

RATIONALE

INTRODUCTION

In 2008, Turkey passed its smoke-free law prohibiting smoking in public places. However, this law does not extend to motor vehicles. This poses significant health risks to secondhand smoke exposure (SHS)

OBJECTIVE

To identify taxi drivers' attitudes and behaviors in order to assess tobacco consumption and SHS in taxi cabs

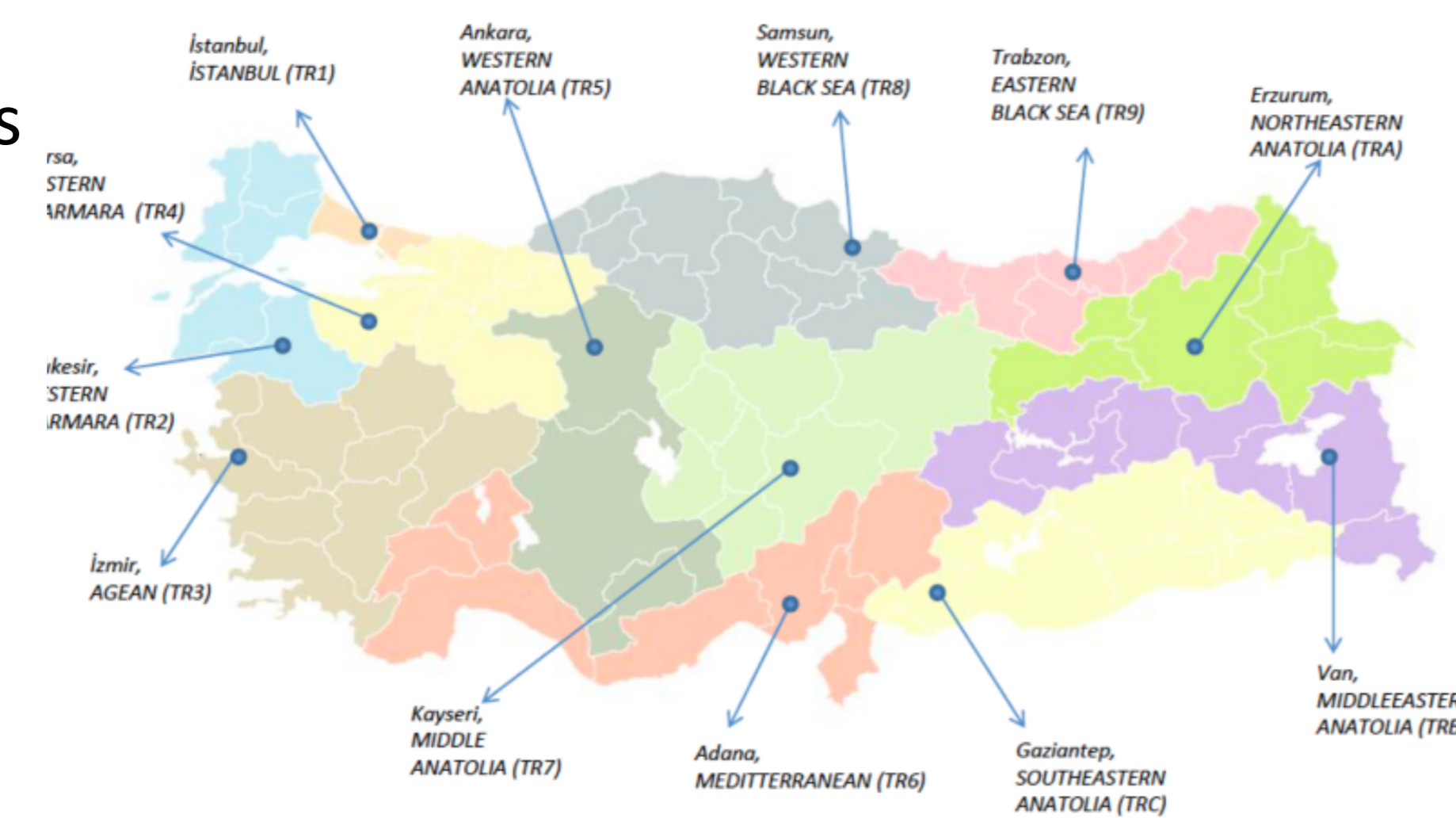
METHODS

STUDY POPULATION

This cross-sectional observational study, part of Secondhand Smoke Evaluation in Turkey (SHELT) was carried out from December 2012 to July 2013

356 taxi commercial vehicles were selected
Interviews were conducted across 12 cities in Turkey:

Istanbul, Ankara, Izmir, Adana, Balikesir, Bursa, Erzurum, Gaziantep, Kayseri, Samsun, Trabzon, Van



DATA COLLECTION

- Fieldworkers observed smoking exposure in taxicabs: presence of cigarette butts, ashtrays, no smoking signs or penalty sign, cigarette packs; smell of tobacco smoke,
- Taxicab drivers were interviewed on their smoking status and smoking policy in vehicle

DATA ANALYSIS

- Descriptive analysis stratified by smokers to non-smokers (never and former smokers)
- Two-sample t-test with equal variances to compare differences between smokers and non-smokers

RESULTS

Taxi Driver characteristics and observations stratified by smoking status

Among 356 taxi drivers observed, 65% identified themselves as smokers

- The mean age of taxi drivers observed was 43 years old
- Taxi drivers who smoked were younger than those who did not

Table 1: Taxi Driver characteristics stratified by smoking status^a

| | Overall (n = 356) | Smoker (n = 232) | Non-Smoker ^b (n = 124) | p value |
|--|-------------------|------------------|-----------------------------------|---------|
| Survey Questions | | | | |
| Age, mean (SD) | 43.1(10.9) | 42.2 (10.6) | 45.0 (11.2) | 0.02 |
| Self reported smoking status inside the taxi | | | | |
| Always | 30 (14.3) | 30 (14.4) | -- | |
| Sometimes | 61 (29.1) | 61 (29.1) | -- | |
| Never | 119 (56.7) | 119 (56.7) | -- | |
| Driver allows passengers to smoke | 219(61.5) | 179 (77.2) | 40 (32.3) | <0.001 |
| Driver smokes when customers are in taxi | 161 (45.2) | 159 (68.5) | 2 (1.60) | <0.001 |
| Driver smokes when customers allow | 70 (19.7) | 70 (30.2) | -- | <0.001 |
| Driver smokes when customers smoke | 92 (26.1) | 92 (39.7) | -- | <0.001 |
| Frequency of passengers smoking in taxi | | | | |
| None | 77 (21.6) | 26 (11.2) | 51 (41.1) | <0.001 |
| Rarely | 69 (19.4) | 46 (19.5) | 24 (18.6) | |
| Some | 165 (46.4) | 125 (53.9) | 40 (32.3) | |
| Many | 45 (12.6) | 35 (15.1) | 10 (8.10) | |
| Driver fined by police because of smoking | 2 (0.60) | 2 (0.90) | -- | 0.31 |

^a Values represent frequency and percentages
^b Non smokers include former and never smokers

- Less than 1% of smokers reported being fined by police because of smoking inside their taxi
- The smell of smoke was observed in more than half of the taxicabs (52%)

In evaluating SHS exposure in taxicabs in Turkey, there was a high percentage of smoking and secondhand smoke exposure.

- 69% of taxi drivers who smoke and 2% of drivers who do not smoke report that smoking takes place inside the taxi when customers are present
- If customers allow taxi drivers to smoke, 20% of the drivers report smoking in the taxi.

Table 2: Taxicab observations stratified by driver's smoking status^a

| | Overall (n = 356) | Smoker (n = 232) | Non-Smoker ^b (n = 124) | p value |
|---------------------------------|-------------------|------------------|-----------------------------------|---------|
| Fieldworker Observations | | | | |
| Taxi smells like smoke | 52(14.60) | 51 (22.0) | 1 (0.80) | <0.001 |
| Cigarette butts | 6 (1.70) | 6 (2.60) | -- | 0.07 |
| Ashtrays | 17 (4.80) | 16 (7.00) | 1 (0.80) | 0.01 |
| 'No smoking' signs | 176 (49.4) | 109(47.0) | 67 (54.0) | 0.21 |
| Fines or penalty signs | 89 (25.0) | 47 (20.3) | 42 (33.9) | 0.01 |
| Adequate signage visibility | 151 (84.8) | 92 (82.9) | 59 (88.1) | 0.35 |
| Visible cigarettes pack | 13(3.70) | 12 (5.20) | 1(0.80) | 0.04 |
| Driver smoking during trip | 18 (5.10) | 18 (7.80) | -- | <0.001 |

^a Values represent frequency and percentages
^b Non smokers include former and never smokers

Overall, less than 5% of drivers had visible cigarette packs and ashtrays in their taxis

- The presence of 'no smoking' signs as well as fines or penalty signs was lower among taxi drivers who smoked compared to those who did not
- Even though 49% and 84% had 'no smoking' signs and adequate signage visibility, respectively, 18% of the taxi drivers smoked during their trip with the fieldworkers present

CONCLUSIONS

- This study demonstrates a high smoking prevalence and low compliance among taxi drivers
 - Majority of these taxicab drivers report smoking inside the taxi and also allow passengers to smoke inside the taxi
 - Less than 1% of smoker taxicab drivers report receiving fines for smoking inside their vehicle
- Efforts should be taken to inform the public about the risks of secondhand smoke exposure in motor vehicles, even under optimal ventilation
- Stronger measures of enforcement to increase compliance for taxi drivers and passengers is needed