



KNOWLEDGE ABOUT SMOKE EXPOSURE IN MULTI-UNIT HOUSING RESIDENTS WITH AND WITHOUT YOUNG CHILDREN



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BACKGROUND

- Secondhand smoke (SHS) and third hand smoke (THS) pollution have been demonstrated in multi-unit housing (MUH).
- Young children are at highest risk due to physiologic and behavioral factors.

OBJECTIVE

To compare the level of knowledge about SHS and THS between those with and without young children living in their MUH.

METHODS

- Data were from the 2012 Social Climate Survey of Tobacco Control.
- We recruited US residents 18+ years living in MUH from a nationally representative online panel that includes listed and unlisted numbers, those without a landline telephone, does not accept self-selected volunteers and provides sample coverage for 99% of U.S. households.
- Participants were asked about smoking status, children at home, demographics and SHS and THS.
- Knowledge of SHS exposure was defined as agreeing that "SHS seeping into my unit is a health risk".
- Knowledge of THS was defined as responding "yes" to any of the questions: Is tobacco smoke residue on walls THS? Is tobacco smoke residue on carpets THS? Is tobacco residue on furniture THS?
- Chi-square tests were performed and logistic regression models were estimated on data weighted to adjust for design effects.
- Analyses were performed with SAS v9.3.

RESULTS

- Data from 3253 respondents were collected.
- 12% of participants had a child ≤5 years old living at home.
- 26% of respondents reported at least one adult smoker living in the home.
- 48% were male, 51% were white, 30% were 30-44 years of age, 13% had less than a high school education and 11% received government assistance for housing.

Table 1. Comparison of Demographics, Smoking Status, Smoking Rules and Smoking Knowledge between MUH Residents with and without Children ≤ 5 Living at Home (n=3253)

	Without young children (n=2854)	With young children (n=399)	p-value
Multi-unit housing smoking rules (n=3140)			<.0001
Allowed in units	1715 (62.3)	183 (47.0)	
Not allowed in units	1036 (37.7)	207 (53.0)	
Personal home smoking rules (n=3203)			<.0001
Not permitted	1891 (67.3)	314 (79.4)	
Permitted in some places/times	580 (20.7)	66 (16.7)	
Permitted anywhere	337 (12.0)	15 (3.9)	
Is there an adult smoker in the home?			0.45
No	2125 (74.5)	290 (72.7)	
Yes	728 (25.5)	109 (27.3)	
In past 3 months, has anyone smoked inside your home? (n=3230)			<.0001
Yes	667 (23.5)	56 (14.2)	
No	2169 (76.5)	339 (85.8)	
SHS seeping into my unit is a health risk (n=2881)			<.0001
Agree	1726 (69.0)	319 (84.2)	
Disagree	777 (31.0)	60 (15.8)	
Being in a room where people smoke but aren't smoking now is harmful (n=2748)			0.88
Agree	1770 (73.8)	261 (74.2)	
Disagree	627 (26.2)	91 (25.8)	
Which of the following is THS?			
Tobacco smoke residue on household walls	1594 (55.9)	229 (57.4)	0.57
Tobacco smoke residue on carpets	1658 (58.1)	221 (55.5)	0.32
Tobacco smoke residue on furniture	1607 (56.3)	242 (60.7)	0.10
Would choose smoke-free MUH (n=3182)			0.0005
Strongly agree	1418 (50.9)	238 (60.4)	
Agree	757 (27.2)	103 (26.0)	
Disagree	446 (16.0)	37.5 (9.5)	
Strongly disagree	164.9 (5.9)	16 (4.1)	

Table 2. Knowledge of THS and Home Smoking among MUH Residents with Children ≤ 5 at Home (n=399)

	Not knowledgeable (n=132)	Knowledgeable (n=266)	p-value
Personal home smoking rules (n=395)			0.001
Not permitted	92 (69.8)	221 (84.3)	
Permitted in some places/times	35 (26.4)	31 (11.8)	
Permitted anywhere	5 (3.8)	10 (3.9)	
Would choose smoke-free MUH (n=395)			<.0001
Strongly agree	59 (44.7)	180 (68.2)	
Agree	46 (34.8)	57 (21.6)	
Disagree	20 (15.2)	17 (6.6)	
Strongly disagree	7 (5.3)	9 (3.6)	

BIVARIABLE RESULTS

- Among those with young children at home, respondents who were knowledgeable about THS were more likely to have a home smoking ban and to strongly agree that they would choose smoke-free MUH compared those not knowledgeable about THS.

MULTIVARIABLE RESULTS

- Having a child ≤ 5 years in the house was positively associated with agreeing that SHS seeping into their unit is a health risk (OR: 2.3, 95% CI: 1.7-3.2), controlling for home smoking rules, age group, race, educational level and smoking status.
- Having a young child living in the house was not associated with knowledge of THS (OR: 1.0, 95% CI: 0.8-1.3) when adjusting for home smoking rules, age group, race, educational level and MUH smoking rules.

CONCLUSIONS

- Having children in the home is associated with greater knowledge about the health risks of SHS, but not with knowledge of what constitutes THS.
- Parents of young children at home who know what constitutes THS are more likely to have a home smoking ban and to choose smoke-free MUH, other things being equal, compared to parents of young children who are not aware of household surface THS.

LIMITATIONS

- There were a limited number of questions on SHS and THS.
- Missing responses for some questions may introduce bias.
- Cross-sectional data collection precludes the ability to examine causality.

IMPLICATIONS

- Educating parents about THS may motivate more to seek out smoke-free MUH.