



# Smoke Free Hospital Grounds: Is it Time?



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## BACKGROUND

Since 1992, the interiors of facilities certified by The Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) have been required to be smoke free; however, smoking can be permitted on hospital grounds. A growing number of hospitals, including children's hospitals, have made their grounds completely smoke free. Benefits include increased employee smoking cessation rates, decreased litter and fire hazards, elimination of exposure to secondhand smoke, and improved public image. One perceived barrier to expanding smoke free areas to hospital grounds is acceptability of this policy to patients and families. We compared the acceptability of *smoke free hospitals* to *smoke-free hospitals with smoke free grounds*.

## METHODS

National random-digit-dial telephone surveys of US households were conducted annually from 2000 to 2007. Surveys and protocols were approved by the Mississippi State University Institutional Review Board. Samples were weighted by race, gender, and age to represent the US population.

**Table 1. 2007 Respondents, N = 1207**

Description		N	%
Female		794	66
Age, Years	18-24	63	5
	25-44	282	23
	45-64	535	44
	65+	327	27
Race/Ethnicity	Caucasian	1080	90
	African-American	127	11
Education	No HS	72	6
	HS Grad	342	28
	Some College	309	26
	College Grad	284	40
Child in Household		296	25
Urban Residence		805	67
Nonsmoker		1037	86

## RESULTS

Rates of survey completion by eligible respondents ranged from 75% (2000) to 87% (2007). "Yes" responses to the question "Should hospitals be smoke free?" rose from 74.6% to 91.9% (2000-2007,  $P < 0.001$ ). The question "Should hospital grounds be smoke free?" was added in 2007. In contrast to the acceptability of smoke free hospitals, smoke free hospital grounds were less acceptable: 91.9% of respondents supported smoke free hospitals and only 41.0% supported smoke free hospital grounds ( $P < 0.001$ ). Using logistic regression, non-smoking status (OR 5.3, 95% CI 3.3-8.6) and age 18-24 years (OR 4.7, 95% CI 1.5-14.8) independently predicted support of smoke free hospitals. Support of smoke free grounds was associated with non-smoking status (OR 3.5, 95% CI 2.3-5.2), urban residence (OR 1.3, 95% CI 1.0-1.8), African-American race (OR 1.5, 95% CI 1.0-2.1), and female gender (OR 1.6, 95% CI 1.3-2.1). Having one or more children in the household and education were not associated with support for either smoke free hospitals or smoke free grounds.



A smoker in a clearly labeled "No Smoking" zone outside the main entrance of CNMC, Washington, DC, illustrating one of the challenges: ENFORCEMENT!

**Table 2. Regression Results**

Variable	SF Hospitals		SF Grounds		
	OR	95% CI	OR	95% CI	
Female gender	1.3	0.8, 2.0	1.6	1.3, 2.1	
Age, years	18-24	4.7	1.5, 14.8	0.8	0.5, 1.3
	25-44	1.4	0.7, 2.9	0.9	0.6, 1.3
	45-64	0.8	0.4, 1.5	0.9	0.6, 1.3
African-American	1.8	0.8, 3.9	1.5	1.0, 2.1	
Education	Not HS Grad	1.3	0.4, 3.6	1.1	0.6, 2.1
	HS Grad	0.7	0.4, 1.2	0.9	0.6, 1.2
	Some College	1.0	0.5, 1.8	0.8	0.6, 1.1
Child in Household	1.2	0.7, 2.2	0.8	0.6, 1.1	
Urban Residence	1.1	0.7, 1.8	1.3	1.0, 1.8	
Nonsmoker	5.3	3.3, 8.6	3.5	2.3, 5.2	

## CONCLUSIONS

Hospitals that have successfully implemented "smoke free campus" policies report that education of employees and the public prior to the change is helpful in promoting acceptance of the policy. Our results identify three groups that may be supportive of smoke free grounds: non-smokers, African-Americans, and women. Engaging these groups in the process of going smoke free may be useful in successful policy changes.

Tacit support of smoking by providing smoking areas delivers a message inconsistent with health and puts patients, families, visitors, and staff at risk of secondhand smoke exposure. Healthcare facilities should take the next step: make all indoor and outdoor areas smoke and tobacco free.

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