

**Executive Summary**

**An Observational Study of Compliance**

**With North Dakota's Smoke-Free Law**

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The adverse effects of secondhand smoke, including cancer and cardiovascular disease in adults, and adverse respiratory effects in both children and adults are well documented in the scientific literature (U.S. Department of Health and Human Services [USDHHS], 2006). In 2005, the North Dakota Legislative Assembly passed Senate Bill 2300 amending the North Dakota Century Code Chapter 23-12-09 – Smoking in Public Places and Places of Employment to expand protections from secondhand smoke. The law required most public places and places of employment to be smoke free with some exemptions including stand-alone bars; separately enclosed bars in restaurants, hotels and bowling centers; and hotel and motel rooms and other lodging establishments. The law was implemented on August 1, 2005.

Conclusions from a 2006 report, *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General* indicated there is no risk-free level of exposure to secondhand smoke. Breathing even a little secondhand smoke can be harmful (USDHHS, 2006). With the indisputable scientific evidence available, the North Dakota Department of Health (NDDoH) determined it was important to measure the impact of the new law in protecting nonsmokers from secondhand smoke one year after implementation. The NDDoH commissioned Healthy Communities International of Minot State University to conduct an observational study of compliance with the law. The study assessed the impact of North Dakota's smoke-free law on exposure to secondhand smoke in restaurants, bowling alleys, bingo halls, and bars across the state and monitored changes in the workplace environment that supported a smoke-free policy (e.g., posting signage and removing ashtrays).

## **Methods**

Healthy Communities International conducted an observational study of 220 hospitality venues between July and September of 2006 to assess the impact of the smoke-free law. Systematic sampling of restaurants, bowling alleys, bingo halls and bars in each of the state's 53 counties determined the establishments to be surveyed. Trained field workers observed up to six establishments from each county. When available, the establishments included two restaurants, one bowling alley, one bingo hall and two bars from each county in North Dakota. The field workers also assessed co-located hospitality establishments and indicators of support for smoke-free policy (e.g., posting signage and removing ashtrays). After adjusting for establishments that were permanently or seasonally closed and incomplete surveys, the study population consisted of 102 restaurants, 16 bowling alleys, six bingo halls and 96 bars. The systematic geopolitical sampling methodology used resulted in a similar number of establishments observed in each county. The sample was not representative of the establishments in the county, but was a geopolitical representation of all counties in the state. The state law does not require stand-alone bars to be smoke free; therefore, data was not gathered for compliance but as baseline for future measurements.

## **Results/Discussion**

Overall compliance with the law was high, with compliance in the primary establishments assessed at 100 percent for bingo halls and bowling alleys, and 98 percent for restaurants. Compliance rates decreased substantially in the co-located establishments with 70 percent compliance in bar areas of restaurants, 75 percent compliance in dining areas of bowling alleys and 58 percent compliance in bar areas of bowling alleys. Bar

areas of bingo halls were 100 percent compliant during the period of observation. According to state law, conditions related to noncompliance included permitting smoking in areas required to be smoke free; not separately enclosing co-located bars; and not keeping doors of co-located establishments closed. A major area of noncompliance was the bar areas of restaurants as one-fourth were not separately enclosed and one-third did not keep the doors between the bar and restaurant shut. See Table 1 for a summary of compliance.

**Table 1**

***Establishment Compliance with North Dakota Smoke-Free Law***

	Venue		
	Restaurants	Bowling Alleys	Bingo Halls
Number Surveyed (n)	102	16	6
Percent Compliant (n) (%)	(100) (98%)	(16) (100%)	(6) (100%)
Co-located Dining Area		8	
Percent Compliant (n) (%)		(6) (75%)	
Co-located Bar Area	20	12	1
Percent Compliant (n) (%)	(14) (70%)	(7) (58%)	(1) (100%)

**Conclusions**

The study indicates overall compliance with the smoke-free law was high. However, exposure to secondhand smoke still occurred in establishments that the Legislature intended to be smoke free. North Dakotans who work in or visit establishments that permit smoking continue to be exposed to the dangers of secondhand smoke. Restaurants that still allowed smoking and bar areas that were not separately enclosed or did not keep doors shut evidenced this. In addition, the number of facilities

that reported smoke odor when co-located with other establishments was evidence of smoke drift which may have occurred through shared ventilation systems or doors that did not remain shut. North Dakotans who work in or visit establishments that permit smoking continue to be exposed to the dangers of smoking.

### **Recommendations**

Given the high level of compliance with the current law, establishing smoke-free laws appears to be an effective method to reduce exposure to secondhand smoke. Health care advocates and policy makers should continue to work toward establishing smoke-free environments in all public places and places of employment so all workers and patrons are protected from secondhand smoke. Research indicates establishing comprehensive smoke-free policies is the most economic and effective way to fully protect nonsmokers from the dangers of secondhand smoke.

### **References**

Smoking in Public Places and Places of Employment. North Dakota Century Code.

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