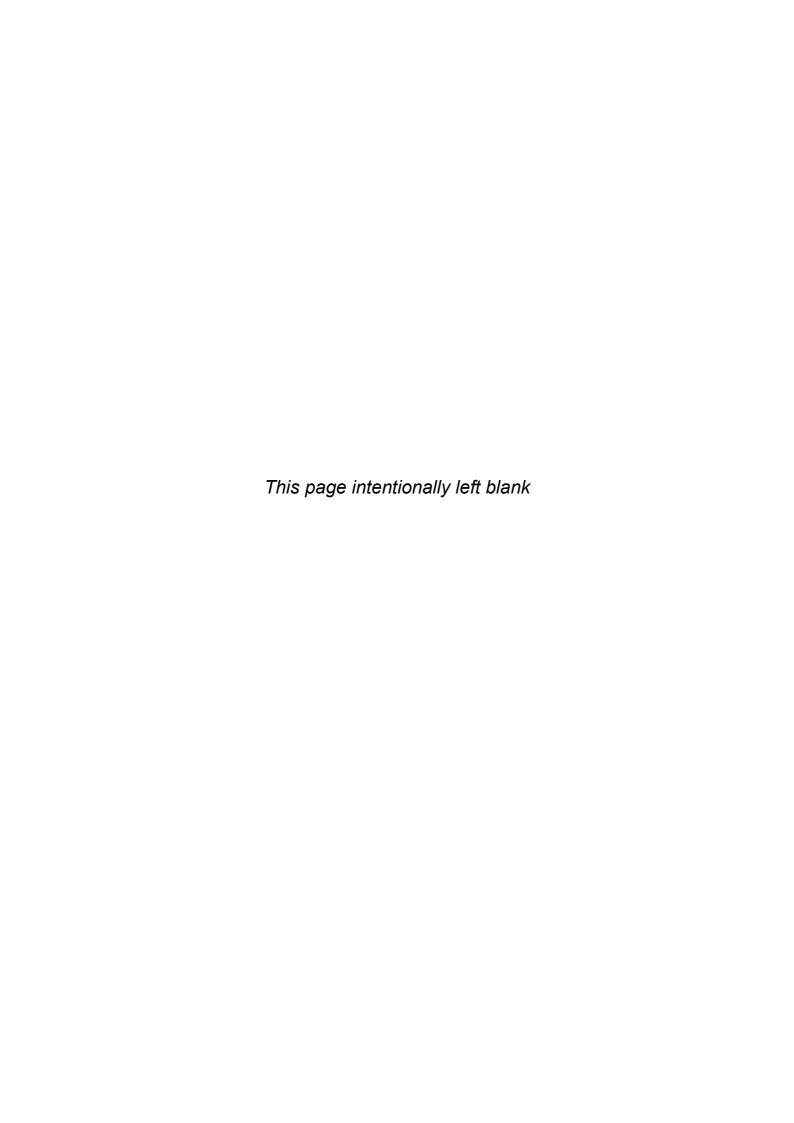
## THE LANCET Public Health

### Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Rojas NA, Dobell E, Lacey B, et al. Burden of hypertension and associated risks for cardiovascular mortality in Cuba: a prospective cohort study. *Lancet Public Health* 2019; published online Jan 22. http://dx.doi.org/10.1016/S2468-2667(18)30210-X.



# Burden of hypertension and associated risks for cardiovascular mortality in Cuba: a prospective study of 150,000 adults

#### **Supplementary Appendix, Table of Contents**

	Page
Questionnaire (Spanish)	3
Questionnaire (English translation)	4
<b>Table S1.</b> Prevalence of isolated systolic hypertension and isolated diastolic hypertension, by age and sex	5
Table S2. Prevalence of stage 1 hypertension and stage 2 hypertension, by age and sex	6
<b>Table S3.</b> Proportion of participants with treated hypertension taking a single or multiple blood pressure-lowering medications, by age and sex	7
Table S4. Proportion of participants with treated hypertension taking specific types of blood           pressure-lowering medication, by age and sex	8
Table S5. Baseline characteristics of the 23 114 study participants that were resurveyed	9
<b>Table S6.</b> Prevalence, diagnosis, treatment and control of hypertension at baseline among resurveyed participants, by age and sex	10
Table S7. Prevalence, diagnosis, treatment and control of hypertension at among resurvey participants, by age and sex	11
<b>Table S8.</b> Number of hypertensive participants taking 1,2,3 or 4 antihypertensives at resurvey, by age and sex	12
Table S9. Baseline characteristics of the 127 253 study participants in the prospective analyses	13
Figure S2. Age- and sex-specific relevance of hypertension to cardiovascular mortality	14
Table S10. Prevalence and control of hypertension using four different definitions of hypertension	15

#### ESTUDIO CUBANO SOBRE TABACO Y SALUD

Provincia No	. 1-9 Municipio No	0-99	Area de 0-9 Salud No.	M	17524	A
v			Carnet de Identidad No. Fech	a de nacimiento (a.m		os
	4		(11 números: exc	luir si no tiene C.I. d	le 6 + 5 núme	ros)
Nombre de la persona						
y dirección:	Calle	No.			Telé	fono
Nombre del		1			1111	111
familiar y dirección:		1 1 1		1 1 1 1 1	1111	1 1 1
' L	Calle	No.	Municipio	Provinc	ia Telé	fono
Γ	LETRA DE MOLDE,			o (1 = masc, 2 = fen		
	POR FAVOR	Colo	r de piel (1 = blanco, 2 = negro,			
cado, 5 — pr	e-universitario, 6 💳 universita	rio)	Estado social (1 = sol a, 2 = secundaria, 3 = técnico m rigente, 2 = profesional, 3 = técn	edio, 4 = obrero cali	fi- 0-6	6
	grícola, 6 = industria, 7 = m	litar)	•			
Quisiera med		-	bilado o desempleado), diga si ha do hacerle unas pocas preguntas sol Presión arterial (una sola toma,	re tabaco y alcohol, y n	ez. Lui nedir su PA de ni	
	CO: ¿Ha fumado alguna vez i directamente a las preguntas		nte (Ej. en la mayoria de los dias)?	30112d0). 1 1 1 1	•	Sí, N=No
•			COMENZO USTED A FUMAR REGU	LARMENTE?	año	s de edad
	<del>-</del>		alguna vez por un año o más?		<u></u>	Sí, N=No
	•		oor día se fumó usted el último me	s? (0 = ninguno	. — —	riamente
•		•	día se fumó usted el último mes?	(0 == ninguno	"	riamente s de edad
Aboro mo au	Si no fumó el último mes staría hacerle algunas pregunt			nco si no es aplicable		s de edad
		as a la s	emana toma usted ron u otra bebid	a fuerte?	0-7	,
			bida fuerto) chántas líneas se tom	a?	[] línea	38
	Aproximadamente cuántos d	as a la s	emana toma usted cerveza?		0-7	1
	(0 = céro días o usualmente ¿El día que usted toma cerve		· ·		bote	llas
Finalmente, a	Igunos aspectos médicos: Q	ilsiera pr	eguntarle sobre algunas enfermeda les. Si no lo ha sido, conteste No (	des. Lo que quiero co	nocer es si ust	ed alguna:
Asma	□ S/N			Cirrosis		☐ S/N
Enfisema (E.F	P.O.C.) S/N	Infar	to miocardio " S/N	Enf. renal crónica	а	□ . □ S/N
Diabetes	s/N	Angi	na pectoris " S/N	Cáncer de piel		☐ S/N
Ulcera péptic	a S/N	Hipe	tensión arterial S/N	- Otro cáncer*	ļ	☐ S/N
(1 = boca o	faringe, 2 = laringe, 3 = pu	món, 4 ==	¿*Si Otro Cáncer = esófago, 5 = estómago, 6 = páno	Sí, dónde le comenzo reas, 7 — cuello útero		0 - 9 = mama,
	is de un sitio, o no conocido omando alguna medicina reg Xì		desde hace más de un mes? Si es	Sí: ¿Qué medicinas	esta tomando?	
Digoxina	Nitratos		Hipoglic, oral Antic	oncept.	Ca. Antag.	
Beta B.	Inh. ACE	$\Box$	Insulina Antic	lepres.	Broncodilat.	Ħ
Diurético	ASA		Esteroides Ansie	olítico	Antiácido/H2	
	ACIAS POR SUS RESPUESTAS presión arterial. Repita la ton			14.7 11.1		PAS/PAD
¿Cuál es la ú	iltima cifra PA que tiene en					
4	r chequee TODA	recha d	e la última PA (a,m,d)	&       ? (medirlo o pregunta	_  /	PAS/PAD cm
1	encuesta  IAS GRACIAS!		¿Cuál es su PESO aproximado	? (pesarlo o preguntar	rlo) [ ] [	kg
1			Fecha	de la entrevista		(a,m,d)
utt	والتغديمونية المار مماناام	1 1 1	Calidad de la cooperación (1 = 1	oobre, 2 == regular, 3	= buena) [	1 - 3
Nombre y ap	pellidos del entrevistador:					•

CUBAN STUDY OF TOBACCO AND HEALTH: PROSPECTIVE
Province Nº 1-9 Municipality Nº 0-99 Health 0-9 Identity 1-9 Date of birth (y,m,d)
Name of interviewee:
Address: Street Nº Municipality Province Telephone
Name of the state
Address: Street Nº Municipality Province Telephone
CAPITAL LETTERS, PLEASE!  Sex (1=masc, 2=fem)  1-2  Skin colour(1=white, 2=black, 3=mixed, 4=other)  Marital status (1=single/widowed, 2=married)  1-2
Education completed (0=none, 1=primary, 2=secondary, 3=technician, 4=skilled worker, 5=high school, 6=university)
Occupational category (0=none, 1=manager, 2=professional, 3=technician, 4=service worker, 5=agricultural, 6=industrial, 7=military; if housewife, retired or unemployed, we would like to know if you were employed in the past)
What I'd like to do is measure your blood pressure while you are sitting down, ask you a few questions about tobacco and alcohol, and then do your blood pressure again.  Blood pressure (single measurement, seated):    SBP / DBP
Now, TOBACCO: Have you EVER smoked regularly (i.e. on most days for at least a year)?  If NO, then go directly to the ALCOHOL questions  Y=Yes, N=No
AT ABOUT WHAT AGE DID YOU FIRST START SMOKING TOBACCO REGULARLY?  years of age
Since then, have you ever STOPPED smoking for a year or more?  Y=Yes, N=No
About how many cigarettes a day did you smoke last month? (0=none) daily
About how many cigars a day did you smoke last month? (0=none) daily
If NO SMOKING last month, at about what age did you last stop smoking? (blank = not applicable) years of age
Now I'd like to ask you some questions about ALCOHOL:  About how many days a week would you drink any rum or other spirits?  (0=none or usually less than once a week)  On a day when you drink rum (or other spirits), about how many glasses ("lineas") would you drink?  About how many days a week would you drink beer?  (0=none or usually less than once a week)
On a day when you do drink beer, about how many bottles would you drink?  Finally, MEDICAL MATTERS: I'd like to ask about various different illnesses. What I want to know for each illness is whether
you've ever had medical attention for it. If you've never heard of the illness, then just say NO.  Asthma  Y/N  Stroke (definite/probable)  Y/N  Cirrhosis of the liver  Y/N
Emphysema/C.O.P.D. Y/N Myocardial infarction " Y/N Chronic kidney disease Y/N
Diabetes Y/N Angina pectoris " Y/N Skin cancer Y/N
Peptic ulcer Y/N Hypertension Y/N Other cancer* Y/N
*If Other cancer, where in your body did the cancer start?  (1=mouth, 2=larynx, 3=lung, 4=oesphagus, 5=stomach, 6=pancreas, 7=cervix, 8=bladder, 9=breast, 0=other, more than 1 site, or not known
Have you been taking any regular medication for more than 1 month? If Yes: What such medicines are you now taking? (Mark with an X)
Digoxin
Beta blocker ACE inhibitor Insulin Antidepressant Bronchodilator  Diuretic Aspirin Steroids Tranquillisers Antacid/H2
THANK YOU VERY MUCH FOR YOUR ANSWERS. Now we just need
one more blood pressure. Repeat blood pressure (single measurement, seated)  What was the last blood pressure in the patient's medical record before today?
Please check that ALL  Date of last BP (y,m,d)
the questions have been answered, so that there
is no need to write back to you for extra details.  What is your approximate WEIGHT (either ask or measure)? kg
MANY THANKS!  Date of interview (y,m.d)
Quality of co-operation (1=poor, 2=fair, 3=good) 1-3
Name of interviewer: please PRINT
Any comments:

Table S1. Prevalence of isolated systolic hypertension and isolated diastolic hypertension, by age and sex

				Н	ypertension (%	)	
			Isolated systolic	Isolated diastolic	Both	Controlled	All
Age at entry	No. of	SBP (mmHg):	>=140	<140	>=140	<140	
(years)	participants	DBP(mmHg):	and <90	and >=90	and >=90	and <90	
Male							
35-39	9291		3.1	6.8	6.8	2.2	18.9
40-49	16 774		4.1	8.4	10.4	3.5	26.4
50-59	15 347		5.2	9.4	14.9	5.4	34.9
60-69	11 192		7.7	8.9	18.6	6.0	41.2
70-79	7560		9.6	8.7	18.0	6.2	42.5
All	60 164		5.6	8.5	13.4	4.5	32.0
Female							
35-39	12 301		2.0	4.5	4.8	2.8	14.1
40-49	21 651		3.4	6.6	9.5	5.2	24.7
50-59	19 014		5.8	8.9	17.1	8.8	40.6
60-69	13 920		8.7	8.7	21.9	10.1	49.4
70-79	9061		12.2	7.6	21.3	9.1	50.2
All	75 947		5.8	7.4	14.4	7.1	34.7
Both							
35-39	21 592		2.5	5.5	5.7	2.5	16.2
40-49	38 425		3.7	7.4	9.9	4.4	25.5
50-59	34 361		5.5	9.1	16.1	7.3	38.1
60-69	25 112		8.2	8.8	20.4	8.3	45.8
70-79	16 621		11.0	8.1	19.9	7.8	46.8
Overall	136 111		5.7	7.9	13.9	6.0	33.5

SBP = systolic blood pressure; DBP = diastolic blood pressure. Analyses are standardised for area, and where appropriate for age and sex. Exclusions as in Table 1. Each percentage is that of the specified subgroup of the participants in each row.

Table S2. Prevalence of stage 1 hypertension and stage 2 hypertension, by age and sex

			nsion (%)			
		_	Stage 1	Stage 2	Controlled	All
Age at entry	No. of	SBP (mmHg):	140-159	>=160	<140	
(years)	participants	DBP(mmHg):	or 90-99	or >=100	and <90	
Male						
35-39	9291		13.4	3.3	2.2	18.9
40-49	16 774		17.7	5.2	3.5	26.4
50-59	15 347		22.2	7.3	5.4	34.9
60-69	11 192		26.0	9.2	6.0	41.2
70-79	7560		26.7	9.6	6.2	42.5
All	60 164		20.8	6.7	4.5	32.0
Female						
35-39	12 301		9.0	2.3	2.8	14.1
40-49	21 651		14.8	4.7	5.2	24.7
50-59	19 014		22.9	8.9	8.8	40.6
60-69	13 920		27.5	11.7	10.1	49.4
70-79	9061		28.4	12.7	9.1	50.2
All	75 947		19.9	7.7	7.1	34.7
Both						
35-39	21 592		10.9	2.8	2.5	16.2
40-49	38 425		16.1	4.9	4.4	25.5
50-59	34 361		22.6	8.2	7.3	38.1
60-69	25 112		26.8	10.6	8.3	45.8
70-79	16 621		27.6	11.4	7.8	46.8
Overall	136 111		20.3	7.2	6.0	33.5

Table S3. Proportion of participants with treated hypertension taking a single or multiple blood pressure-lowering medications, by age and sex

Age at entry	Treated		Treated hyperter	sives, N (%)	
(years)	hypertensives, N	1 medication	2 medications	3 medications	4 medications
Male					
35-39	584	407 (69.7)	162 (27.7)	15 (2.6)	0 (0.0)
40-49	1728	1209 (70.0)	463 (26.8)	55 (3.2)	1 (0.1)
50-59	2502	1705 (68.1)	729 (29.1)	66 (2.6)	2 (0.1)
60-69	2240	1582 (70.6)	595 (26.6)	62 (2.8)	1 (0.0)
70-79	1490	1038 (69.7)	409 (27.5)	42 (2.8)	1 (0.1)
Female					
35-39	779	539 (69.2)	226 (29.0)	14 (1.8)	0 (0.0)
40-49	2938	2049 (69.7)	806 (27.4)	83 (2.8)	0 (0.0)
50-59	4712	3192 (67.7)	1381 (29.3)	139 (3.0)	0 (0.0)
60-69	4216	2939 (69.7)	1165 (27.6)	112 (2.7)	0 (0.0)
70-79	2568	1825 (71.1)	686 (26.7)	57 (2.2)	0 (0.0)
Both					
35-39	1363	946 (69.4)	388 (28.5)	29 (2.1)	0 (0.0)
40-49	4666	3258 (69.8)	1269 (27.2)	138 (3.0)	1 (0.0)
50-59	7214	4897 (67.9)	2110 (29.2)	205 (2.8)	2 (0.0)
60-69	6456	4521 (70.0)	1760 (27.3)	174 (2.7)	1 (0.0)
70-79	4058	2863 (70.6)	1095 (27.0)	99 (2.4)	1 (0.0)
Overall	23 757	16 485 (69.4)	6622 (27.9)	645 (2.7)	5 (0.0)

Table S4. Proportion of participants with treated hypertension taking specific types of blood pressure-lowering medication, by age and sex

		% of treated hypertensives % of treated hypertensi							tensives	sives	
						(s	ingle blood p	ressure-lowe	ering medication	on only)	
				Calcium				Calcium		-	
Age at entry	Treated	ACE-	Beta-	channel		ACE-	Beta-	channel			
(years)	hypertensives, N	inhibitors	blockers	blockers	Diuretics	inhibitors	blockers	blockers	Diuretics	Any	
Male											
35-39	584	5.7	40.6	26.7	59.9	3.3	20.2	13.2	33.0	69.7	
40-49	1728	5.7	40.0	27.7	59.9	2.9	19.5	13.8	33.8	70.0	
50-59	2502	5.5	41.6	29.4	58.1	2.8	20.0	15.3	30.1	68.1	
60-69	2240	5.0	34.7	33.8	58.7	2.3	16.0	18.8	33.5	70.6	
70-79	1490	3.4	33.9	34.4	61.7	2.1	14.4	18.9	34.2	69.7	
Female											
35-39	779	6.5	40.4	20.9	64.7	2.4	18.5	11.7	36.6	69.2	
40-49	2938	4.7	41.6	23.8	63.0	2.2	19.5	11.7	36.3	69.7	
50-59	4712	4.5	40.9	29.2	60.7	1.9	18.7	14.5	32.7	67.7	
60-69	4216	4.6	35.7	32.7	60.0	2.1	16.2	17.8	33.6	69.7	
70-79	2568	5.1	30.6	33.2	62.2	2.4	13.6	19.4	35.7	71.1	
Both											
35-39	1363	6.2	40.5	23.4	62.7	2.8	19.2	12.3	35.1	69.4	
40-49	4666	5.0	41.0	25.2	61.9	2.4	19.5	12.5	35.4	69.8	
50-59	7214	4.9	41.1	29.2	59.8	2.2	19.1	14.8	31.8	67.9	
60-69	6456	4.7	35.3	33.1	59.6	2.2	16.2	18.2	33.6	70.0	
70-79	4058	4.5	31.8	33.6	62.0	2.3	13.9	19.2	35.1	70.6	
Overall	23 757	4.9	37.9	29.9	60.7	2.3	17.5	15.9	33.7	69.4	

Table S5. Baseline characteristics of the 23 114 study participants that were resurveyed\*

	Men	Wome	en	Al	
	(10 183)	(12 93	1)	(23 1	14)
Age at entry (years), n (%)					
35-39	1784 (18	3) 2352	(18)	4136	(18)
40-49	2717 (27	7) 3708	(29)	6425	(28)
50-59	2813 (28	3362	(26)	6175	(27)
60-69	1788 (18	3) 2198	(17)	3986	(17)
70-79	1081 (13	1) 1311	(10)	2392	(10)
Age (years), mean (SD)	53 (12	2) 53	(12)	53	(12)
Blood pressure (mm Hg), mean (SD)					
Systolic	126 (17	7) 124	(20)	125	(18)
Diastolic	81 (10	0) 79	(12)	80	(11)
Area, n (%)†					
Matanzas	10 183 (10	00) 12 931	(100)	23 114	(100)
Camagüey	0 (0)	0	(0)	0	(0)
Pinar del Río	0 (0)	0	(0)	0	(0)
Ciudad de La Habana	0 (0)	0	(0)	0	(0)
La Habana	0 (0)	0	(0)	0	(0)
Educational level, n (%)					
Less than primary	710 (7)	1125	(9)	1835	(8)
Primary	2700 (27	7) 4207	(33)	6907	(30)
Lower secondary	3002 (29	9) 3694	(29)	6696	(29)
High school/technical college	2862 (28	3) 2950	(23)	5812	(25)
University	909 (9)	955	(7)	1864	(8)
Ethnicity					
White	7919 (78	3) 9947	(77)	17 866	(77)
Black	1606 (16	5) 1945	(15)	3551	(15)
Mixed	649 (6)	1024	(8)	1673	(7)
Other	9 (<	1) 15	(<1)	24	(<1)
Prior cardiovascular disease					
No	9706 (95	5) 12 404	(96)	22 110	(96)
Yes	477 (5)	527	(4)	1004	(4)
Season of baseline survey, n (%)+					
Spring	5135 (50	7038	(54)	12 173	(53)
Summer	3376 (33	3521	(27)	6897	(30)
Autumn	599 (6)	837	(6)	1436	(6)
Winter	1073 (13			2608	
Ever smoked tobacco, n (%)	5761 (57			9698	(42)
At least weekly alcohol consumption, n (%)	2215 (22			2426	
BMI (kg/m²), mean (SD)	24.6 (3.			24.9	(4.2)

 $<sup>\</sup>hbox{*Exclusion as in Table 1, with further exclusion of participants with missing or implausible blood pressure values at resurvey.}$ 

<sup>†</sup>Spring indicates March to May; Summer, June to August; Autumn, September to November; Winter, December to February.

Table S6. Prevalence, diagnosis, treatment and control of hypertension at baseline among resurveyed participants, by age and sex

					Conti	rolled
Age at baselin	e	<b>Prevalence of</b>	Diagnosed among	<b>Treated among</b>		Among all
(years)	No. of participants	hypertension, %	hypertensives, %	diagnosed, %	Among treated, %	hypertensives, %
Male						
35-39	1784	18.8	37.5	55.6	42.9	8.9
40-49	2717	28.3	41.3	61.9	38.6	9.9
50-59	2813	37.5	49.3	68.5	32.9	11.1
60-69	1788	42.7	49.7	73.2	28.4	10.3
70-79	182	45.6	54.2	62.2	35.7	12.0
All	9 284	32.2	46.0	66.7	33.7	10.4
Female						
35-39	2352	12.8	48.5	66.4	45.4	14.6
40-49	3708	26.2	62.6	73.1	37.8	17.3
50-59	3362	43.6	68.0	75.5	34.0	17.5
60-69	2198	51.8	70.9	74.4	27.6	14.6
70-79	234	53.0	69.4	80.2	27.5	15.3
All	11 854	34.0	66.2	74.3	33.2	16.3
Both						
35-39	4136	15.5	42.6	61.3	44.3	11.6
40-49	6425	27.1	52.8	69.1	38.1	13.9
50-59	6175	40.9	60.5	73.2	33.7	14.9
60-69	3986	47.8	62.6	74.0	27.9	12.9
70-79	416	49.7	63.3	74.0	29.9	14.0
All (40-79)	17 002	37.5	59.0	72.5	32.7	14.0
All (35-79)	21 138	33.2	57.6	71.7	33.4	13.8

SBP = systolic blood pressure; DBP = diastolic blood pressure. Analyses are standardised for area, and where appropriate for age and sex. Exclusions as in Table 1, with further exclusion of participants with missing or implausible blood pressure values at resurvey, and those aged less than 40 or 80 and over at resurvey.

Each percentage is that of the specified subgroup of the participants in each row.

Table S7. Prevalence, diagnosis, treatment and control of hypertension at among resurveyed participants, by age and sex

					Conti	rolled
Age at resurvey		<b>Prevalence of</b>	Diagnosed among	<b>Treated among</b>		Among all
(years)	No. of participants	hypertension, %	hypertensives, %	diagnosed, %	Among treated, %	hypertensives, %
Male						
40-49	2147	29.5	53.6	79.6	67.4	28.8
50-59	2811	38.1	55.9	78.0	56.3	24.5
60-69	2687	42.9	62.3	76.5	49.3	23.5
70-79	1639	45.0	64.7	73.0	50.9	24.0
All	9284	37.4	57.8	77.5	57.6	25.6
Female						
40-49	2842	25.3	59.4	83.2	72.5	35.8
50-59	3733	42.2	65.5	77.7	59.4	30.2
60-69	3183	51.7	75.6	73.2	51.9	28.8
70-79	2096	56.3	76.8	69.4	42.5	22.6
All	11 854	40.5	67.2	77.4	59.8	30.7
Both						
40-49	4989	27.2	56.6	81.6	70.2	32.5
50-59	6544	40.4	61.5	77.8	58.3	27.9
60-69	5870	47.8	70.4	74.4	51.0	26.7
70-79	3735	51.3	72.1	70.6	45.5	23.2
Overall	21 138	39.1	63.1	77.4	58.8	28.5

SBP = systolic blood pressure; DBP = diastolic blood pressure. Analyses are standardised for area, and where appropriate for age and sex. Exclusions as in Table 1, with further exclusion of participants with missing or implausible blood pressure values at resurvey, and those aged less than 40 or 80 and over at resurvey. Each percentage is that of the specified subgroup of the participants in each row.

Table S8. Proportion of participants with treated hypertension at resurvey taking a single or multiple blood pressure-lowering medications, by age and sex

Age at resurvey	Treated with		Treated hypert	tensives, N (%)	
(years)	hypertensives, N	1 medication	2 medications	3 medications	4 medications
Male					
40-49	280	173 (61.8)	98 (35.0)	9 (3.2)	0 (0.0)
50-59	495	312 (63.0)	161 (32.5)	22 (4.4)	0 (0.0)
60-69	583	347 (59.5)	204 (35.0)	31 (5.3)	1 (0.2)
70-79	368	231 (62.8)	127 (34.5)	10 (2.7)	0 (0.0)
Female					
40-49	377	228 (60.5)	133 (35.3)	15 (4.0)	1 (0.3)
50-59	863	560 (64.9)	276 (32.0)	26 (3.0)	1 (0.1)
60-69	938	617 (65.8)	295 (31.5)	25 (2.7)	1 (0.1)
70-79	653	434 (66.5)	198 (30.3)	20 (3.1)	1 (0.2)
Both					
40-49	657	401 (61.0)	231 (35.2)	24 (3.7)	1 (0.2)
50-59	1358	872 (64.2)	437 (32.2)	48 (3.5)	1 (0.1)
60-69	1521	964 (63.4)	499 (32.8)	56 (3.7)	2 (0.1)
70-79	1021	665 (65.1)	325 (31.8)	30 (2.9)	1 (0.1)
Overall	4557	2902 (63.7)	1492 (32.7)	158 (3.5)	5 (0.1)

Table S9. Baseline characteristics of the 127 253 study participants in the prospective analyses\*

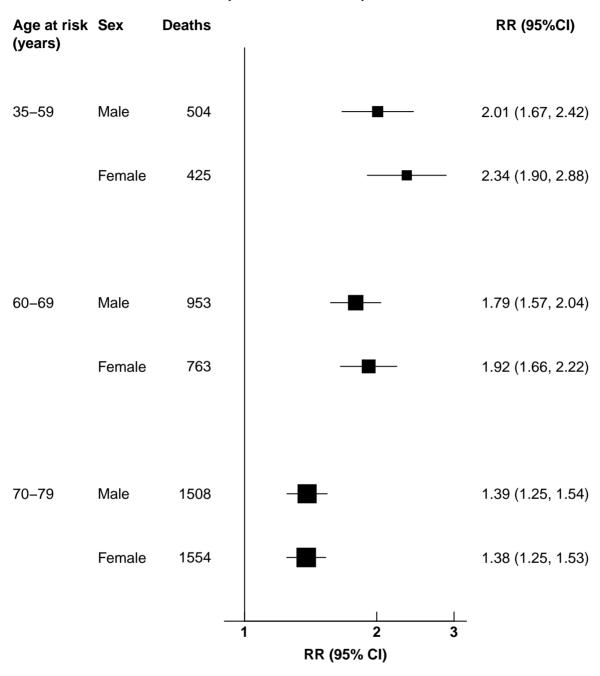
Table 35. Baseline Characteristics of the 127	Men Women All				-	
	(56 33	35)	(70 9	18)	(127 2	:53)
Age at entry (years), n (%)				<u> </u>	<u> </u>	
35-39	9156 (	(16)	12 144	(17)	21 300	(17)
40-49	16 316		21 002	-	37 318	
50-59	14 442 (		17 656	-	32 098	
60-69	10 016 (		12 392	-	22 408	
70-79	6405 (	(11)	7724	(11)	14 129	(11)
Age (years), mean (SD)		(12)		(12)		(12)
Blood pressure (mm Hg), mean (SD)						
Systolic	125 (	(14)	124	(16)	124	(15)
Diastolic	81 (		79	(10)		(10)
Area, n (%)						
Matanzas	25 067 (	(44)	30 719	(43)	55 786	(44)
Camagüey	22 705		28 624		51 329	. ,
Pinar del Río	4522 (	(8)	5441	(8)	9963	(8)
Ciudad de La Habana	2842 (	(5)	4578	(6)	7420	(6)
La Habana	1199 (	•	1556		2755	
Educational level, n (%)				. ,		. ,
Less than primary	2919 (	(5)	4899	(7)	7818	(6)
Primary	13 365	(24)	20 943	(30)	34 308	
Lower secondary	15 243 (		19 932	-	35 175	
High school/technical college	19 100 (	(34)	18 815	(27)	37 915	(30)
University	5708 (	(10)	6329	(9)	12 037	(9)
Ethnicity						
White	43 559 (	(77)	54 403	(77)	97 962	(77)
Black	8243 (	(15)	10 098	(14)	18 341	(14)
Mixed	4341 (	(8)	6175	(9)	10 516	(8)
Other	192 (	(<1)	242	(<1)	434	(<1)
Prior cardiovascular disease						
No	56 335 (	(100)	70 918	(100)	127 253	(100)
Yes	0 (	(0)	0	(0)	0	(0)
Season of baseline survey, n (%)†						
Spring	11 778 (	(21)	15 123	(21)	26 901	(21)
Summer	18 425 (	(33)	22 280	(31)	40 705	(32)
Autumn	11 380 (	(20)	14 991	(21)	26 371	(21)
Winter	14 752	(26)	18 524	(26)	33 276	
Ever smoked tobacco, n (%)	33 302 (	(59)	23 364	(33)	56 666	(45)
At least weekly alcohol consumption, n (%)	16 553 (		3266	(5)	19 819	
BMI (kg/m²), mean (SD)	24.1 (	(3.7)	24.4	(4.4)	24.3	(4.1)
	· · · · · · · · · · · · · · · · · · ·	. ,		• '		. ,

<sup>\*</sup>Excludes participants with missing information, those with implausible blood pressure values, or those without follow-up at age 35-79 year. In addition excludes those with prior history at baseline of angina, myocardial infarction or stroke.

<sup>†</sup>Spring indicates March to May; Summer, June to August; Autumn, September to November; Winter, December to February.

Figure S1. Age- and sex-specific relevance of hypertension to cardiovascular mortality

### Death rate ratios (RR) for uncontrolled hypertension vs not (5420 CVD deaths)



Death rate ratios (RRs) are calculated for participants with vs without uncontrolled hypertension.
RRs are adjusted for area, level of education, smoking, alcohol, body mass index and age (in 5–year bands) within each age group.
Exclusions as in Table 1 with further exclusion of those participants with a prior cardiovascular disease at baseline.
For each RR, the area of the square is inversely proportional to the variance of the log risk.

Table S10. Prevalence and control of hypertension at baseline using four different definitions of hypertension\*

Age at entry (years)	No. of participants	Standard definition		Alternative definition 1		Alternative definition 2		Alternative definition 3	
								-	
		Prevalence, %	Control, %	Prevalence, %	Control, %	Prevalence, %	Control, %	Prevalence, %	Control, %
Male									
35-39	9291	18.9	11.7	19.4	13.9	21.8	23.3	22.3	24.9
40-49	16 774	26.4	13.1	27.0	15.4	29.3	21.9	30.0	23.8
50-59	15 347	34.9	15.4	36.0	17.9	38.1	22.4	39.1	24.6
60-69	11 192	41.2	14.5	42.9	18.0	44.7	21.2	46.5	24.2
70-79	7560	42.5	14.5	45.2	19.6	45.9	20.9	48.6	25.3
All	60 164	32.0	14.2	33.2	17.3	35.2	21.9	36.4	24.5
Female									
35-39	12 301	14.1	19.6	14.8	23.4	17.6	36.0	18.3	38.4
40-49	21 651	24.7	21.0	25.8	24.1	29.2	33.0	30.2	35.3
50-59	19 014	40.6	21.8	42.1	24.5	46.2	31.1	47.6	33.3
60-69	13 920	49.4	20.5	50.9	23.0	55.0	28.7	56.6	30.7
70-79	9061	50.2	18.1	52.6	21.8	55.4	25.7	57.8	28.9
All	75 947	34.7	20.6	36.1	23.5	39.6	30.4	41.0	32.7
Both									
35-39	21 592	16.2	15.5	16.8	18.6	19.5	29.7	20.1	31.8
40-49	38 425	25.5	17.4	26.3	20.1	29.2	28.1	30.1	30.2
50-59	34 361	38.1	19.2	39.4	21.9	42.6	27.7	43.9	29.9
60-69	25 112	45.8	18.1	47.4	21.0	50.5	25.8	52.1	28.1
70-79	16 621	46.8	16.6	49.3	20.9	51.2	23.8	53.7	27.4
Overall	136 111	33.5	17.9	34.8	20.9	37.6	26.9	38.9	29.3

Each percentage is that of the specified subgroup of the participants in each row.

Alternative definition 1: Measured SBP >= 140 mm Hg or DBP >= 90 mm Hg or treated with any of ace inhibitors, beta-blockers, ca antagonist, diuretics.

Alternative definition 2: Measured SBP  $\geq$  140 mm Hg or DBP  $\geq$  90 mm Hg or diagnosed.

Alternative definition 3: Measured SBP >= 140 mm Hg or DBP >= 90 mm Hg or (diagnosed AND/OR treated with any of ace inhibitors, beta-blockers, ca antagonist, diuretics).

<sup>\*</sup> Standard definition: Measured SBP >= 140 mm Hg or DBP >= 90 mm Hg or (diagnosed AND treated with any of ace inhibitors, beta-blockers, ca antagonist, diuretics).