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in Europe

The online edition

Do smokers want to protect non-smokers from the harms of secondhand smoke in cars?

Findings from the EUREST-PLUS ITC Europe Surveys

Marcela Fu, Sarah O Nogueira, Olena Tigova, Yolanda Castellano, Pete Driezen,
Christina N Kyriakos, Mateusz Zatonski, Ute Mons, Anne CK Quah, Geoffrey T Fong,
Constantine I Vardavas, and Esteve Fernández,
on behalf of the EUREST-PLUS Project Consortium

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Generalitat de Catalunya
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de Salut



BACKGROUND AND OBJECTIVE



- There is currently no comprehensive legislation protecting non-smokers and children from secondhand smoke (SHS) exposure in private cars at the European Union (EU) level
- The objective was to assess smokers' support for smoke-free cars legislation in six EU countries



Design

Cross-sectional data using the EUREST-PLUS ITC Surveys (2016-2018)

Sample

National representative samples of 1000 adult smokers (≥ 18 y) in Germany, Greece, Hungary, Poland, Rumania and Spain





Variables

Support for smoke-free cars legislation

At which of the following places do you think smoking SHOULD be allowed...

- In cars with pre-school children in them? (yes / no / don't know / refused)
- In cars with non-smokers in them? (yes / no / don't know / refused)

Voluntary implementation of smoke-free car rules

- What are the rules about smoking in your car or cars when there are children in the car?
 - smoking is never allowed in any car
 - smoking is sometimes allowed or in some cars
 - smoking is allowed in all cars
 - do not have a car/you never have children in your car
 - refused



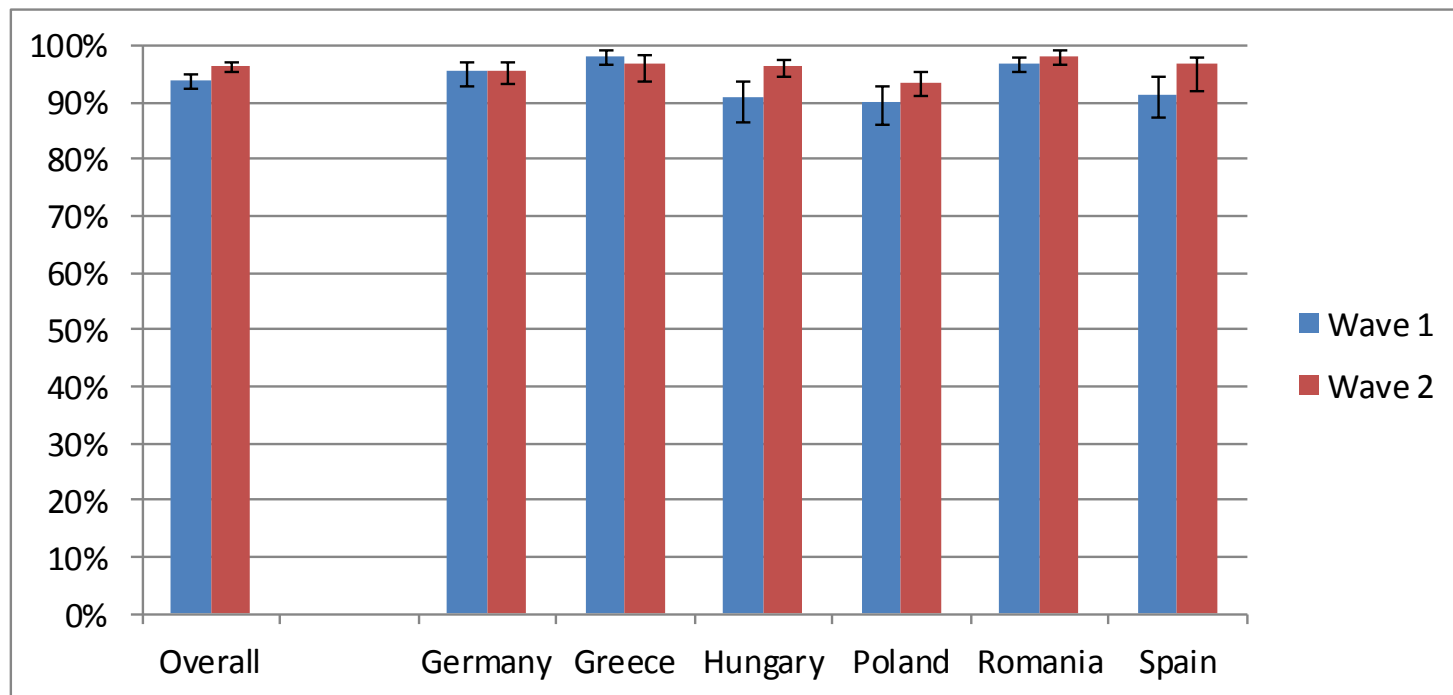
Analysis

- Support for smoke-free cars rules in each wave and changes between waves
- Percentages of change estimated from logistic generalized estimating equations regression models (GEE)
- Models were adjusted for:
 - socio-demographics (country, urbanisation, sex, age, income, educational level)
 - time in the sample (one or both waves)
 - smoking status (current or former smoker)
- All analyses included weighting to make the sample representative for all six countries' populations

RESULTS



Support for smoke-free cars with pre-school children



*Prevalences estimated from GEE models to assess the overall change between waves, adjusting for country, urbanisation, time in the sample, sex, age, income, educational level and smoking status.

RESULTS



Support for smoke-free cars with pre-school children

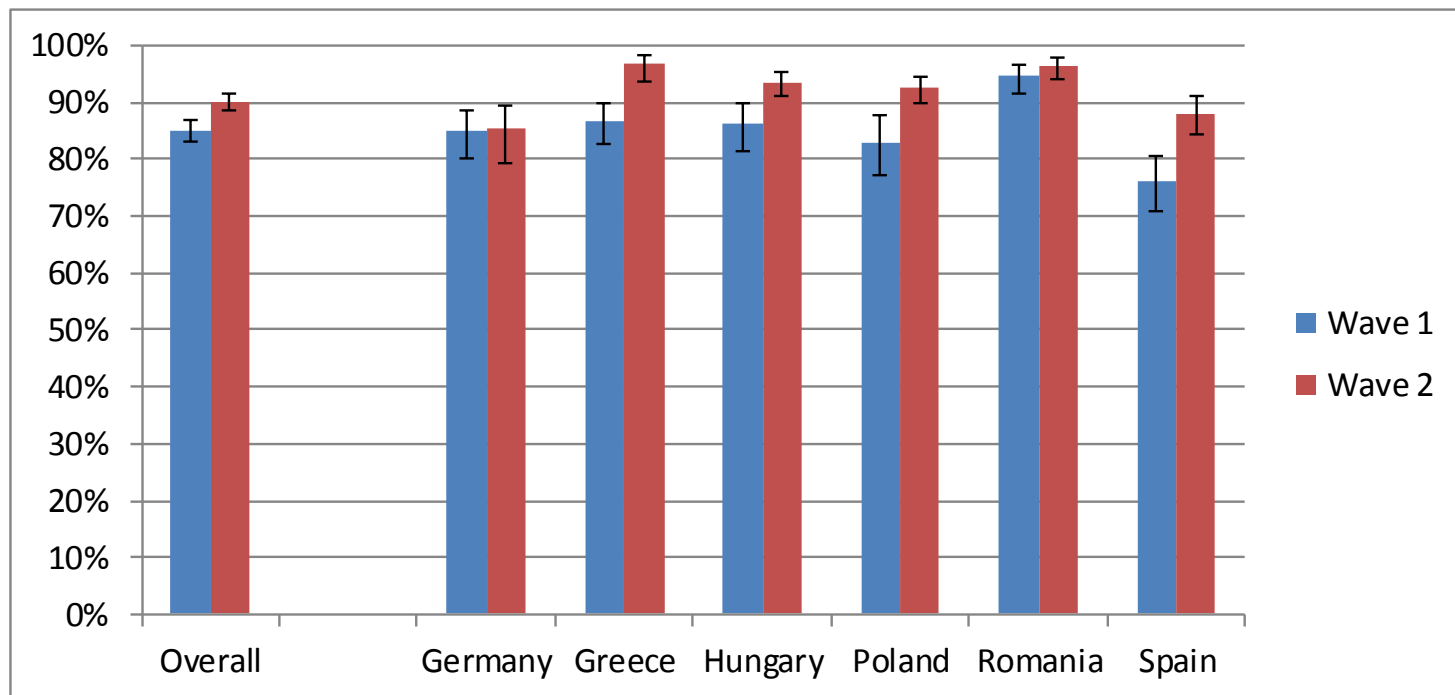
	Wave 1	Wave 2	Difference
Overall	93.8 (92.4; 95.0)	96.3 (95.4; 97.0)	2.4 (0.93; 4.0)
Age group			
18-24	91.5 (87.7; 94.2)	95.7 (93.2; 97.7)	4.2 (0.6; 7.8)
25-39	94.1 (92.3; 95.5)	96.1 (94.8; 97.1)	2.0 (0.1; 4.0)
40-54	94.5 (92.7; 95.8)	96.4 (95.1; 97.4)	2.0 (-0.1; 4.0)
55+	93.6 (91.6; 95.1)	96.4 (94.8; 97.5)	2.8 (0.8; 4.8)
Sex			
Women	94.7 (93.0; 96.0)	96.8 (95.7; 97.6)	2.1 (0.3; 3.9)
Men	93.1 (91.6; 94.4)	95.9 (94.8; 96.7)	2.7 (1.0; 4.5)
Nicotine dependence			
Low	94.3 (92.4; 95.7)	96.4 (94.8; 97.6)	2.1 (-0.1; 4.3)
Moderate	94.1 (92.7; 95.2)	96.3 (95.3; 97.1)	2.2 (0.7; 3.7)
High	78.0 (73.1; 82.3)	84.0 (79.0; 88.1)	6.0 (-0.7; 12.7)

*Prevalences estimated from GEE models to assess the overall change between waves, adjusting for country, urbanisation, time in the sample, sex, age, income, educational level and smoking status.

RESULTS



Support for smoke-free cars with non-smokers



*Prevalences estimated from GEE models to assess the overall change between waves, adjusted for country, urbanisation, time in the sample, sex, age, income, educational level and smoking status.

RESULTS



Support for smoke-free cars with non-smokers

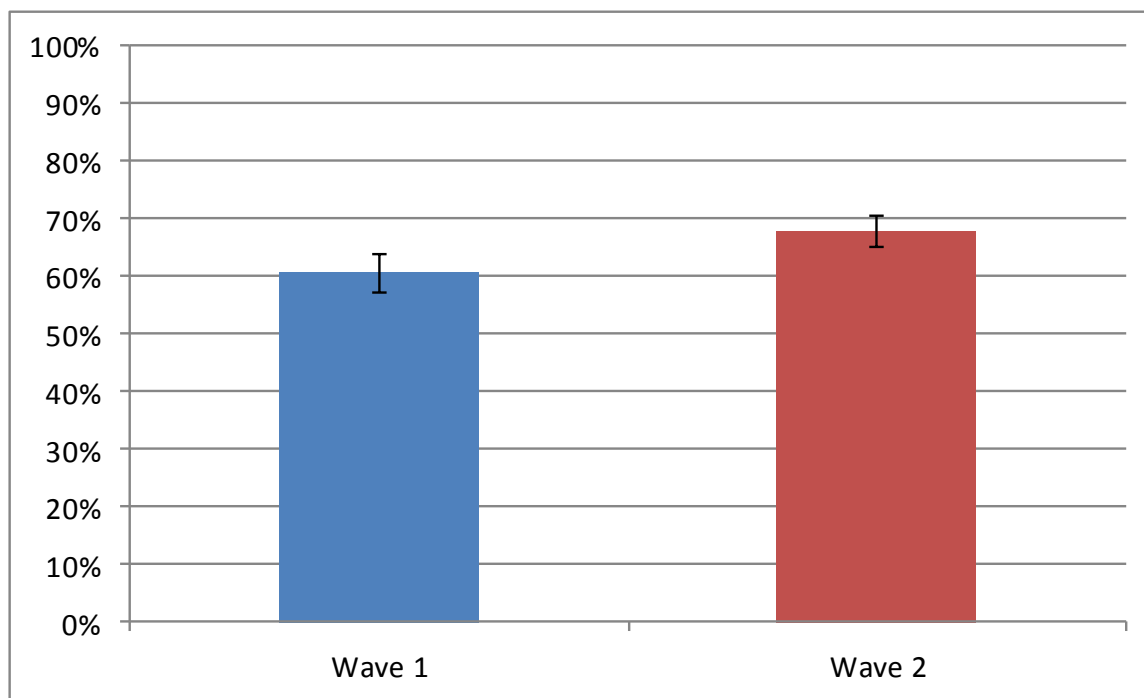
	Wave 1	Wave 2	Difference
Overall	85.2 (83.1; 87.1)	90.2 (88.6; 91.7)	5.0 (2.4; 7.7)
Age group			
18-24	78.5 (72.7; 83.3)	90.0 (86.2; 92.8)	11.5 (5.3; 17.7)
25-39	84.0 (81.4; 86.2)	90.8 (88.8; 92.4)	6.8 (3.9; 9.6)
40-54	86.4 (83.7; 88.7)	91.1 (89.1; 92.7)	4.6 (1.5; 7.8)
55+	87.8 (85.3; 89.9)	88.5 (85.5; 91.0)	0.7 (-3.0; 4.4)
Sex			
Women	88.0 (85.8; 89.9)	92.3 (90.7; 93.6)	4.3 (1.8; 6.8)
Men	83.1 (80.6; 85.3)	88.7 (86.6; 90.4)	5.6 (2.4; 8.8)
Nicotine dependence			
Low	88.9 (86.3; 91.1)	92.2 (89.7; 94.1)	3.2 (0.0; 6.5)
Moderate	84.7 (82.4; 86.7)	89.8 (88.0; 91.4)	5.2 (2.4; 7.9)
High	91.0 (87.2; 93.8)	93.2 (89.2; 95.8)	2.1 (-2.6; 6.9)

*Prevalences estimated from GEE models to assess the overall change between waves, adjusting for country, urbanisation, time in the sample, sex, age, income, educational level and smoking status.

RESULTS



Voluntary implementation of smoke-free cars with children



*Prevalences estimated from GEE models to assess the overall change between waves, adjusted for country, urbanisation, time in the sample, sex, age, income, educational level and smoking status.



Support for smoke-free cars with non-smokers

- The majority of smokers in all countries support smoke-free cars with pre-school children and non-smokers
- While smokers' support for smoke free cars legislation was higher than 90%, only around 70% of smokers reported implementing voluntary smoke-free rules in their vehicles while carrying children



Limitations

- Potential information bias (self-report)
- Potential social desirability bias
- Ceiling effects might limit the potential for further increases

Strengths

- Longitudinal study
- Representative samples of smokers in six European countries
- Sample size
- Use of a common questionnaire

CONCLUSIONS



- The vast majority of smokers in all six EU countries support for smoke-free legislation in cars carrying pre-school children and non-smokers
- There is a window of opportunity for the introduction of comprehensive legislation to protect non-smokers and children from SHS exposure in car



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Sarah O. Nogueira^{1,2,3,4}, Olena Tigova^{1,2,4}, Pete Driezen^{5,6}, Marcela Fu^{1,2,3,4}, Christina N. Kyriakos^{7,8}, Mateusz Zatoński^{9,10,11}, Ute Mons¹², Anne C.K. Quah⁵, Tibor Demjén¹³, Antigona C. Trofor^{14,15}, Krzysztof Przewoźniak^{9,16,17}, Paraskevi A. Katsaounou^{18,19}, Geoffrey T. Fong^{5,6,20}, Constantine I. Vardavas^{7,8}, Esteve Fernández^{1,2,3,4}, on behalf of the EUREST-PLUS Consortium*

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