

Appendix Table 1: Underlying causes of death at age 35-79: 65,298 cases and 13,527 controls, Tianjin, China, 2016-17

<i>Underlying cause(s) of death; and corresponding ICD-10 code(s)</i>	Deaths, age 35-79	
	Number	%
Cases*		
Tuberculosis; A15-19, B90	148	0.2
Chronic obstructive pulmonary disease; I26-28, J40-47	2784	4.3
Other respiratory diseases; J00-22, J30-39, J60-98	1553	2.4
Cerebrovascular diseases; I60-69	20827	31.9
Ischemic heart disease; I20-25, I70-79	17290	26.5
Other cardiovascular disease; I10-15, I30-51, I80-89, I95-99	1861	2.9
Cancer of the lung: C33-34	10382	15.9
Ca. mouth, pharynx, larynx, esophagus; C00-15, C30-32	1446	2.2
Ca. stomach, liver or pancreas; C16, C22-25	7244	11.1
Ca. cervix or urinary tract, myeloid leukemia; C51-3, C55, C64-8, C92	1477	2.3
Ca. endometrium, Parkinsonism, ulcerative colitis; G20, K51, C54	286	0.4
Total cases	65298	100.0
Controls*		
Diabetes and endocrine; D55-63, D65-89, E03 -34, E65-90	3512	26.0
Infectious and parasitic diseases; A00-14, A20-B19, B25-89, B91-99	194	1.4
Other specified cancers; C17-21, C26, C37-40, C42-45, C47-50, C56-63, C69-75, C81-91, C93-96	6848	50.6
Diseases of the nervous system; G00-99, excluding G20	899	6.7
Digestive diseases; K23, K35-50, K52, K69, K71-73, K75, K77-84, K86-93	394	2.9
Genitourinary diseases; N00-99	857	6.3
Nutritional deficiencies; D50-53, D64, E00-02, E40-46, E50-64	59	0.4
Musculoskeletal diseases; M00-99	266	2.0
Skin infections and disorders; L00-98	22	0.2
Benign neoplasms; D00-48	136	1.0
Miscellaneous and minor conditions; O00-99, P00-96, U00-52	250	1.9
Acute rheumatic fever or chronic rheumatic heart disease; I00-09	0	0
Congenital anomalies; Q00-09	84	0.6
Oral diseases; K00-14	5	0.0
Diseases of the sense organs; H00-62, H68-95	1	0.0
Total controls	13527	100.0

Causes in *italic* are included in the non-*italic* categories preceding them

* Definitions of cases and of controls are as in Sitas F et al, *Lancet* 2013;382: 685-93.

Appendix Table 2. Demographic characteristics (%) of cases and controls[†] in all deaths (aged 35-79 years), Tianjin, China, 2016-2017

	Cases (65298)	Controls (13527)
Age at death, years		
35-59	20.4	28.1
60-69	31.7	33.3
70-79	47.9	38.6
Men	62.9	49.7
Education		
Junior high school and below	78.7	71.3
Secondary, High School, Technical School	15.5	20.5
College and above	5.8	8.1
Married status		
Never	2.6	3.1
Windowed	17.6	15.7
Divorced	3.2	3.9
Married or living as married	76.4	77.3
Do not know	0.2	0.1
Quitting status		
Current smokers	30.2	20.5
Quitters	13.1	11.2
Never smokers	56.6	68.3
Duration of quitting, years		
1-5	48.5	49.7
6-9	9.5	9.0
≥10	42.0	41.3
Age at quitting, years		
25-44	6.3	8.4
45-64	56.7	60.6
65+	36.0	31.0

[†]Deaths from diseases as in Sitas et al 2013.

Appendix Table 3. Smoking history and mortality from all deaths of interest and 4 smoking-related diseases—mortality rate ratio (RR, 95% CI) comparing current or ex-smokers vs. never smokers, 2016 to 2017, Tianjin, China

Deaths from selected diseases vs. deaths from control diseases, at ages 35-59, 60-69 and 70-79 (both sexes)

	Never smokers	Ex-smokers	Current smokers
All deaths of interest			
Age 35-59	1.00 (6631)	2.13 (6528) 1.97-2.30	2.35 (5393) 2.16-2.56
Age 60-69	1.00 (11139)	1.80 (9361) 1.68-1.93	1.96 (6644) 1.81-2.12
Age 70-79	1.00 (18790)	1.41 (12129) 1.33-1.51	1.54 (7496) 1.42-1.66
Lung cancer			
Age 35-59	1.00 (840)	2.82 (1134) 2.51-3.16	2.89 (868) 2.55-3.28
Age 60-69	1.00 (1457)	3.41 (2350) 3.11-3.74	3.80 (1687) 3.43-4.21
Age 70-79	1.00 (1712)	3.55 1(2804) 3.26-3.86	4.15 (1853) 3.76-4.58
Other smoking-related cancer			
Age 35-59	1.00 (1263)	2.09 (1240) 1.88-2.32	2.28 (1001) 2.03-2.55
Age 60-69	1.00 (1635)	1.96 (1522) 1.78-2.15	2.18 (1097) 1.96-2.43
Age 70-79	1.00 (1796)	1.38 (1135) 1.26-1.52	1.59 (736) 1.42-1.78
Cardiovascular disease			
Age 35-59	1.00 (1926)	2.25 (1956) 2.05-2.47	2.66 (1738) 2.40-2.94
Age 60-69	1.00 (3185)	1.57 (2331) 1.45-1.71	1.78 (1719) 1.62-1.96
Age 70-79	1.00 (6300)	1.11 (3184) 1.03-1.19	1.24 (2021) 1.13-1.35
COPD			
Age 35-59	1.00 (177)	1.21 (105) 0.94-1.57	1.24 (81) 0.94-1.64
Age 60-69	1.00 (368)	1.72 (300) 2.45-2.03	1.61 (184) 1.32-1.95
Age 70-79	1.00 (972)	1.84 (839) 1.64-2.05	1.84 (473) 1.60-2.09

Appendix Table 4. Smoking history and mortality from 4 smoking-related diseases—mortality rate ratios (RR) comparing ever smokers vs. never smokers, 2016 to 2017, Tianjin, China

Deaths from selected diseases vs. deaths from control diseases, at ages 35-59, 60-69 and 70-79 years and sex

Cause of death	Age group	Sex	Case	Control	RR (95% CI)
			No of subjects ever/ never smoked	No of subjects ever/ never smoked	
Lung cancer	Age 35-59	Men	1063/353	1064/812	2.11 (1.80-2.46)
		Women	71/487	124/1767	1.97 (1.43-2.70)
		Both	1134/840	1188/2579	2.82 (2.51-3.16)
	Age 60-69	Men	1990/585	1207/993	2.81 (2.47-3.18)
		Women	360/872	225/2072	3.60 (2.98-4.36)
		Both	2350/1457	1432/3020	3.41 (3.11-3.74)
	Age 70-79	Men	1815/716	1169/1383	3.05 (2.68-3.39)
		Women	989/996	451/2142	4.40 (3.84-5.05)
		Both	2804/1712	1620/3525	3.55 (3.26-3.86)
Other smoking-related cancer	Age 35-59	Men	1188/695	1064/812	1.24 (1.08-1.41)
		Women	52/568	124/1767	1.31 (0.93-1.85)
		Both	1240/1263	1188/2579	2.09 (1.88-2.32)
	Age 60-69	Men	1406/876	1207/993	1.31 (1.16-1.47)
		Women	116/759	225/2072	1.38 (1.08-1.76)
		Both	1522/1635	1432/3020	1.96 (1.78-2.15)
	Age 70-79	Men	893/911	1169/1383	1.17 (1.03-1.32)
		Women	242/885	451/2142	1.30 (1.09-1.56)
		Both	1135/1796	1620/3525	1.38 (1.26-1.52)
Cardiovascular disease	Age 35-59	Men	1872/1166	1064/812	1.26 (1.12-1.42)
		Women	84/760	124/1767	1.43 (1.06-1.92)
		Both	1956/1926	1188/2579	2.25 (2.05-2.47)
	Age 60-69	Men	2094/1558	1207/993	1.12 (1.01-1.25)
		Women	237/1627	225/2027	1.18 (0.97-1.44)
		Both	2331/3185	1432/3020	1.57 (1.45-1.71)
	Age 70-79	Men	2204/2676	1169/1383	0.99 (0.90-1.09)
		Women	980/3624	451/2142	1.18 (1.04-1.34)
		Both	3184/6300	1620/3525	1.11 (1.03-1.19)
COPD	Age 35-59	Men	93/76	1064/812	0.91 (0.66-1.26)
		Women	12/101	124/1767	1.55 (0.81-2.93)
		Both	105/177	1188/2579	1.22 (0.94-1.57)

All interesting diseases	Age 60-69	Men	251/171	1207/993	1.22 (0.98-1.51)
		Women	49/197	225/2027	1.93 (1.36-2.74)
		Both	300/368	1432/3020	1.72 (1.45-2.03)
	Age 70-79	Men	508/383	1169/1383	1.56 (1.33-1.82)
		Women	331/589	451/2142	2.26 (1.90-2.69)
		Both	839/972	1620/3525	1.84 (1.64-2.05)
	Age 35-59	Men	6199/3517	1064/812	1.33 (1.20-1.47)
		Women	329/3114	124/1767	1.40 (1.12-1.74)
		Both	6525/6631	1188/2579	2.12 (1.97-2.30)
	Age 60-69	Men	8297/5405	1207/993	1.27 (1.16-1.40)
		Women	1064/5734	225/2027	1.53 (1.31-1.79)
		Both	9361/11139	1432/3020	1.80 (1.68-1.93)
	Age 70-79	Men	8663/8660	1169/1383	1.22 (1.12-1.33)
		Women	3466/10330	451/2142	1.48 (1.32-1.65)
		Both	12129/18790	1620/3525	1.41 (1.33-1.51)
