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Attitudes of women from five European Countries regarding tobacco control policies

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Abstract

Aims—Tobacco related cancers and, in particular, lung cancer still represents a substantial public health epidemic across Europe as a result of high rates of smoking prevalence. Countries in Europe have proposed and implemented tobacco control policies to reduce smoking prevalence, with some countries being more progressive than others. The aim of this study was to examine

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factors that influenced women's attitudes across five European countries relative to comprehensive smokefree laws in their countries.

Methods—A cross-sectional landline telephone survey on attitudes towards tobacco control laws was conducted in five European countries: France, Ireland, Italy, the Czech Republic, and Sweden. Attitudinal scores were determined for each respondent relative to questions about smokefree laws. Logistic regression models were used to obtain odds ratios with 95% confidence intervals.

Results—A total of 5,000 women were interviewed (1,000 women from each country). The majority of women, regardless of smoking history, objected to smoking in public buses, enclosed shopping centers, hospitals and other indoor work places. More women who had quit smoking believed that new tobacco control laws would prompt cessation – as compared to women who still smoked.

Conclusions—In general, there is very high support for national smokefree laws that cover bars, restaurants and public transport systems. As such laws are implemented, attitudes do change as demonstrated by the differences between countries such as Ireland and the Czech Republic. Implementing comprehensive smokefree laws will gain high approval and will be associated with prompting people to quit.

Keywords

European women's attitudes; opinions; knowledge; Secondhand smoke; Tobacco control policy

Introduction

Decreasing the morbidity and mortality from tobacco use is most effectively accomplished with changes in population-wide policies such as comprehensive tobacco control laws and increases in tobacco prices, for example, through taxation. Often, changes to public policy are difficult to achieve because a substantial portion of the population may not be supportive. However, as evidenced-based policies are implemented and enforced, the population gradually shifts its opinions and becomes increasingly more supportive of the policy changes.

In tobacco control, Ireland is an excellent example of shifting attitudes. Prior to Ireland becoming the first country, in 2004, to implement a comprehensive smokefree law – including all pubs, restaurants and other workplaces, only 13-45% (pubs versus restaurants) of the populace supported the initiative. However, one year later, the support was 46-77%. Women and men have changed their opinion and now expect the healthier environments that exist with such comprehensive smokefree laws.[1] Martínez-Sánchez et al [2] have examined the 2008 Eurobarometer and demonstrated that broad, strong tobacco control policies were correlated with higher attitudinal support of smokefree policies.

Unfortunately, the tobacco industry fights back by financially establishing and supporting front organizations that claim such policies are part of a ‘nanny state’, infringe on ‘smoker's rights’ and denigrate or isolate people who smoke. The tobacco industry is notorious for attempts to subvert or inhibit strong evidence-based policies, such as comprehensive smokefree laws by promoting an ‘accommodation’ campaign – asking ‘can't we all just live together’. [3,4]

In order to increase support for strong tobacco control policies, it is important to understand the baseline attitudes towards such policies as these will help guide educational and promotional programs to garner progressive success with implementation of the policies. To better understand a gendered focus on tobacco control policies, specifically on

comprehensive smokefree laws, a population-based survey was conducted in five European countries in 2008. The world's highest prevalence of women's smoking occurs in the European region.[5]. This survey assessed eight questions determining attitudes of women from five European countries to understand their specific attitudes relative to comprehensive smokefree laws in their countries.

Methods

A population-based telephone survey of 1,000 women aged 18 and older was conducted in each of five European countries (the Czech Republic, France, Ireland, Italy, and Sweden), for a total sample size of 5,000 women, in June and July 2008. These countries were selected for the survey because they are at differing stages of enacting tobacco control legislation. The participants' information on demographics, smoking behaviors, family history of lung cancer, parents smoking and attitudes towards the tobacco control laws were collected by phone interview using the native language of each country. Telephone numbers were taken from country wide phone lists and random digit dialed. Of the women reached and eligible for participation, response rates were 30.6% in the Czech Republic, 64.8% in France, 54.6% in Ireland, 41.4% in Italy, and 59.0% in Sweden. To improve robustness, smokers were oversampled in all countries to reach 28% of subjects; results were weighted to account for the oversampling. After weighting, results are nationally representative with regards to age, smoking, and city size.

Age at last year of education was categorized into <16, 16 to 19, 20 to 25, and >25 years old, which approximately reflect individuals who did not finish secondary school, finished secondary school, went to university, and had postgraduate education, respectively. Job classification was measured using the International Standard Classification of Occupation, 1988 version (ISCO-88). Income information was collected as “well below the median”, “below the median”, “around the median”, “above the median”, and “well above the median” with a specific reference to median salary for each country, to create comparable categories between countries. Smoking status was classified into “current smokers” if the subject reported currently smoking “every day” or “some days or occasionally”; “former smokers” if the subject reported not smoking anymore but previously smoked at least 100 cigarettes over the life time; and “never smokers” if the subject reported never smoking (<100 cigarettes in lifetime). Eight questions on attitudes towards the tobacco control laws in Europe were included and scored as ‘not at all’ = 1, ‘some areas’ = 2, ‘in all areas’ = 3; and ‘totally agree’ = 1 to ‘totally disagree’ = 4:

- Should smoking be allowed in the hospitals?
- Should smoking be allowed in offices/other indoor workplaces?
- Should smoking be allowed in public buses?
- Should smoking be allowed in train stations?
- Should smoking be allowed in enclosed shopping centers?
- Should smoking be allowed in the restaurants and cafes?
- Should smoking be allowed in the drinking establishments (Bars/pubs)?
- Will new tobacco control laws prompt smokers to quit?

Statistical analyses

We created an ‘attitude score’ by summing the answers to the eight items on attitudes toward European tobacco laws. The range of the scores was 8 to 25. Higher scores reflected more negative attitudes towards tobacco control laws. In other words, objecting to smoking

in public areas and agreeing that new tobacco control laws would prompt smokers to quit was defined as having a positive attitude in our study. Participants were classified into a positive attitude group (score=8-9; percent=35.8%), an intermediate attitude group (score=10-11; percent=30.4%) and a negative attitude group (score = 12-25; percent=33.7%) based on their attitude scores. Among the 5,000 participants, there was no missing data for questions Q1 to Q7. However, 225 participants replied that they “didn't know” or “refused to answer” Q8. Thus these 225 participants were excluded for estimation of the attitude scores. The number of subjects in the tables may not sum to the total because we weighted all of our analyses.

Demographic and smoking variables such as age, age at last year of education, job category, marital status, income, smoking status, parents smoking, and family history of lung cancer, bothered by second hand smoking, family/friends smoking situation, home smoking bans, and working area smoking bans, were included in the analyses. χ^2 tests were conducted to test possible difference in attitudes on tobacco control laws among countries and different smoking status groups. Logistic regression models were used to obtain odds ratios (OR) and 95% confidence intervals (95% CIs) for the negative attitude group relative to the positive attitude group, and the medium attitude group relative to the positive attitude group. SAS version 9.2 was used for all statistical analyses.

Results

The overall demographic distributions for the 5,000 participants are shown in Table 1. The largest proportions of women were >55 year age, 19 years for age at last education, skilled workers, married, and had never smoked.

Table 2 shows the responses to questions about where smoking should be allowed and whether new tobacco control laws will prompt people who smoke to quit, by country. A clear majority of participants did not think smoking should be allowed in public buses (98.3%), enclosed shopping centers (88.7%), in hospitals (85.3%), and in offices or other indoor workplaces (84.1%). Participants from Ireland and Sweden shared more similar attitudes toward smoking laws, with opposition to smoking in offices or other indoor workplaces, train stations, enclosed shopping centers, bars or pubs. Higher proportions of participants from Ireland (46.8%) and Sweden (43.6%) agreed that new tobacco control laws would prompt smokers to quit, while lower proportions of participants from France (30.5%), Italy (20.9%) and Czech Republic (15.1%) agreed with this statement.

The attitudes towards smoking laws among current smokers, former smokers and never smokers was significantly different (Table 3). Regardless of smoking status, the majority of women objected to smoking in public buses, in enclosed shopping centers, in hospitals and in offices or other indoor workplaces. However, a higher proportion of women who have never smoked were against smoking in any public areas. A higher proportion of former smokers (34.2%) agreed that new tobacco control laws will prompt people who smoke to quit compared with those who currently smoke (28.5%) and have never smoked (31.3%).

Table 4 showed the odds of intermediate or negative attitude scores relative to positive attitude scores by demographic factors and smoking status. Women who were older than 44 years of age, and were from Ireland, Italy, and Sweden were more likely to have positive attitudes. On the other hand, women who were never married or members of unmarried couples, current smokers or former smokers, had parents who smoked, and were from the Czech Republic tended to have negative attitudes. Women who were not bothered by secondhand smoking, had friends who smoked or family members, and did not have bans on

smoking in the home were more likely to have a negative attitude towards the restrictive smoking laws (Table 5).

Discussion

It is intuitive that women who have never smoked would be most supportive of no smoking policies in bars, restaurants, and other workplaces, but these policies also had very strong support by women who were currently smoking or had quit smoking. In fact, women who had previously smoked constituted the highest proportion who believed that such comprehensive smokefree laws would prompt others who smoked - to quit. This is consistent with the literature that such comprehensive smokefree laws do lead to quit attempts and ultimately successfully quitting. [1] Also, strong policy support by women is consistent with the findings from studies in Swedish and Estonian women that women seem to report more health impacts from secondhand smoke exposure. [6,7] It is also not surprising that women who currently smoke have the lowest belief that smokefree policies would prompt smoking cessation. Although, it is notable that over one-fourth of women who continue to smoke do agree that such policies would lead to quitting smoking.

Attitudes from our survey are basically consistent with the 2008 Eurobarometer survey [8] which demonstrated that overall 84% of Europeans supported smokefree workplaces – however this varied from Sweden at 92%, Ireland at 82%, Italy at 95%, France at 89% with Czech Republic at 76%. This pattern across the five countries throughout in our smokefree attitudinal survey was fairly consistent with the Czech Republic generally having substantially lower support scores. The Czech Republic was the last country (2 May 2012) of the five to ratify the international treaty on the Framework Convention on Tobacco Control (FCTC). [9] This FCTC requires countries that have ratified the treaty to implement comprehensive smokefree laws. These data demonstrate the effect of attitudes across countries that have smokefree laws versus those that do not.

France has a national smokefree law (2007) that bans smoking in restaurants, bars, cafes, casinos and workplaces. Sweden's national smokefree law (2005) bans smoking in all restaurants, bars, cafes but allows for smoking rooms; Italy (2005) bans smoking in workplaces, restaurants, and bars but also allows for smoking rooms; Czech Republic has very limited smokefree laws and Ireland is the first country in the world (2004) to ban all smoking in public spaces, including bars and restaurants. [10] Our results demonstrate that Ireland, Italy and Sweden are the most likely to have more positive attitudes to smokefree policies and they are among the earliest adapters of such policies. Not surprisingly, the Czech Republic with very limited laws has the highest negative attitudes and high female smoking prevalence. However, the Czech Republic gained substantially for desiring smokefree bars and pubs from 35% approval in 2005 to 42% in 2006 and another 9 percentage point increase to 51% in 2008 – probably reflecting policy environments in neighboring countries and the EU in general. [8,11,12]

In the 2008 Eurobarometer survey, more women were more in favor of smokefree workplaces, restaurants, bar and pub restrictions than men. [8] The source for these attitudes is a mixture of national laws and the smoking behavior of those closest to the women, and is probably a reflection of personal knowledge of the dangers of secondhand smoke.

The main limitation of this survey is its cross-sectional nature. It is difficult to rule out temporal ambiguity regarding whether attitudes toward laws were the consequence of smoking behavior or whether the laws had already affected smoking behavior. Previous studies have all been cross-sectional in design; it would be of interest to examine how cancer risk perception changes over time in a population-based cohort. Another limitation was that

participation rates were not as high as desired and varied by country, possibly due to cultural differences in attitudes towards telephone surveys. Although only a small proportion of eligible females who refused participation also provided demographic information, refusers appeared to be generally younger than participants, and were more frequently employed as technical workers or as skilled workers. These refusers might have had more negative attitudes. Therefore, our results may not be completely representative of the general population of women in each country.

In summary, our survey of women across five European countries demonstrates the impact of national laws that restrict smoking in public places. In general, there is very high support for the laws across working environments, including bars, restaurants and public transport systems. As such laws are implemented, our evidence suggests that attitudes change, as demonstrated by the spectrum of beliefs varying from Ireland and Sweden to the Czech Republic. This paper supports the notion that implementing evidence-based policies such as comprehensive smokefree laws will gain high approval, and will be associated with prompting people to quit smoking.

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Table 1
Demographic characteristics of the survey population (weighted)

	Overall (N=5000)	
	N	%
Age (years)		
18-24	426	8.5
25-34	939	18.8
35-44	916	18.3
45-54	883	17.7
>55	1834	36.7
Missing	2	0.0
Age at last education(years)		
19	2585	56.7
20-25	1553	34.1
26	422	9.3
Missing	440	0.1
Job category (ISCO-88)		
Professionals(ISCO 1, 2)	1289	25.8
Technical position(ISCO3)	226	4.5
Skilled workers(ISCO 4,5,6,7,8,10)	2016	40.3
Unskilled workers(ISCO 9)	471	9.4
Homemaker	731	14.6
Full-time student	267	5.3
Marital status		
Married	2011	40.2
Divorced	493	9.9
Widowed	629	12.6
Separated	201	4.0
Never married	1057	21.2
A member of an unmarried couple	507	10.1
Refused	102	2.0
Income		
Well below the median	460	9.2
Below the median	1175	23.5
Around the median	1381	27.6
Above the median	799	16.0
Well above the median	167	3.3
Refuse to answer	1018	20.4
Smoking status		
Smoke every day or almost	787	15.7

	Overall (N=5000)	
	N	%
Smoke some days or occasionally	206	4.1
Former smoker	1072	21.5
Never smoker	2935	58.7

ISCO-88: International Standard Classification of Occupation, 1988 version

Table 2

Attitudes toward smoking laws by country (weighted)

	Overall (N=5000)	France (N=1000)	Ireland (N=1000)	Italy (N=1000)	Czech Republic (N=1000)	Sweden (N=1000)	df ^{\$}	p value*
Q1. Should smoking be allowed in the hospitals?								
	%	%	%	%	%	%	4	<.0001
Not at all	85.3	91.4	83.0	94.7	85.6	71.8		
Some areas	14.0	5.8	16.7	5.4	14.2	28.2		
In all areas	0.7	2.8	0.3	0.0	0.3	0.1		
Q2. Should smoking be allowed in offices/other indoor workplaces?								
							4	<.0001
Not at all	84.1	82.2	88.3	84.5	77.1	88.3		
Some areas	14.6	13.6	11.3	14.9	22.1	11.3		
In all areas	1.3	4.2	0.4	0.6	0.8	0.5		
Q3. Should smoking be allowed in public buses?								
							4	<.0001
Not at all	98.3	95.2	98.4	99.1	99.7	99.1		
Some areas	0.8	1.3	1.2	0.7	0.2	0.6		
In all areas	0.9	3.6	0.4	0.2	0.1	0.4		
Q4. Should smoking be allowed in train stations?								
							4	<.0001
Not at all	68.4	60.7	80.9	61.1	61.2	78.2		
Some areas	28.8	32.0	17.9	37.2	37.1	19.7		
In all areas	2.8	7.3	1.3	1.7	1.7	2.1		
Q5. Should smoking be allowed in enclosed shopping centers?								
							4	<.0001
Not at all	88.7	83.8	92.8	84.8	88.5	93.8		
Some areas	9.8	10.9	6.7	14.5	11.4	5.5		
In all areas	1.5	5.2	0.4	0.7	0.2	0.7		
Q6. Should smoking be allowed in the restaurants and cafes?								
							4	<.0001
Not at all	69.7	60.6	89.7	80.9	32.4	84.7		
Some areas	26.6	28.9	9.9	18.4	61.4	14.7		
In all areas	3.7	10.5	0.4	0.7	6.2	0.7		
Q7. Should smoking be allowed in the drinking establishments (Bars/pubs)?								
							4	<.0001

	Overall (N=5000)	France (N=1000)	Ireland (N=1000)	Italy (N=1000)	Czech Republic (N=1000)	Sweden (N=1000)	df [§]	p value*
	%	%	%	%	%	%		
Not at all	63.8	54.8	82.2	81.3	22.8	77.7		
Some areas	27.1	27.1	16.0	17.7	56.2	18.7		
In all areas	9.1	18.1	1.8	1.0	21.0	3.6		
Q8. Will new tobacco control laws prompt smokers to quit?								
Totally agree	31.4	30.5	46.8	20.9	15.1	43.6	10	<.0001
Somewhat agree	25.8	27.1	22.8	33.8	18.9	26.2		
Somewhat disagree	14.0	17.3	7.5	17.9	22.0	5.1		
Totally disagree	24.2	23.2	18.7	21.8	39.5	17.9		
Don't know	4.7	1.9	4.2	5.6	4.5	7.2		
Refused to answer	0.0	0.0	0.0	0.0	0.0	0.1		

* Chi-square test

§ degree of freedom

Table 3
Attitudes toward smoking laws by smoking status in European countries (France, Italy, Ireland, Czech Republic, Sweden)(weighted)

	Current smokers (N=993)		Former smoker (N=1072)		Never smoker (N=2935)		df [§]	p value*
	N	%	N	%	N	%		
Should smoking be allowed in the hospitals?								
Not at all	755	76.1	903	84.2	2606	88.8	4	<.0001
Some areas	228	23.0	162	15.1	311	10.6		
In all areas	10	1.0	8	0.7	18	0.6		
Should smoking be allowed in offices/other indoor workplaces?								
Not at all	757	76.2	910	84.8	2537	86.4	4	<.0001
Some areas	213	21.4	152	14.1	367	12.5		
In all areas	23	2.3	11	1.0	31	1.1		
Should smoking be allowed in public buses?								
Not at all	964	97.1	1060	98.9	2890	98.5	4	0.008
Some areas	17	1.7	5	0.4	19	0.7		
In all areas	12	1.2	8	0.7	25	0.9		
Should smoking be allowed in train stations?								
Not at all	571	57.6	732	68.2	2118	72.2	4	<.0001
Some areas	376	37.8	313	29.2	749	25.5		
In all areas	46	4.6	27	2.5	67	2.3		
Should smoking be allowed in enclosed shopping centers?								
Not at all	830	83.6	949	88.5	2657	90.5	4	<.0001
Some areas	139	14.1	113	10.5	239	8.1		
In all areas	23	2.3	11	1.0	39	1.3		
Should smoking be allowed in the restaurants and cafes?								
Not at all	546	55.0	782	72.9	2155	73.4	4	<.0001
Some areas	359	36.2	264	24.6	709	24.2		
In all areas	87	8.8	27	2.5	71	2.4		
Should smoking be allowed in the drinking establishments (Bars/pubs)?								
Not at all	546	55.0	782	72.9	2155	73.4	4	<.0001
Some areas	359	36.2	264	24.6	709	24.2		
In all areas	87	8.8	27	2.5	71	2.4		

	Current smokers (N=993)		Former smoker (N=1072)		Never smoker (N=2935)		df [§]	p value*
	N	%	N	%	N	%		
Not at all	487	49.1	722	67.3	1979	67.4		
Some areas	334	33.6	279	26.0	744	25.4		
In all areas	172	17.3	71	6.7	212	7.2		
Will new tobacco control laws prompt smokers to quit?								
Totally agree	283	28.5	367	34.2	919	31.3	10	<.0001
Somewhat agree	216	21.8	305	28.4	767	26.1		
Somewhat disagree	110	11.1	139	12.9	449	15.3		
Totally disagree	357	36.0	222	20.7	631	21.5		
Don't know	26	2.6	40	3.8	168	5.7		
Refused to answer	0	0.0	0	0.0	1	0.0		

* Chi-square test

§ degree of freedom

Table 4
Odds of negative attitude scores by demographic and smoking status (weighted)

	Positive attitude	Intermediate	OR*	95%CI	Negative attitude	OR*	95%CI
	N(1707)	N(1451)			N(1606)		
Age (years)							
18-24	134	107	ref		170	ref	
25-34	285	271	1.11	(0.75, 1.63)	361	1.00	(0.66, 1.49)
35-44	306	275	1.10	(0.74, 1.64)	308	0.87	(0.57, 1.31)
45-54	325	269	0.97	(0.65, 1.45)	261	0.56	(0.37, 0.86)
>55	658	527	0.97	(0.66, 1.43)	506	0.64	(0.43, 0.97)
Missing							
Age at last education(years)							
19	914	738	ref		792	ref	
20-25	530	463	1.03	(0.86, 1.23)	509	1.04	(0.85, 1.26)
26	137	134	1.24	(0.94, 1.64)	127	1.28	(0.93, 1.76)
Missing							
Job category ISCO-88§							
Professionals(ISCO 1, 2)	411	385	ref		447	ref	
Technical position(ISCO3)	89	74	1.21	(0.84, 1.74)	52	0.81	(0.52, 1.26)
Skilled workers(ISCO 4,5,6,7,8,10)	686	569	1.01	(0.83, 1.23)	665	1.21	(0.97, 1.51)
Unskilled workers(ISCO 9)	154	130	0.92	(0.67, 1.26)	165	1.01	(0.72, 1.42)
Homemaker	297	226	1.09	(0.84, 1.41)	157	0.99	(0.73, 1.35)
Full-time student	70	67	N/A	N/A	119	N/A	N/A
Marital status							
Married	729	580	ref		618	ref	
Divorced	147	150	1.20	(0.91, 1.59)	180	0.98	(0.72, 1.34)
Widowed	222	174	0.97	(0.74, 1.27)	162	0.89	(0.64, 1.22)
Separated	74	68	1.28	(0.88, 1.86)	53	1.06	(0.69, 1.62)
Never married	330	304	1.32	(1.05, 1.66)	384	1.28	(0.99, 1.66)

	Positive attitude N(1707)	Intermediate N(1451)	OR*	95%CI	Negative attitude N(1606)	OR*	95%CI
A member of an unmarried couple	169	149	1.36	(1.03, 1.80)	175	1.45	(1.08, 1.96)
Refused	36	27	0.76	(0.40, 1.43)	36	0.94	(0.49, 1.79)
Income							
Well below the median	144	128	ref		156	ref	
Below the median	413	362	1.05	(0.78, 1.43)	347	0.81	(0.58, 1.13)
Around the median	437	388	0.99	(0.72, 1.35)	508	0.88	(0.63, 1.23)
Above the median	297	248	1.11	(0.79, 1.57)	227	0.73	(0.50, 1.07)
Well above the median	67	53	1.22	(0.76, 1.97)	42	0.92	(0.53, 1.61)
Refuse to answer	350	272	0.88	(0.64, 1.22)	328	0.88	(0.62, 1.24)
Smoking status							
Smoke everyday or almost	183	186	1.30	(1.02, 1.66)	399	3.48	(2.73, 4.43)
Smoke some days or occasionally	65	49	0.94	(0.61, 1.44)	84	1.99	(1.30, 3.07)
Former smoker	405	319	1.11	(0.92, 1.34)	308	1.33	(1.07, 1.66)
Never smoker	1054	896	ref		816	ref	
Country							
France	299	285	ref		397	ref	
Ireland	525	277	0.55	(0.43, 1.70)	156	0.20	(0.15, 0.26)
Italy	344	352	1.09	(0.86, 1.39)	249	0.54	(0.42, 0.70)
Czech Republic	81	256	3.67	(2.63, 5.13)	617	7.62	(5.51, 10.53)
Sweden	458	281	0.63	(0.49, 0.80)	188	0.29	(0.22, 0.37)

§ ISCO-88: International Standard Classification of Occupation, 1988 version

* odds ratios are adjusted for all factors in the table, parents' smoking situation, and family history of lung cancer. "Positive attitude group" is the base category. ORs above 1 indicate a more negative attitude.

Table 5
The odds of intermediate or negative attitude scores by attitudes toward smoking and friends/family smoking(weighted)

	Positive attitude N(1708)	Intermediate N(1451)	OR*	95%CI	Negative attitude N(1606)	OR*	95%CI
Are you bothered by secondhand smoke?							
Yes	1321	1079	ref		922	ref	
No	366	360	1.36	(1.13, 1.63)	656	2.81	(2.33, 3.39)
Don't know	17	12	0.97	(0.45, 2.07)	27	1.28	(0.61, 2.67)
Refused to answer	3	0	N/A	N/A	1	0.71	(0.06, 7.90)
How many of your friends or family members smoke?							
None	447	316	ref		211	ref	
A few	852	714	1.19	(0.99, 1.43)	693	1.48	(1.18, 1.85)
Less than half	155	173	1.42	(1.08, 1.87)	214	1.88	(1.38, 2.57)
About half	139	115	0.95	(0.70, 1.29)	239	1.64	(1.19, 2.25)
More than half	41	58	1.62	(1.03, 2.55)	132	3.66	(2.34, 5.70)
Most or all	61	74	1.55	(1.05, 2.30)	113	2.66	(1.76, 4.00)
Don't know/not sure	10	1	0.13	(0.02, 1.02)	4	0.61	(0.14, 2.63)
Refused to answer	2	1	1.22	(0.11, 14.09)	0	N/A	N/A
Parents' smoking status?							
Yes	959	819	1.09§	(0.94, 1.26)§	964	1.39§	(1.17, 1.64) §
No	749	632	ref		643	ref	
Family history of lung cancer							
Yes	322	272	0.93€	(0.77, 1.12) €	366	1.07€	(0.88, 1.31) €
No	1385	1179	ref		1240	ref	
Is anyone allowed to smoke inside your home?							
No	1332	1040	ref		908	ref	
Yes. Certain members, guests or relatives	160	180	1.51	(1.18, 1.91)	247	2.68	(2.06, 3.47)
Yes. Anyone	207	227	1.52	(1.21, 1.90)	445	3.54	(2.81, 4.44)
Don't know/not sure	3	3	1.28	(0.23, 7.24)	7	4.96	(1.11, 22.11)

	Positive attitude N(1708)	Intermediate N(1451)	OR*	95%CI	Negative attitude N(1606)	OR*	95%CI
Refused to answer	5	1	0.29	(0.04, 2.26)	0	N/A	N/A
Is smoking allowed in your immediate work area?							
Yes	129	139	1.14	(0.86, 1.50)	201	1.28	(0.95, 1.72)
No	1132	954	ref		1026	ref	
Don't work or Don't have a regular work area	68	60	1.06	(0.71, 1.57)	93	1.30	(0.87, 1.96)
Don't know/not sure	9	6	1.02	(0.36, 2.85)	9	0.98	(0.35, 2.76)
Refused to answer	2	0	N/A	N/A	2	2.37	(0.26, 21.36)
Missing							

* adjusted by age, marital status, income, smoking status and country. "Positive attitude group" is the base category. ORs above 1 indicate a more negative attitude.

§ adjusted by age, marital status, income, smoking status, country, and family history of lung cancer.

€ adjusted by age, marital status, income, smoking status, country, and parents' smoking situation.