

Supplemental Table 1. The Number of Sudden Cardiac Death (SCD) according to the Time of Symptom Onset and the Place of Death.

Place of death	Time of symptom onset		Total
	< 1 hour SCD1	1-24 hours SCD1-24	
Outside of hospital SCD_NER	58(4)	132(19)	190(23)
Emergency room or hospital SCD_ER	105(14)	176(80)	281(94)
Total	163(18)	308(99)	471(117)

In parentheses, the number of SCD with myocardial infarction (SCD_MI)

Supplemental Table 2. Trends for age- and sex-adjusted cardiovascular risk characteristics among men and women aged 40 to 74 years in four Japanese communities from 1981 to 2005.

	1981-1985	1986-1990	1991-1995	1996-2000	2001-2005	<i>p</i> for trend
Age-adjusted, mean or percent						
Men						
Number	4678	4315	4408	4281	4038	
Age, year	55	56	57	59	60	
Systolic blood pressure, mmHg	137	134	133	135	133	<0.01
Diastolic blood pressure, mmHg	82	82	81	83	83	<0.01
Antihypertensive medication, %	19.7	18.6	17.1	18.0	19.2	0.322
Hypertension, %	50.2	41.6	41.6	45.3	45.1	<0.01
Body mass index, kg/m ²	22.8	23.0	23.3	23.6	24.0	<0.01
Overweight (BMI ≥25kg/m ²)	26.5	29.4	30.3	34.1	35.8	<0.01
Total cholesterol, mmol/L	4.76	4.90	4.99	5.15	5.27	<0.01
Total cholesterol ≥5.69 mmol/L, %	14.1	17.9	21.2	27.5	32.7	<0.01
Blood glucose, mmol/L	61.9	69.6	68.0	63.8	62.3	<0.01
Diabetes mellitus, %	4.8	7.1	7.3	7.7	9.8	<0.01
Heavy drinking(ethanol intake ≥46g/day)	33.5	30.2	29.6	29.6	25.1	<0.01
Current smoking, %	61.0	56.3	52.4	49.9	44.6	<0.01
ECG findings						
Atrial fibrillation	1.3	1.5	1.1	1.3	1.3	0.639
Ventricular premature contraction	3.0	2.8	2.9	2.5	2.1	0.013
Supraventricular premature contraction	2.8	3.7	3.6	3.0	2.8	0.535
Major ST-T abnormality	4.5	4.0	3.7	4.0	3.9	<0.01
Minor ST-T abnormality	12.5	9.9	12.5	11.8	11.6	<0.01
PQ prolonged	1.4	1.1	1.3	1.4	1.0	0.465
Complete/incomplete right bundle branch block	5.3	5.0	5.1	5.6	6.1	0.449
Wide QRS	2.9	2.8	2.8	3.2	3.5	0.075
Abnormal Q wave	0.4	0.6	0.5	0.6	0.7	0.307
Left ventricular hypertrophy	29.3	27.6	23.3	19.5	17.5	<0.01
Women						
Number	6954	6766	7131	7041	6524	
Age, year	55	56	56	57	58	
Systolic blood pressure, mmHg	135	132	130	131	129	<0.01
Diastolic blood pressure, mmHg	79	78	78	79	78	<0.01
Antihypertensive medication, %	19.3	18.4	16.5	16.6	17.4	<0.01
Hypertension, %	43.4	38.1	34.7	35.8	34.1	<0.01
Body mass index, kg/m ²	23.6	23.5	23.5	23.5	23.3	<0.01
Overweight (BMI ≥25kg/m ²)	35.8	35.0	32.6	32.8	29.2	<0.01
Total cholesterol, mg/dl	5.12	5.28	5.33	5.53	5.59	<0.01
Total cholesterol ≥5.69 mmol/L, %	25.5	30.7	33.3	43.1	48.7	<0.01
Blood glucose, mmol/L	58.2	65.7	63.2	57.6	56.6	<0.01
Diabetes mellitus, %	2.8	3.9	3.5	3.9	4.1	<0.01
Heavy drinking(ethanol intake ≥46g/day)	0.5	0.4	0.5	0.6	0.5	0.041
Current smoking, %	6.4	5.7	5.6	6.0	6.1	0.659
ECG findings						
Atrial fibrillation	0.6	0.5	0.3	0.3	0.3	<0.01
Ventricular premature contraction	2.0	2.2	1.7	1.8	1.9	0.269
Supraventricular premature contraction	2.3	2.5	2.9	2.4	2.5	0.653
Major ST-T abnormality	6.5	5.8	4.9	4.4	4.6	0.970
Minor ST-T abnormality	22.5	19.0	19.9	20.0	17.4	0.283
PQ prolonged	0.5	0.5	0.4	0.5	0.4	0.063
Complete/incomplete right bundle branch block	3.1	3.4	3.1	3.2	3.0	<0.01
Wide QRS	1.4	1.6	1.5	1.6	1.5	0.598
Abnormal Q wave	0.1	0.2	0.2	0.2	0.3	0.010
Left ventricular hypertrophy	10.8	9.6	7.7	5.7	4.5	<0.01

Supplemental Table 3. Trends for age- and sex-adjusted cardiovascular risk characteristics among men and women aged 40 to 74 years in Ikawa and Kyowa with high participation rates from 1981 to 2005.

	1981-1985	1986-1990	1991-1995	1996-2000	2001-2005	<i>p</i> for trend
Age-adjusted, mean or percent						
Men						
Number	2698	2384	2533	2506	2381	
Age, year	55	55	57	59	59	
Systolic blood pressure, mmHg	139	136	134	135	133	<0.01
Diastolic blood pressure, mmHg	82	83	81	82	82	0.913
Antihypertensive medication, %	21.7	21.7	19.3	20.6	21.6	0.425
Hypertension, %	55.0	50.3	44.1	47.4	46.7	<0.01
Body mass index, kg/m ²	22.9	23.2	23.4	23.7	23.9	<0.01
Overweight (BMI ≥25kg/m ²)	27.3	32.1	29.0	32.7	36.0	<0.01
Total cholesterol, mmol/L	4.69	4.82	4.92	5.07	5.21	<0.01
Total cholesterol ≥5.69 mmol/L, %	13.4	15.5	18.5	24.0	30.5	<0.01
Blood glucose, mmol/L	59.0	72.7	70.3	64.1	61.3	<0.01
Diabetes mellitus, %	4.2	9.1	8.1	8.1	10.3	<0.01
Heavy drinking(ethanol intake ≥46g/day)	39.0	37.3	34.3	34.7	27.7	<0.01
Current smoking, %	65.1	61.0	56.1	53.2	47.2	<0.01
ECG findings, %						
Atrial fibrillation	1.5	1.9	1.4	1.7	1.4	0.588
Ventricular premature contraction	3.4	2.9	3.6	2.6	2.2	0.011
Supraventricular premature contraction	3.2	3.4	3.5	3.2	3.1	0.520
Major ST-T abnormality	5.0	4.7	3.5	4.0	3.4	<0.01
Minor ST-T abnormality	11.2	9.3	11.3	10.8	9.9	0.507
PQ prolonged	1.4	1.1	0.9	1.2	1.0	0.375
Complete/incomplete right bundle branch block	5.1	4.9	4.8	4.8	5.6	0.628
Wide QRS	2.9	2.6	2.8	2.8	3.1	0.634
Abnormal Q wave	0.6	0.7	0.5	0.7	0.7	0.869
Left ventricular hypertrophy	31.1	29.8	29.1	21.6	21.5	<0.01
Women						
Number	3543	3299	3618	3686	3473	
Age, year	55	56	57	57	58	
Systolic blood pressure, mmHg	136	134	131	132	130	<0.01
Diastolic blood pressure, mmHg	80	80	78	78	78	<0.01
Antihypertensive medication, %	22.2	21.7	19.2	20.1	19.7	<0.01
Hypertension, %	47.3	42.6	36.9	37.8	35.7	<0.01
Body mass index, kg/m ²	24.0	24.1	23.9	23.9	23.8	<0.01
Overweight (BMI ≥25kg/m ²)	41.3	41.7	36.4	36.4	33.6	<0.01
Total cholesterol, mmol/L	5.06	5.23	5.26	5.42	5.51	<0.01
Total cholesterol ≥5.69 mmol/L, %	23.3	28.8	30.8	38.9	45.7	<0.01
Blood glucose, mmol/L	54.8	67.7	65.3	58.3	56.4	<0.01
Diabetes mellitus, %	2.7	5.4	4.2	4.5	4.6	0.204
Heavy drinking(ethanol intake ≥46g/day)	0.4	0.3	0.5	0.7	0.5	0.140
Current smoking, %	5.3	4.2	4.3	4.7	4.8	0.600
ECG findings, %						
Atrial fibrillation	0.6	0.7	0.4	0.5	0.4	0.133
Ventricular premature contraction	2.4	2.7	1.8	2.0	2.2	0.119
Supraventricular premature contraction	2.7	2.7	2.7	2.5	3.1	0.653
Major ST-T abnormality	7.5	6.2	4.2	4.5	3.6	<0.01
Minor ST-T abnormality	20.8	18.2	18.2	17.9	12.9	<0.01
PQ prolonged	0.4	0.4	0.4	0.6	0.5	0.120
Complete/incomplete right bundle branch block	2.4	3.1	2.9	3.3	3.3	0.049
Wide QRS	1.1	1.5	1.3	1.5	1.6	0.107
Abnormal Q wave	0.1	0.2	0.1	0.1	0.3	0.254
Left ventricular hypertrophy	11.5	10.9	10.1	7.4	5.7	<0.01

Supplemental Table 4. Trends for age- and sex-adjusted cardiovascular risk characteristics among men and women aged 40 to 74 years in Yao and Noichi with lower participation rates from 1981 to 2005.

	1981-1985	1986-1990	1991-1995	1996-2000	2001-2005	<i>p</i> for trend
Age-adjusted, mean or percent						
Men						
Number	1980	1931	1875	1775	1657	
Age, year	56	57	58	60	61	
Systolic blood pressure, mmHg	135	132	132	134	133	0.401
Diastolic blood pressure, mmHg	81	80	82	83	83	<0.01
Antihypertensive medication, %	17.0	14.9	14.1	14.2	15.8	0.251
Hypertension, %	43.7	37.5	38.3	42.2	42.6	0.598
Body mass index, kg/m ²	22.6	22.8	23.2	23.5	24.0	<0.01
Overweight (BMI ≥25kg/m ²)	25.3	26.1	32.0	36.2	35.6	<0.01
Total cholesterol, mmol/L	4.88	5.00	5.09	5.27	5.36	<0.01
Total cholesterol ≥5.69 mmol/L, %	15.3	20.9	24.7	32.6	35.9	<0.01
Blood glucose, mmol/L	67.3	67.0	65.3	62.2	62.0	<0.01
Diabetes mellitus, %	5.4	4.9	6.3	7.0	9.0	<0.01
Heavy drinking(ethanol intake ≥46g/day)	26.7	21.6	23.1	22.2	21.1	<0.01
Current smoking, %	55.8	50.5	47.5	45.1	40.8	<0.01
ECG findings, %						
Atrial fibrillation	1.1	1.0	0.8	0.8	1.1	0.767
Ventricular premature contraction	2.5	2.7	2.0	2.4	2.1	0.362
Supraventricular premature contraction	2.1	4.1	3.8	2.7	2.5	0.781
Major ST-T abnormality	3.7	3.1	3.9	4.1	4.7	0.037
Minor ST-T abnormality	14.3	10.7	14.2	13.2	14.1	0.396
PQ prolonged	1.5	1.1	1.8	1.5	0.9	0.567
Complete/incomplete right bundle branch block	5.5	5.2	5.4	6.6	6.8	0.023
Wide QRS	3.0	3.1	2.8	3.8	4.1	0.035
Abnormal Q wave	0.2	0.6	0.5	0.5	0.5	0.159
Left ventricular hypertrophy	27.0	25.0	15.4	16.4	11.5	<0.01
Women						
Number	3411	3467	3513	3355	3051	
Age, year	55	55	56	58	59	
Systolic blood pressure, mmHg	133	131	130	130	129	<0.01
Diastolic blood pressure, mmHg	79	77	79	80	79	0.025
Antihypertensive medication, %	16.4	15.3	13.5	12.8	14.8	0.014
Hypertension, %	39.3	33.7	32.4	33.6	32.4	<0.01
Body mass index, kg/m ²	23.1	23.0	23.0	23.0	22.8	<0.01
Overweight (BMI ≥25kg/m ²)	30.3	28.6	28.7	29.0	24.2	<0.01
Total cholesterol, mmol/L	5.20	5.33	5.40	5.64	5.67	<0.01
Total cholesterol ≥5.69 mmol/L, %	28.4	32.5	35.9	47.7	52.0	<0.01
Blood glucose, mmol/L	61.6	63.9	61.3	56.8	56.9	<0.01
Diabetes mellitus, %	2.8	2.6	2.8	3.4	3.5	0.020
Heavy drinking(ethanol intake ≥46g/day)	0.5	0.3	0.5	0.5	0.7	0.151
Current smoking, %	7.5	7.1	6.9	7.4	7.5	0.774
ECG findings, %						
Atrial fibrillation	0.6	0.3	0.2	0.1	0.2	<0.01
Ventricular premature contraction	1.5	1.8	1.7	1.6	1.6	0.974
Supraventricular premature contraction	2.0	2.3	3.1	2.2	2.0	0.900
Major ST-T abnormality	5.4	5.4	5.6	4.3	5.6	0.613
Minor ST-T abnormality	24.2	19.8	21.6	22.3	22.5	0.721
PQ prolonged	0.6	0.6	0.4	0.3	0.3	0.008
Complete/incomplete right bundle branch block	3.9	3.6	3.3	3.0	2.6	0.005
Wide QRS	1.7	1.6	1.8	1.6	1.4	0.505
Abnormal Q wave	0.1	0.2	0.3	0.2	0.4	0.015
Left ventricular hypertrophy	10.1	8.4	5.1	4.0	3.1	<0.01