

## RATIONALE

### INTRODUCTION

Turkey enacted smoke-free legislation in 2008 that was extended to hospitality venues in 2009. Current law prohibits indoor smoking in all workplaces, including bars, restaurants, and nightclubs. Assessing the level of compliance with the smoke-free legislation is key to reduce secondhand smoke (SHS) exposure.

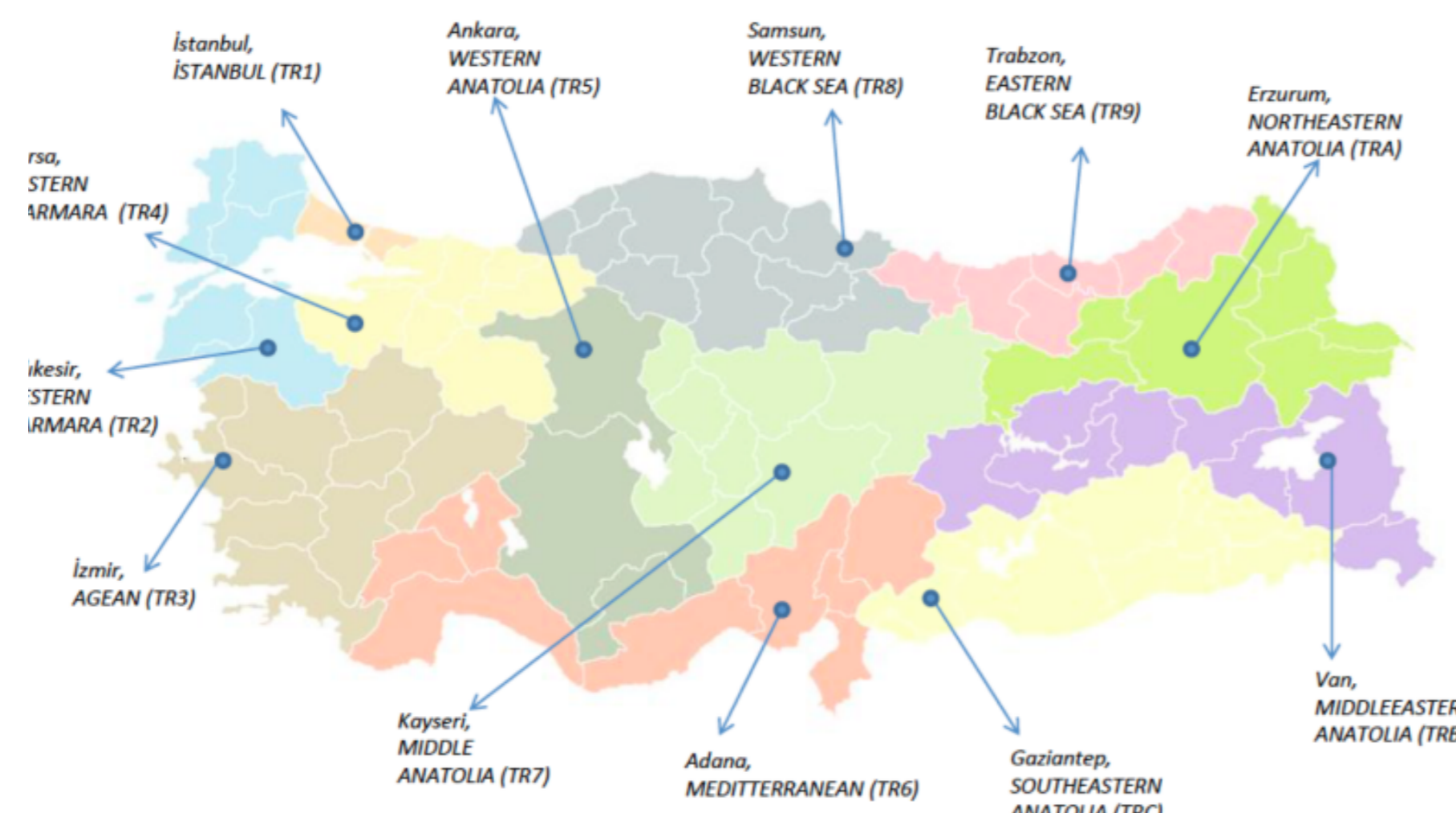
### OBJECTIVE

To identify sociodemographic and other factors that influence support and enforcement of the smoke-free legislation, including smoking status and quitting behavior

## METHODS

### STUDY POPULATION

- Secondhand Smoke Evaluation of Legislation in Turkey (SHELT) study, Phase 2 was carried out between May and September 2014
- 430 participants: 300 venue employees, 100 venue owners, 30 school directors
- Interviews were conducted across 7 cities: Adana, Ankara, Gaziantep, Istanbul, Izmir, Trabzon, Van



### DATA COLLECTION AND ANALYSIS

Sociodemographic information; smoking behavior; knowledge of health effects of smoking; knowledge and opinions about the smoke-free legislation in Turkey; enforcement behavior

#### Descriptive analysis

- Demographic variables stratified by smoking status
- Participant's knowledge, support, enforcement of the ban stratified by smoking status

#### Logistic Regression Models

- Odds ratio of support and enforcement of the ban by sociodemographic characteristics, knowledge of health effects of smoking, smoking behavior

## RESULTS

### Participant characteristics stratified by smoking category

**Table 1:** Current smokers were more likely to be male than never smokers. Never smokers had the highest percentage of educational attainment compared to former and current smokers.

Characteristics	Category	N	Total (N=430)	Never (N=105)	Former (N=44)	Current (N=281)
Age	Mean (SD)	428	31.8 (11.5)	32.1 (12.3)	36.9 (12.4)	30.8 (10.9)
Gender	Male	387	90.2	81.9	90.9	93.2
	Female	42	9.8	18.1	9.1	6.8
Education Level	Primary School or less	98	22.9	16.4	29.5	24.2
	Secondary School	73	17.0	15.4	9.1	18.9
	High School	162	37.8	35.6	34.1	39.1
	University	95	22.1	31.7	27.3	17.8
Occupation	Venue Employee	300	68.8	66.7	52.3	73.7
	Venue Owners	100	23.2	20.0	29.5	23.5
	School Directors	30	7.0	13.3	18.2	2.8
Cigarettes Smoked daily	Mean (SD)	277	-	-	-	19.3 (11)

### Knowledge of the legislation and health effects of smoking

- 99% of hospitality owners and employees and 100% of school directors have an excellent knowledge on the extent of the Turkish smoke-free legislation
- Nearly all indicated that smoking is dangerous to non-smokers' health (97.3%)
- Fewer participants indicated smoking causes cancer in non-smokers (77.2%) with current smokers indicating the lowest (73.3%)

### Support for the smoking legislation

**Table 2:** Support for the legislation was more than 50% but varied by smoking status with current smokers supporting the lowest (62.9%). Compared to venue employees, school directors were more likely to support the ban after adjustment.

Characteristic	Category	N	Unadjusted	Adjusted
Overall		430		
Age		425	1.00 (0.98 - 1.02)	0.97 (0.95 - 1.00)
Gender	Male	384	1.00 (ref)	1.00 (ref)
	Female	42	0.73 (0.37 - 1.45)	0.53 (0.22 - 1.23)
Occupation	Venue employee	298	1.00 (ref)	1.00 (ref)
	Venue owner	99	0.85 (0.52 - 1.39)	0.90 (0.48 - 1.68)
	School director	30	2.51 (0.85 - 7.41)	4.09 (1.01 - 16.6)
Education	Primary School or less	96	1.00 (ref)	1.00 (ref)
	Secondary school	73	0.54 (0.27 - 1.07)	0.40 (0.18 - 0.87)
	High School	162	0.83 (0.45 - 1.51)	0.52 (0.26 - 1.07)
	University	94	0.60 (0.31 - 1.14)	0.21 (0.09 - 0.51)
Smoke Status	Never	104	1.00 (ref)	1.00 (ref)
	Former	44	0.44 (0.15 - 1.30)	0.26 (0.08 - 0.86)
	Current	279	0.14 (0.07 - 0.30)	0.09 (0.04 - 0.22)
Indicated causes cancer in non-smokers	No	88	1.00 (ref)	1.00 (ref)
	Yes	329	2.15 (1.31 - 3.53)	1.62 (0.91 - 2.87)
Indicated dangerous to non-smoker's health	No	11	1.00 (ref)	1.00 (ref)
	Yes	415	3.25 (0.97 - 10.8)	2.32 (0.59 - 9.16)
Enforced law when violation observed	No	336	1.00 (ref)	1.00 (ref)
	Yes	94	0.93 (0.56 - 1.55)	0.97 (0.54 - 1.76)

### Enforcement of the smoking legislation

**Table 3:** 94 participants (22%) reported that they enforce the legislation. Compared to never smokers, former smokers were more likely to enforce the ban (odds ratio 2.34, 95%CI 1.05, 5.20). Compared to venue employees, school directors were more likely to enforce the ban before and after similar adjustment (both odds ratios above 2.7). University-educated participants were more likely to enforce the ban

Characteristic	Category	N	Unadjusted	Adjusted
Overall		430		
Age		428	0.99 (0.97 - 1.01)	0.98 (0.95 - 1.01)
Gender	Male	387	1.00 (ref)	1.00 (ref)
	Female	42	0.69 (0.30 - 1.61)	0.52 (0.21 - 1.32)
Occupation	Venue employee	300	1.00 (ref)	1.00 (ref)
	Venue owner	100	1.13 (0.65 - 1.99)	1.38 (0.6 - 2.79)
	School director	30	4.87 (2.24 - 10.6)	2.71 (0.85 - 8.67)
Education	Primary School or less	98	1.00 (ref)	1.00 (ref)
	Secondary school	73	1.40 (0.55 - 3.56)	1.51 (0.56 - 4.09)
	High School	162	2.08 (0.97 - 4.46)	1.91 (0.81 - 4.52)
	University	95	6.97 (3.23 - 15.0)	6.27 (2.43 - 16.2)
Smoke Status	Never	105	1.00 (ref)	1.00 (ref)
	Former	44	2.34 (1.05 - 5.20)	2.73 (1.09 - 6.82)
	Current	281	1.22 (0.69 - 2.18)	1.71 (0.87 - 3.40)
Indicated causes cancer in non-smokers	No	88	1.00 (ref)	1.00 (ref)
	Yes	332	1.20 (0.66 - 2.16)	1.02 (0.53 - 1.99)
Indicated dangerous to non-smoker's health	No	11	1.00 (ref)	1.00 (ref)
	Yes	418	1.25 (0.27 - 5.90)	1.01 (0.18 - 5.70)
Support for the ban	No	118	1.00 (ref)	1.00 (ref)
	Yes	309	0.93 (0.56 - 1.55)	0.97 (0.54 - 1.76)

### Current smokers: Smoking Behavior

- Those who smoke less since the implementation of the ban were more likely to support and enforce the ban before and after adjustment
- Those who also smoke relatively fewer cigarettes per day were also more likely to support the ban before and after adjustment (both odds ratios below 0.96).

**Table 4a:** Smoking behavior by support for the legislation

Characteristic	Category	N	Unadjusted	Adjusted
Quit attempt	No	259	1.00 (ref)	1.00 (ref)
	Yes	9	2.17 (0.44 - 10.6)	2.46 (0.36 - 16.6)
Smoke Less	No	179	1.00 (ref)	1.00 (ref)
	Yes	90	5.13 (2.7 - 9.75)	4.23 (2.18 - 8.2)
Cigarettes per day		275	0.94 (0.92 - 0.97)	0.95 (0.92 - 0.97)

**Table 4b:** Smoking behavior by enforcement of the legislation

Characteristic	Category	N	Unadjusted	Adjusted
Quit attempt	No	261	1.00 (ref)	1.00 (ref)
	Yes	9	3.14 (0.81 - 12.1)	2.64 (0.65 - 10.7)
Smoke Less	No	181	1.00 (ref)	1.00 (ref)
	Yes	90	2.15 (1.19 - 3.92)	2.03 (1.09 - 3.80)
Cigarettes/day		277	0.99 (0.96 - 1.01)	0.99 (0.96 - 1.02)

## CONCLUSIONS

- While overall support towards the ban is high, additional efforts are needed to increase knowledge and support among subpopulations
  - Subpopulations: older aged individuals, women, individuals working in hospitality venues, and current smokers
- Enforcement of the law is carried out more often by higher educated individuals and former smokers
- Educational interventions are needed to improve the implementation of the smoke-free law and reduce unwanted secondhand smoke exposure