

Supplementary Table 1. Carbon monoxide levels according to different types of tobacco products used on site just before the interview.

	Total	CC	HTP	EC	P-value
Exhaled carbon monoxide levels (ppm)					
Type of on-site tobacco use (n) ^a	675	525	108	42	
Median (25th, 75th centiles)	14.0 (6.0, 22.0)	17.0 (11.0, 25.0) ^a	4.0 (2.5, 5.0) ^b	3.0 (2.0, 4.0) ^b	<0.001

CC: conventional cigarette; HTP: heated tobacco product; EC: electronic cigarette.

P-value was based on Kruskal-Wallis test; Medians denoted by a letter (a, b) in common are not significantly different, while medians not denoted by a letter in common are significantly different by the Dunn's test at the 5% level of significance.

^a The type of tobacco products used on site at the hotspots were recorded since a few months into the survey.

Supplementary Table 2. Carbon monoxide and saliva cotinine levels in tobacco users who did not use products other than CCs, HTPs or ECs in the past 30 days.

	Total	CC only	HTP only	EC only	CC+HTP	CC+EC	HTP+EC	Triple	P-value
Exhaled carbon monoxide levels (ppm)									
Sample size (n)	639	419	64	13	82	35	6	20	
Median (25th, 75th centiles)	14.0 (6.0, 23.0)	18.0 (12.0, 26.0) ^a	3.0 (2.0, 5.0) ^b	2.0 (1.5, 3.0) ^{bc}	5.5 (3.0, 15.0) ^{cd}	12.0 (7.0, 20.0) ^d	4.5 (2.5, 5.8) ^{bcd}	11.0 (3.0, 22.8) ^{ad}	<0.001
Saliva cotinine level									
Sample size (n)	537	384	39	7	60	33	4	10	
Median (25th, 75th centiles)	3.0 (2.0, 4.0)	3.0 (3.0, 4.0)	3.0 (2.0, 4.0)	4.0 (3.0, 4.0)	4.0 (2.0, 4.0)	3.0 (2.0, 4.0)	4.0 (1.8, 4.8)	3.0 (2.0, 4.0)	0.90

CC: conventional cigarette; HTP: heated tobacco product; EC: electronic cigarette.

P-value was based on Kruskal-Wallis test; Medians denoted by a letter (a, b) in common are not significantly different, while medians not denoted by a letter in common are significantly different by the Dunn's test at the 5% level of significance.

Supplementary Table 3. Characteristics of tobacco users across three analytic samples.

	Total n (%)	Samples with CO test n (%)	Samples with saliva cotinine test n (%)
N	3294 (100.0)	780 (23.7)	620 (18.8)
Sex			
Male	2415 (73.3)	551 (70.6)	415 (66.9)
Female	879 (26.7)	229 (29.4)	205 (33.1)
Age, years			
15-29	695 (21.1)	229 (29.4)	167 (26.9)
30-39	952 (28.9)	298 (38.2)	204 (32.9)
40-49	810 (24.6)	168 (21.5)	153 (24.7)
50 or more	837 (25.4)	85 (10.9)	96 (15.5)
Education			
Secondary or below	1952 (59.3)	322 (41.3)	306 (49.4)
Tertiary	1342 (40.7)	458 (58.7)	314 (50.6)
Marital status			
Single	1260 (38.3)	414 (53.1)	290 (46.8)
Married	1793 (54.4)	330 (42.3)	284 (45.8)
Divorced/widowed	241 (7.3)	36 (4.6)	46 (7.4)
Household income (HK\$)			
<20,000	580 (18.6)	72 (9.6)	93 (15.5)
20,000-39,999	1190 (38.1)	257 (34.3)	211 (35.1)
≥40,000	1350 (43.3)	421 (56.1)	297 (49.4)

CO: carbon monoxide; US\$1=HK\$7.8.