

Supplementary Table S1. Number of TRO within 500 meters around schools in 10 districts of Beijing, 2024

District	<i>n</i>	<i>Mean</i>	<i>Sd</i>	<i>P50</i>	<i>Min</i>	<i>Max</i>
Straight-line distance						
Xicheng	6	12.00	5.18	10.5	6	20
Chaoyang	6	13.17	4.45	13.0	7	19
Fengtai	6	10.50	3.15	11.0	6	15
Shijingshan	6	12.00	8.07	12.5	2	23
Haidian	6	6.83	3.97	6.0	3	14
Fangshan	6	10.83	7.31	9.0	2	20
Tongzhou	6	9.67	3.98	9.5	4	15
Changping	6	7.83	10.98	4.5	1	30
Daxing	6	14.17	16.12	12.0	0	38
Pinggu	6	23.50	23.82	17.5	3	70
Total	60	12.05	10.83	10.0	0	70
Walking distance						
Xicheng	6	5.17	1.72	5.5	2	7
Chaoyang	6	7.83	2.99	7.0	4	13
Fengtai	6	5.50	2.66	6.0	1	8
Shijingshan	6	7.00	5.48	6.0	0	16
Haidian	6	4.50	5.97	3.0	0	13
Fangshan	6	7.00	4.60	7.5	1	12
Tongzhou	6	6.00	3.16	6.5	0	9
Changping	6	5.00	7.54	3.0	0	20
Daxing	6	7.50	8.29	7.0	0	17
Pinggu	6	13.50	15.90	10.0	1	43
Total	60	6.90	6.86	6.0	0	43

Supplementary Table S2. Complex sampling logistic regression analysis of the number of TRO and ever smoking among secondary school students in Beijing under straight-line distance, 2024

Characteristic	Model 1 (≤ 100 m) <i>OR</i> (95% <i>CI</i>)	Model 2 (≤ 200 m) <i>OR</i> (95% <i>CI</i>)	Model 3 (≤ 500 m) <i>OR</i> (95% <i>CI</i>)
Sex			
Female	ref	ref	ref
Male	1.97 (1.65-2.34)*	1.97 (1.66-2.34)*	2.00 (1.68-2.38)*
School type			
Junior high school	ref	ref	ref
Senior high school	1.04 (0.85-1.28)	0.89 (0.72-1.09)	0.86 (0.70-1.07)
Vocational senior high school	1.67 (1.34-2.08)*	1.50 (1.21-1.86)*	1.59 (1.29-1.97)*
Parental smoking			
No	ref	ref	ref
Yes	1.41 (1.19-1.67)*	1.39 (1.17-1.64)*	1.39 (1.17-1.64)*
Peer smoking			
No	ref	ref	ref
Yes	5.17 (4.32-6.18)*	5.12 (4.28-6.13)*	5.12 (4.28-6.13)*
Notice smoking in school			
No	ref	ref	ref
Yes	1.55 (1.30-1.84)*	1.54 (1.30-1.83)*	1.54 (1.30-1.83)*
Exposure to tobacco advertising or promotion at TRO			
No	ref	ref	ref
Yes	1.46 (1.16-1.85)*	1.45 (1.14-1.83)*	1.46 (1.16-1.85)*
Quitting smoking is difficult			
Yes	ref	ref	ref
No	1.56 (1.30-1.87)*	1.57 (1.31-1.88)*	1.57 (1.31-1.88)*
Secondhand smoke is harmful			
Yes	ref	ref	ref
No	3.16 (2.33-4.27)*	3.12 (2.30-4.23)*	3.13 (2.31-4.24)*
Received tobacco hazard education			
Yes	ref	ref	ref
No	1.04 (0.88-1.22)	1.06 (0.90-1.26)	1.07 (0.91-1.27)
The number of TRO	0.92 (0.83-1.03)	1.03 (1.01-1.05)*	1.01 (1.01-1.02)*

Note. * $P < 0.05$.

Supplementary Table S3. Complex sampling logistic regression analysis of the number of TRO and ever smoking among secondary school students in Beijing under walking distance, 2024

Characteristic	Model 4 (≤ 100 m) <i>OR</i> (95% <i>CI</i>)	Model 5 (≤ 200 m) <i>OR</i> (95% <i>CI</i>)	Model 6 (≤ 500 m) <i>OR</i> (95% <i>CI</i>)
Sex			
Female	ref	ref	ref
Male	1.97 (1.66-2.35)*	1.97 (1.66-2.34)*	1.99 (1.68-2.37)*
School type			
Junior high school	ref	ref	ref
Senior high school	0.99 (0.80-1.21)	0.92 (0.75-1.13)	0.90 (0.73-1.11)
Vocational senior high school	1.59 (1.28-1.98)*	1.51 (1.21-1.87)*	1.57 (1.27-1.94)*
Parental smoking			
No	ref	ref	ref
Yes	1.40 (1.19-1.66)*	1.39 (1.18-1.65)*	1.39 (1.18-1.65)*
Peer smoking			
No	ref	ref	ref
Yes	5.17 (4.32-6.18)*	5.15 (4.31-6.16)*	5.15 (4.30-6.16)*
Notice smoking in school			
No	ref	ref	ref
Yes	1.56 (1.31-1.85)*	1.56 (1.31-1.85)*	1.55 (1.30-1.84)*
Exposure to tobacco advertising or promotion at TRO			
No	ref	ref	ref
Yes	1.46 (1.15-1.84)*	1.44 (1.14-1.82)*	1.46 (1.15-1.84)*
Quitting smoking is difficult			
Yes	ref	ref	ref
No	1.56 (1.31-1.88)*	1.57 (1.31-1.88)*	1.57 (1.31-1.88)*
Secondhand smoke is harmful			
Yes	ref	ref	ref
No	3.17 (2.34-4.29)*	3.14 (2.32-4.25)*	3.14 (2.32-4.25)*
Received tobacco hazard education			
Yes	ref	ref	ref
No	1.04 (0.88-1.23)	1.05 (0.89-1.25)	1.07 (0.90-1.26)
The number of TRO	1.01 (0.81-1.26)	1.04 (1.01-1.08)*	1.02 (1.01-1.03)*

Note. *, $P < 0.05$.

Supplementary Table S4. Complex sampling logistic regression analysis of the number of TRO and current smoking among secondary school students in Beijing under straight-line distance, 2024

Characteristic	Model 1 (≤ 100 m) <i>OR</i> (95% <i>CI</i>)	Model 2 (≤ 200 m) <i>OR</i> (95% <i>CI</i>)	Model 3 (≤ 500 m) <i>OR</i> (95% <i>CI</i>)
Sex			
Female	ref	ref	ref
Male	2.08 (1.51-2.87)*	2.08 (1.50-2.87)*	2.18 (1.57-3.01)*
School type			
Junior high school	ref	ref	ref
Senior high school	1.06 (0.72-1.56)	0.72 (0.48-1.08)	0.70 (0.46-1.06)
Vocational senior high school	2.19 (1.50-3.18)*	1.85 (1.28-2.67)*	2.08 (1.45-2.99)*
Parental smoking			
No	ref	ref	ref
Yes	1.61 (1.18-2.19)*	1.54 (1.13-2.10)*	1.54 (1.13-2.11)*
Peer smoking			
No	ref	ref	ref
Yes	17.40 (11.11-27.27)*	17.23 (10.98-27.04)*	17.25 (10.99-27.06)*
Notice smoking in school			
No	ref	ref	ref
Yes	1.66 (1.23-2.24)*	1.62 (1.20-2.19)*	1.62 (1.20-2.19)*
Exposure to tobacco advertising or promotion at TRO			
No	ref	ref	ref
Yes	2.36 (1.68-3.30)*	2.33 (1.65-3.27)*	2.38 (1.70-3.35)*
Quitting smoking is difficult			
Yes	ref	ref	ref
No	1.19 (0.87-1.63)	1.21 (0.88-1.66)	1.21 (0.88-1.66)
Secondhand smoke is harmful			
Yes	ref	ref	ref
No	2.90 (1.83-4.60)*	2.78 (1.75-4.44)*	2.80 (1.76-4.45)*
Received tobacco hazard education			
Yes	ref	ref	ref
No	0.84 (0.63-1.12)	0.89 (0.66-1.19)	0.90 (0.67-1.20)
The number of TRO	0.93 (0.77-1.11)	1.06 (1.04-1.08)*	1.02 (1.01-1.03)*

Note. * $P < 0.05$.

Supplementary Table S5. Complex sampling logistic regression analysis of the number of TRO and current smoking among secondary school students in Beijing under walking distance, 2024

Characteristic	Model 1 (≤ 100 m) <i>OR</i> (95% <i>CI</i>)	Model 2 (≤ 200 m) <i>OR</i> (95% <i>CI</i>)	Model 3 (≤ 500 m) <i>OR</i> (95% <i>CI</i>)
Sex			
Female	ref	ref	ref
Male	2.08 (1.51-2.87)*	2.07 (1.50-2.86)*	2.16 (1.56-2.98)*
School type			
Junior high school	ref	ref	ref
Senior high school	1.04 (0.70-1.53)	0.83 (0.56-1.23)	0.76 (0.51-1.14)
Vocational senior high school	2.14 (1.47-3.09)*	1.87 (1.29-2.71)*	2.02 (1.41-2.91)*
Parental smoking			
No	ref	ref	ref
Yes	1.60 (1.18-2.18)*	1.56 (1.14-2.12)*	1.56 (1.14-2.13)*
Peer smoking			
No	ref	ref	ref
Yes	17.44 (11.13-27.32)*	17.41 (11.10-27.29)*	17.35 (11.06-27.22)*
Notice smoking in school			
No	ref	ref	ref
Yes	1.67 (1.24-2.25)*	1.68 (1.25-2.27)*	1.64 (1.22-2.22)*
Exposure to tobacco advertising or promotion at TRO			
No	ref	ref	ref
Yes	2.35 (1.68-3.30)*	2.30 (1.64-3.23)*	2.35 (1.67-3.30)*
Quitting smoking is difficult			
Yes	ref	ref	ref
No	1.19 (0.87-1.63)	1.21 (0.89-1.66)	1.21 (0.89-1.66)
Secondhand smoke is harmful			
Yes	ref	ref	ref
No	2.91 (1.84-4.61)*	2.84 (1.79-4.51)*	2.80 (1.76-4.45)*
Received tobacco hazard education			
Yes	ref	ref	ref
No	0.84 (0.63-1.12)	0.87 (0.65-1.16)	0.89 (0.67-1.20)
The number of TRO	0.92 (0.63-1.33)	1.09 (1.04-1.15)*	1.03 (1.02-1.05)*

Note. *, $P < 0.05$.