

IX. Physiological Examinations

1) Cardiovascular system

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

2) Respiratory system

1. Pulmonary functions
2. Blood oxygen saturation

3) Skin sensory system

1. Current perception thresholds of peripheral nerves
2. Skin two-point discrimination test

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			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	119.8	16.5	155	123.6	19.7	149	126.5	18.7	132	122.5	19.8	139	123.0	18.8	575
Female	116.0	19.4	145	118.5	21.0	134	128.3	20.5	138	129.8	19.0	133	123.0	20.8	550
Total	118.0	18.0	300	121.2	20.5	283	127.4	19.6	270	126.1	19.7	272	123.0	19.8	1125

Diastolic blood pressure (mmHg)

	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	75.5	10.6	155	77.3	10.6	149	78.9	11.2	132	73.6	10.9	139	76.3	11.0	575
Female	71.3	11.4	145	72.8	12.3	134	77.3	11.9	138	75.6	10.9	133	74.2	11.8	550
Total	73.4	11.2	300	75.2	11.6	283	78.1	11.6	270	74.6	11.0	272	75.3	11.4	1125

Pulse rate (/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	68.3	10.9	155	67.2	10.5	149	70.8	9.9	132	71.4	11.3	139	69.3	10.8	575
Female	74.0	10.4	145	70.9	9.4	134	75.1	9.6	138	76.8	10.6	133	74.2	10.2	550
Total	71.1	11.0	300	68.9	10.2	283	73.0	10.0	270	74.0	11.3	272	71.7	10.8	1125

2. Pulse wave

(Digital plethysmography, Omnicore RT3300, NEC Corp.,)

SX (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	6.5	1.0	155	6.7	0.9	149	6.7	1.2	134	6.8	1.2	139	6.7	1.1	577
Female	6.5	0.9	145	6.7	1.0	135	6.5	0.9	139	6.6	1.0	135	6.6	0.9	554
Total	6.5	1.0	300	6.7	0.9	284	6.6	1.1	273	6.7	1.1	274	6.6	1.0	1131

SS (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	24.3	4.4	155	24.4	3.7	149	23.7	3.9	134	23.9	4.5	139	24.1	4.1	577
Female	22.6	3.5	145	23.7	3.4	135	22.5	3.2	139	22.3	3.8	135	22.8	3.5	554
Total	23.5	4.1	300	24.1	3.5	284	23.1	3.6	273	23.1	4.2	274	23.4	3.9	1131

Corrected up-stroke 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	0.263	0.029	155	0.273	0.026	149	0.276	0.038	134	0.280	0.035	139	0.273	0.033	577
Female	0.273	0.030	145	0.277	0.031	135	0.275	0.030	139	0.279	0.034	135	0.276	0.031	554
Total	0.268	0.030	300	0.275	0.029	284	0.275	0.034	273	0.280	0.034	274	0.274	0.032	1131

3. Electrocardiography

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

Heart Rate (/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	63.9	10.7	155	62.3	9.7	149	65.5	10.9	134	66.1	11.9	138	64.4	10.9	576
Female	68.0	9.8	145	64.3	8.6	135	67.6	10.3	139	69.8	11.3	135	67.4	10.2	554
Total	65.8	10.4	300	63.3	9.2	284	66.6	10.6	273	68.0	11.8	273	65.9	10.7	1130

PR-interval (msec)

	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	156.5	22.5	154	159.6	20.6	148	161.4	20.7	132	163.4	22.4	132	160.1	21.7	566
Female	149.7	20.4	145	155.1	20.2	135	154.0	21.2	139	156.4	24.3	134	153.7	21.7	553
Total	153.2	21.8	299	157.5	20.5	283	157.6	21.3	271	159.9	23.6	266	156.9	21.9	1119

QRS-width (msec)

	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	90.9	10.5	155	90.2	10.9	149	92.3	13.1	134	93.1	16.8	137	91.6	13.0	575
Female	82.5	9.0	145	85.2	10.5	135	85.4	10.4	139	87.5	14.5	135	85.1	11.4	554
Total	86.8	10.7	300	87.8	11.0	284	88.8	12.3	273	90.3	15.9	272	88.4	12.6	1129

QT-interval (msec)

	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	393.9	30.9	155	399.8	30.5	149	397.4	27.7	134	399.9	29.2	137	397.7	29.7	575
Female	392.6	29.6	145	405.0	24.9	135	404.3	30.1	139	399.4	31.4	135	400.2	29.5	554
Total	393.3	30.2	300	402.3	28.0	284	400.9	29.1	273	399.6	30.3	272	398.9	29.6	1129

QTc-interval (msec)

	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	402.4	19.5	155	404.0	19.7	149	411.6	22.5	134	415.6	22.9	137	408.1	21.7	575
Female	414.6	17.9	145	416.6	21.2	135	425.7	20.7	139	427.1	23.5	135	420.9	21.5	554
Total	408.3	19.7	300	410.0	21.3	284	418.8	22.7	273	421.3	23.9	272	414.4	22.6	1129

S(V1)-height (mV)

	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	-0.909	0.414	154	-0.885	0.434	148	-0.813	0.610	131	-0.836	0.574	133	-0.863	0.509	566
Female	-0.937	0.359	145	-0.783	0.408	134	-0.807	0.450	135	-0.765	0.426	127	-0.826	0.416	541
Total	-0.922	0.388	299	-0.837	0.424	282	-0.810	0.534	266	-0.801	0.507	260	-0.845	0.466	1107

R(V5)-height (mV)

	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	1.610	0.524	155	1.743	0.745	149	1.716	0.641	134	1.680	0.737	137	1.686	0.666	575
Female	1.294	0.413	145	1.435	0.459	135	1.510	0.515	139	1.618	0.560	135	1.462	0.502	554
Total	1.457	0.499	300	1.597	0.643	284	1.611	0.588	273	1.649	0.654	272	1.576	0.601	1129

QRS-axis (degree)

	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	50.8	27.0	155	43.8	32.5	149	39.7	31.6	134	42.4	32.3	137	44.4	31.0	575
Female	51.4	28.5	145	44.3	26.1	133	35.2	29.7	138	32.6	28.5	135	41.0	29.2	551
Total	51.1	27.7	300	44.0	29.6	282	37.4	30.7	272	37.5	30.8	272	42.8	30.2	1126

P-axis (degree)

	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	52.2	28.0	150	51.9	27.4	146	53.4	25.9	129	52.7	29.6	127	52.5	27.7	552
Female	50.6	22.7	144	48.8	25.0	131	47.5	26.6	138	50.2	27.1	133	49.3	25.3	546
Total	51.4	25.5	294	50.4	26.3	277	50.4	26.4	267	51.4	28.3	260	50.9	26.6	1098

T-axis (degree)

	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	42.6	25.8	155	41.5	22.7	148	42.7	34.5	133	47.6	31.6	133	43.5	28.8	569
Female	34.9	21.4	140	36.3	28.4	134	34.2	26.3	136	32.7	31.6	131	34.5	27.1	541
Total	38.9	24.1	295	39.0	25.7	282	38.4	30.9	269	40.2	32.4	264	39.1	28.3	1110

Minnesota code 1-1-1

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
		positive	Male	0	0	0	0	0	0	0	0
	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 1-1-2

		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
	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 1-1-3

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
		positive	Male	0	0	1	0.7	0	0	1	0.7
	Female	0	0	0	0	0	0	0	0	0	0
	Total	0	0	1	0.4	0	0	1	0.4	2	0.2
negative	Male	155	100.0	148	99.3	134	100.0	137	99.3	574	99.7
	Female	145	100.0	135	100.0	139	100.0	135	100.0	554	100.0
	Total	300	100.0	283	99.6	273	100.0	272	99.6	1128	99.8

Minnesota code 1-1-4

		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 1-1-5

		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 1-1-6

		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 1-1-7

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	0	0	0	0	1	0.7	0	0	1	0.2
	Female	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	1	0.4	0	0	1	0.1
negative	Male	155	100.0	149	100.0	133	99.3	138	100.0	575	99.8
	Female	145	100.0	135	100.0	139	100.0	135	100.0	554	100.0
	Total	300	100.0	284	100.0	272	99.6	273	100.0	1129	99.9

Minnesota code 1-2-1

		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

Minnesota code 1-2-2

		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 1-2-3

		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 1-2-4

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	0	0	1	0.7	0	0	1	0.7	2	0.3
	Female	0	0	1	0.7	0	0	0	0	1	0.2
	Total	0	0	2	0.7	0	0	1	0.4	3	0.3
negative	Male	155	100.0	148	99.3	134	100.0	137	99.3	574	99.7
	Female	145	100.0	134	99.3	139	100.0	135	100.0	553	99.8
	Total	300	100.0	282	99.3	273	100.0	272	99.6	1127	99.7

Minnesota code 1-2-5

		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 1-2-6

		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 1-2-7

		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 1-2-8

		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 1-3-1

		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

Minnesota code 1-3-2

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	2	1.3	1	0.7	0	0	2	1.4	5	0.9
	Female	2	1.4	1	0.7	0	0	1	0.7	4	0.7
	Total	4	1.3	2	0.7	0	0	3	1.1	9	0.8
negative	Male	153	98.7	148	99.3	134	100.0	136	98.6	571	99.1
	Female	143	98.6	134	99.3	139	100.0	134	99.3	550	99.3
	Total	296	98.7	282	99.3	273	100.0	270	98.9	1121	99.2

Minnesota code 1-3-3

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	0	0	0	0	1	0.7	2	1.4	3	0.5
	Female	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	1	0.4	2	0.7	3	0.3
negative	Male	155	100.0	149	100.0	133	99.3	136	98.6	573	99.5
	Female	145	100.0	135	100.0	139	100.0	135	100.0	554	100.0
	Total	300	100.0	284	100.0	272	99.6	271	99.3	1127	99.7

Minnesota code 1-3-4

		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	1	0.7	0	0	1	0.7	2	0.4
	Total	0	0	1	0.4	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	145	100.0	134	99.3	139	100.0	134	99.3	552	99.6
	Total	300	100.0	283	99.6	273	100.0	272	99.6	1128	99.8

Minnesota code 1-3-5

		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 1-3-6

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	1	0.6	1	0.7	1	0.7	1	0.7	4	0.7
	Female	2	1.4	0	0	0	0	5	3.7	7	1.3
	Total	3	1.0	1	0.4	1	0.4	6	2.2	11	1.0
negative	Male	154	99.4	148	99.3	133	99.3	137	99.3	572	99.3
	Female	143	98.6	135	100.0	139	100.0	130	96.3	547	98.7
	Total	297	99.0	283	99.6	272	99.6	267	97.8	1119	99.0

Minnesota code 2-1

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	1	0.6	1	0.7	3	2.2	0	0	5	0.9
	Female	1	0.7	1	0.7	0	0	0	0	2	0.4
	Total	2	0.7	2	0.7	3	1.1	0	0	7	0.6
negative	Male	154	99.4	148	99.3	131	97.8	138	100.0	571	99.1
	Female	144	99.3	134	99.3	139	100.0	135	100.0	552	99.6
	Total	298	99.3	282	99.3	270	98.9	273	100.0	1123	99.4

Minnesota code 2-2

		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	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 2-3

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	0	0	4	2.7	0	0	1	0.7	5	0.9
	Female	0	0	0	0	1	0.7	1	0.7	2	0.4
	Total	0	0	4	1.4	1	0.4	2	0.7	7	0.6
negative	Male	155	100.0	145	97.3	134	100.0	137	99.3	571	99.1
	Female	145	100.0	135	100.0	138	99.3	134	99.3	552	99.6
	Total	300	100.0	280	98.6	272	99.6	271	99.3	1123	99.4

Minnesota code 2-4

		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 2-5

		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 3-1

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	4	2.6	7	4.7	4	3.0	4	2.9	19	3.3
	Female	1	0.7	1	0.7	2	1.4	3	2.2	7	1.3
	Total	5	1.7	8	2.8	6	2.2	7	2.6	26	2.3
negative	Male	151	97.4	142	95.3	130	97.0	134	97.1	557	96.7
	Female	144	99.3	134	99.3	137	98.6	132	97.8	547	98.7
	Total	295	98.3	276	97.2	267	97.8	266	97.4	1104	97.7

Minnesota code 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	0	0	2	1.5	2	0.4
	Total	0	0	0	0	0	0	2	0.7	2	0.2
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	133	98.5	552	99.6
	Total	300	100.0	284	100.0	273	100.0	271	99.3	1128	99.8

Minnesota code 3-3-1

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	0	0	0	0	2	1.5	1	0.7	3	0.5
	Female	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	2	0.7	1	0.4	3	0.3
negative	Male	155	100.0	149	100.0	132	98.5	137	99.3	573	99.5
	Female	145	100.0	135	100.0	139	100.0	135	100.0	554	100.0
	Total	300	100.0	284	100.0	271	99.3	272	99.6	1127	99.7

Minnesota code 3-3-2

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	2	1.3	3	2.0	3	2.2	1	0.7	9	1.6
	Female	1	0.7	1	0.7	0	0	1	0.7	3	0.5
	Total	3	1.0	4	1.4	3	1.1	2	0.7	12	1.1
negative	Male	153	98.7	146	98.0	131	97.8	137	99.3	567	98.4
	Female	144	99.3	134	99.3	139	100.0	134	99.3	551	99.5
	Total	297	99.0	280	98.6	270	98.9	271	99.3	1118	98.9

Minnesota code 3-4

		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 4-1-1

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	0	0	0	0	0	0	4	2.9	4	0.7
	Female	0	0	0	0	1	0.7	1	0.7	2	0.4
	Total	0	0	0	0	1	0.4	5	1.8	6	0.5
negative	Male	155	100.0	149	100.0	134	100.0	134	97.1	572	99.3
	Female	145	100.0	135	100.0	138	99.3	134	99.3	552	99.6
	Total	300	100.0	284	100.0	272	99.6	268	98.2	1124	99.5

Minnesota code 4-1-2

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	0	0	3	2.0	3	2.2	3	2.2	9	1.6
	Female	1	0.7	1	0.7	3	2.2	2	1.5	7	1.3
	Total	1	0.3	4	1.4	6	2.2	5	1.8	16	1.4
negative	Male	155	100.0	146	98.0	131	97.8	135	97.8	567	98.4
	Female	144	99.3	134	99.3	136	97.8	133	98.5	547	98.7
	Total	299	99.7	280	98.6	267	97.8	268	98.2	1114	98.6

Minnesota code 4-2

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	0	0	2	1.3	2	1.5	7	5.1	11	1.9
	Female	1	0.7	0	0	3	2.2	3	2.2	7	1.3
	Total	1	0.3	2	0.7	5	1.8	10	3.7	18	1.6
negative	Male	155	100.0	147	98.7	132	98.5	131	94.9	565	98.1
	Female	144	99.3	135	100.0	136	97.8	132	97.8	547	98.7
	Total	299	99.7	282	99.3	268	98.2	263	96.3	1112	98.4

Minnesota code 4-3

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	2	1.3	4	2.7	6	4.5	10	7.2	22	3.8
	Female	10	6.9	4	3.0	11	7.9	13	9.6	38	6.9
	Total	12	4.0	8	2.8	17	6.2	23	8.4	60	5.3
negative	Male	153	98.7	145	97.3	128	95.5	128	92.8	554	96.2
	Female	135	93.1	131	97.0	128	92.1	122	90.4	516	93.1
	Total	288	96.0	276	97.2	256	93.8	250	91.6	1070	94.7

Minnesota code 4-4

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	1	0.6	0	0	1	0.7	1	0.7	3	0.5
	Female	2	1.4	1	0.7	2	1.4	0	0	5	0.9
	Total	3	1.0	1	0.4	3	1.1	1	0.4	8	0.7
negative	Male	154	99.4	149	100.0	133	99.3	137	99.3	573	99.5
	Female	143	98.6	134	99.3	137	98.6	135	100.0	549	99.1
	Total	297	99.0	283	99.6	270	98.9	272	99.6	1122	99.3

Minnesota code 5-1

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	0	0	0	0	1	0.7	1	0.7	2	0.3
	Female	0	0	0	0	0	0	1	0.7	1	0.2
	Total	0	0	0	0	1	0.4	2	0.7	3	0.3
negative	Male	155	100.0	149	100.0	133	99.3	137	99.3	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	272	99.6	271	99.3	1127	99.7

Minnesota code 5-2

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	2	1.3	1	0.7	2	1.5	4	2.9	9	1.6
	Female	4	2.8	1	0.7	2	1.4	2	1.5	9	1.6
	Total	6	2.0	2	0.7	4	1.5	6	2.2	18	1.6
negative	Male	153	98.7	148	99.3	132	98.5	134	97.1	567	98.4
	Female	141	97.2	134	99.3	137	98.6	133	98.5	545	98.4
	Total	294	98.0	282	99.3	269	98.5	267	97.8	1112	98.4

Minnesota code 5-3

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	1	0.6	0	0	3	2.2	5	3.6	9	1.6
	Female	2	1.4	3	2.2	6	4.3	2	1.5	13	2.3
	Total	3	1.0	3	1.1	9	3.3	7	2.6	22	1.9
negative	Male	154	99.4	149	100.0	131	97.8	133	96.4	567	98.4
	Female	143	98.6	132	97.8	133	95.7	133	98.5	541	97.7
	Total	297	99.0	281	98.9	264	96.7	266	97.4	1108	98.1

Minnesota code 5-4

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	4	2.6	2	1.3	1	0.7	1	0.7	8	1.4
	Female	5	3.4	3	2.2	4	2.9	10	7.4	22	4.0
	Total	9	3.0	5	1.8	5	1.8	11	4.0	30	2.7
negative	Male	151	97.4	147	98.7	133	99.3	137	99.3	568	98.6
	Female	140	96.6	132	97.8	135	97.1	125	92.6	532	96.0
	Total	291	97.0	279	98.2	268	98.2	262	96.0	1100	97.3

Minnesota code 5-5

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	4	2.6	3	2.0	5	3.7	3	2.2	15	2.6
	Female	9	6.2	5	3.7	6	4.3	8	5.9	28	5.1
	Total	13	4.3	8	2.8	11	4.0	11	4.0	43	3.8
negative	Male	151	97.4	146	98.0	129	96.3	135	97.8	561	97.4
	Female	136	93.8	130	96.3	133	95.7	127	94.1	526	94.9
	Total	287	95.7	276	97.2	262	96.0	262	96.0	1087	96.2

Minnesota code 6-1

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	0	0	1	0.7	0	0	0	0	1	0.2
	Female	0	0	0	0	0	0	0	0	0	0
	Total	0	0	1	0.4	0	0	0	0	1	0.1
negative	Male	155	100.0	148	99.3	134	100.0	138	100.0	575	99.8
	Female	145	100.0	135	100.0	139	100.0	135	100.0	554	100.0
	Total	300	100.0	283	99.6	273	100.0	273	100.0	1129	99.9

Minnesota code 6-2-1

		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

Minnesota code 6-2-3

		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 6-3

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	0	0	0	0	1	0.7	1	0.7	2	0.3
	Female	1	0.7	0	0	0	0	0	0	1	0.2
	Total	1	0.3	0	0	1	0.4	1	0.4	3	0.3
negative	Male	155	100.0	149	100.0	133	99.3	137	99.3	574	99.7
	Female	144	99.3	135	100.0	139	100.0	135	100.0	553	99.8
	Total	299	99.7	284	100.0	272	99.6	272	99.6	1127	99.7

Minnesota code 6-4-1

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	1	0.6	0	0	0	0	1	0.7	2	0.3
	Female	0	0	0	0	2	1.4	0	0	2	0.4
	Total	1	0.3	0	0	2	0.7	1	0.4	4	0.4
negative	Male	154	99.4	149	100.0	134	100.0	137	99.3	574	99.7
	Female	145	100.0	135	100.0	137	98.6	135	100.0	552	99.6
	Total	299	99.7	284	100.0	271	99.3	272	99.6	1126	99.6

Minnesota code 6-5

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	2	1.3	0	0	0	0	1	0.7	3	0.5
	Female	3	2.1	2	1.5	2	1.4	5	3.7	12	2.2
	Total	5	1.7	2	0.7	2	0.7	6	2.2	15	1.3
negative	Male	153	98.7	149	100.0	134	100.0	137	99.3	573	99.5
	Female	142	97.9	133	98.5	137	98.6	130	96.3	542	97.8
	Total	295	98.3	282	99.3	271	99.3	267	97.8	1115	98.7

Minnesota code 6-8

		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 7-1-1

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	0	0	0	0	1	0.7	0	0	1	0.2
	Female	0	0	0	0	0	0	1	0.7	1	0.2
	Total	0	0	0	0	1	0.4	1	0.4	2	0.2
negative	Male	155	100.0	149	100.0	133	99.3	138	100.0	575	99.8
	Female	145	100.0	135	100.0	139	100.0	134	99.3	553	99.8
	Total	300	100.0	284	100.0	272	99.6	272	99.6	1128	99.8

Minnesota code 7-2-1

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	1	0.6	1	0.7	2	1.5	6	4.3	10	1.7
	Female	0	0	2	1.5	1	0.7	5	3.7	8	1.4
	Total	1	0.3	3	1.1	3	1.1	11	4.0	18	1.6
negative	Male	154	99.4	148	99.3	132	98.5	132	95.7	566	98.3
	Female	145	100.0	133	98.5	138	99.3	130	96.3	546	98.6
	Total	299	99.7	281	98.9	270	98.9	262	96.0	1112	98.4

Minnesota code 7-3

		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 7-4

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
positive	Male	1	0.6	0	0	0	0	0	0	1	0.2
	Female	0	0	0	0	0	0	0	0	0	0
	Total	1	0.3	0	0	0	0	0	0	1	0.1
negative	Male	154	99.4	149	100.0	134	100.0	138	100.0	575	99.8
	Female	145	100.0	135	100.0	139	100.0	135	100.0	554	100.0
	Total	299	99.7	284	100.0	273	100.0	273	100.0	1129	99.9

Minnesota code 7-5

		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 7-6

		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 7-7

		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 7-8

		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 8-1-1

		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