.4	572
Female	48.6	33.0	143	53.0	31.6	134	52.8	39.8	139	53.1	37.1	134	51.8	35.5	550
Total	61.1	40.5	297	60.0	36.7	281	56.6	37.8	272	59.0	44.1	272	59.3	39.8	1122

2. Skin two-point discrimination test

(A couple of needles, Perception needle, Uhu-seiki, Inc.,)

Two-point discrimination threshold is measured on the left palm of the hand using a couple of needles.

Two-points discrimination test (mm)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	9.9	4.5	155	9.7	2.6	148	11.1	5.8	134	12.2	6.5	139	10.6	5.1	576
Female	9.9	5.1	145	11.0	5.9	134	12.3	8.0	139	13.6	5.5	135	11.7	6.3	553
Total	9.9	4.8	300	10.3	4.5	282	11.7	7.0	273	12.9	6.1	274	11.2	5.8	1129