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ABSTRACT

Introduction: The purpose of this study is to examine the change in smoking policy status among bars and restaurants since the Georgia Smokefree Air Act of 2005 was implemented and identify restaurant and bar characteristics that are associated with allowing smoking.

Methods: Data was obtained from similar Georgia indoor air surveys conducted in 2006 and 2012. Both surveys were designed to gather information about restaurant and bar smoking policies and examine owner and manager perceptions of the Georgia Smokefree Air Act. Descriptive analysis and paired sample t-tests were performed to identify changes in smoking policy status and other variables over time. Chi-square and logistic regression analysis were used to test for significant associations between establishment smoking policy status and other characteristics.

Results: The percent of restaurants and bars in Georgia allowing smoking nearly doubled from 9.2% in 2006 to 18.2% in 2012. The analysis showed a statistically significant increase in the percentage of establishments allowing smoking when minors are present. After adjusting for the effects of other variables, three variables were significant predictors of allowing smoking: having seats for drinking outdoors, having a liquor license, and generating greater than or equal to 25% of gross sales from alcohol.

Conclusions: The Smokefree Air Act was enacted to protect the health and welfare of Georgia citizens, but the percentage of establishments allowing smoking has risen since it was implemented. These results suggest that policy makers should reevaluate the law and consider strengthening it to make restaurants and bars 100% smokefree without exemptions.

CHANGES IN GEORGIA RESTAURANT AND BAR SMOKING POLICIES
BETWEEN 2006 AND 2012

by

RACHNA CHANDORA

B.A., UNIVERSITY OF GEORGIA

A Thesis Submitted to the Graduate Faculty
of Georgia State University in Partial Fulfillment
of the
Requirements for the Degree

MASTER OF PUBLIC HEALTH

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2013

CHANGES IN GEORGIA RESTAURANT AND BAR SMOKING POLICIES
BETWEEN 2006 AND 2012

by

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Chapter I - Introduction

Tobacco use is the world's leading cause of preventable death and disease. Currently tobacco use kills more than six million people per year worldwide (1), and if current trends continue, tobacco use will kill approximately one billion people during the twenty-first century (2). In the United States alone, smoking and exposure to secondhand smoke kills at least 433,000 people per year and tobacco use affects 8.6 million people who live with serious illnesses caused by smoking (3). Additionally, in the United States, smoking and exposure to tobacco smoke costs approximately \$193 billion per year; \$96 billion in direct health care expenses and \$97 billion in productivity losses (3). In the state of Georgia, over 10,500 people die each year as a result of tobacco use and the economic burden attributed to tobacco use is over \$5.5 billion per year (4,5).

Secondhand smoke is a major health risk that largely affects people who have chosen not to smoke. It affects non-smokers through exposure in public places, such as workplaces, bars, and restaurants. Exposure to secondhand smoke is one of the most common and harmful air pollutants worldwide (6). Among adults, breathing secondhand smoke causes coronary heart disease, lung cancer, stroke, and asthma (7). Children exposed to secondhand smoke are at an increased risk of Sudden Infant Death Syndrome (SIDS), acute respiratory infection, and ear problems (7). Globally, secondhand smoke causes over 600,000 premature deaths per year, and the majority of those affected by

secondhand smoke are women and children (6). Exposure to secondhand smoke in the United States accounts for approximately 42,000 deaths annually; including over 41,000 adults and nearly 900 infants (8). The economic cost of secondhand smoke in the United States is over \$10 billion annually in excess medical care, morbidity, and mortality (9). Among adults in Georgia, 44.7% reported being exposed to secondhand smoke at least once weekly; 21.4% of adults were exposed in their workplaces and 31.8% of adults were exposed in public places (4).

According to the World Health Organization and the U.S. Surgeon General, the only way to fully protect people from the dangers of secondhand smoke is to implement 100% smokefree environments and enforce legislation that completely eliminates smoking from indoor spaces (7,10). Over the last few decades, evidence-based research, citizen advocacy and mobilization, and legislative action have led to a demand for and implementation of countless tobacco control measures worldwide.

In the United States, the first statewide clean indoor air laws were implemented over 30 years ago in Arizona and Minnesota (11). The first successful examples of clean indoor air laws initiated by citizen activism took place at the local level in California in the 1970s and 1980s (11). Since then, the number of clean indoor air laws has grown exponentially, and currently 3,820 local clean indoor air laws have been enacted. A total of 1,050 localities have 100% smokefree provisions in effect, and of those, 866 municipalities have 100% smokefree restaurant laws and 731 municipalities have 100%

smokefree freestanding bar laws (12). Thirty five states are covered by 100% smokefree restaurant laws and 30 states are covered by 100% smokefree bar laws (13).

Georgia does not have a 100% smokefree workplace, restaurant, or bar law, but local laws are permitted. Eighteen localities have implemented 100% smokefree restaurant laws and nine localities have 100% smokefree freestanding bar laws (14). Over the last three decades there has been significant progress in implementing smokefree policies throughout the United States, but Georgia is far behind most other states with only 6.1% of the population covered by 100% smokefree restaurant laws and 3.5% of the population covered by 100% smokefree bar laws (15).

The Georgia Smokefree Air Act was signed into law in 2005 and it prohibits smoking inside most public places and outlines specific guidelines for allowing smoking in and around establishments that serve the public (16). Americans for Nonsmokers Rights Foundation defines 100% smokefree laws as laws that do not have provisions for allowing smoking in separately ventilated rooms and do not have size exemptions (17). The Georgia law cannot be defined as a 100% smokefree air law because there are provisions that permit restaurants and bars to allow smoking if they prohibit minors from the premises or allow smoking in private rooms with a separate air handling system (16). Smoking is also allowed in outdoor areas, such as patios, that are a reasonable distance from any entrance, exit, window, vent, or air intake system of the building. The establishment's owner or manager is given the authority to determine the definition of

reasonable distance (16). The purpose for the enactment of the Smokefree Air Act was to reduce secondhand smoke exposure for employees and patrons of establishments and protect the public, particularly children (18).

Following the implementation of the Georgia Smokefree Air Act, a research collaboration was formed between Michael Eriksen, Sc.D., Dean, Georgia State University, Institute of Public Health; Paul Mowery, formerly of the CDC; and Jim Bason, Ph.D., Director, University of Georgia, Survey Research Center, to examine the effects restaurants and bars of the newly implemented legislation (19). The researchers created the Georgia Smokefree Indoor Air Survey and the Survey Research Center was contracted to administer the survey via telephone interviews. Between May 10, 2006 and July 27, 2006, 1,150 complete surveys were administered. In 2006, Meredith Madden, under the guidance of Michael Eriksen, Sc.D., analyzed the data and reported the findings in a master's thesis entitled, "Predictors of Being Smokefree and Compliant among Restaurant and Bars Following the Implementation of the Georgia Smokefree Air Act of 2005" (19).

In 2012, Dr. Eriksen commissioned a repeat of the 2006 survey in order to examine the changes in Georgia restaurant and bar smoking policy status and compliance and assess the changes in restaurant and bar owner and manager views and perceptions of the law. The survey instrument was slightly modified by researchers at Georgia State University, Institute of Public Health. Modifications were made in order to add new questions and

remove questions relevant only to the 2005 implementation of the law. New questions that were added to the 2012 survey are: do you allow smoking in outdoor areas; how have your revenues been affected by implementing a 100% smokefree policy; would you support a 100% smokefree law in your county or state; are you more or less supportive of the law now than when it was implemented; and how harmful is it for you employees to secondhand smoke while at work. The Survey Research Center completed 834 surveys between June 4, 2012 and July 6, 2012.

The 2006 and 2012 Georgia Smokefree Air Surveys were conducted at the University of Georgia Survey Research Center via computer assisted telephone interview. In order to assure quality, the Survey Research Center conducted interviewer trainings prior to survey implementation, provided onsite supervisors to monitor interviewer progress, and monitored approximately one fourth of all interviews administered. In both surveys, a representative sample size resulted from a disproportionate stratified random sample design based on specified Standard Industrial Classification (SIC) industry codes. Survey Sampling International supplied the telephone numbers for the interviews based on a database of businesses that includes the SIC for type of business and the Federal Information Processing Standard (FIPS) code for country and location. The sampling frame included eating places (5812), drinking places (5813), and restaurants and bars operated by hotels (7011). In order to minimize bias, the sampling frame was stratified by region in the state, whether the establishment is a stand-alone bar, whether the establishment is part of a national chain, and whether the establishment is located in an

area with a clean indoor air law. Establishments were selected to be interviewed based on the probability sample within the strata.

The primary aim of this study is to examine the change in smoking policy status among bars and restaurants since the law was put into place. The sub-aims are to assess the changes in owners' and managers' views, opinions, and perceptions toward the Smokefree Air Act and identify restaurant and bar characteristics that are associated with smoking allowed and non-compliant establishments. The change in smoking policy status and characteristics of restaurants and bars associated with allowing smoking are discussed in the manuscript section of this research. The changes in owners' and managers' views, opinions, and perceptions toward the Smokefree Air Act and characteristics of non-compliant establishments are discussed in the extended discussion section. This research is important because it will help policy makers understand the benefits and weaknesses of the Georgia Smokefree Air Act and help them measure the positive or negative impact of the law on restaurant and bar employees and patrons. This research will also identify the characteristics of establishments that allow smoking and that are non-compliant, thus helping policy makers and public health professionals craft targeted messages and interventions.

Chapter II – Manuscript

Changes in Georgia restaurant and bar smoking policies between 2006 and 2012

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Abstract

Introduction: The purpose of this study is to examine the change in smoking policy status among bars and restaurants since the Georgia Smokefree Air Act of 2005 was implemented and identify restaurant and bar characteristics that are associated with allowing smoking.

Methods: Data was obtained from similar Georgia indoor air surveys conducted in 2006 and 2012. Both surveys were designed to gather information about restaurant and bar smoking policies and examine owner and manager perceptions of the Georgia Smokefree Air Act. Descriptive analysis and paired sample t-tests were performed to identify changes in smoking policy status and other variables over time. Chi-square and logistic regression analysis were used to test for significant associations between establishment smoking policy status and other characteristics.

Results: The percent of restaurants and bars in Georgia allowing smoking nearly doubled from 9.2% in 2006 to 18.2% in 2012. The analysis showed a statistically significant increase in the percentage of establishments allowing smoking when minors are present. After adjusting for the effects of other variables, three variables were significant predictors of allowing smoking: having seats for drinking outdoors, having a liquor license, and generating greater than or equal to 25% of gross sales from alcohol.

Conclusions: The Smokefree Air Act was enacted to protect the health and welfare of Georgia citizens, but the percentage of establishments allowing smoking has risen since it was implemented. These results suggest that policy makers should reevaluate the law and consider strengthening it to make restaurants and bars 100% smokefree without exemptions.

Introduction

Smoking and tobacco use are a leading cause of premature death and disease worldwide. Tobacco use results in nearly six million deaths worldwide per year (1). Globally, secondhand smoke kills approximately 600,000 people (2). The Centers for Disease Control and Prevention (CDC) estimate that in the United States, smoking and exposure to tobacco smoke kills at least 433,000 people per year and the total economic burden of smoking is approximately \$193 billion per year (\$96 billion in direct health care expenses and \$97 billion in productivity losses) (3). Tobacco use is the single most preventable cause of disease in the United States, affecting 8.6 million people who live with serious illness caused by smoking. Exposure to secondhand smoke in the United States accounts for approximately 42,000 deaths annually; including over 41,000 adults and nearly 900 infants (4). In Georgia alone, over 10,500 adults die each year as a result of tobacco use (5). Additionally, 44.7% of adults in Georgia reported some exposure to secondhand smoke; ranking Georgia sixteenth among all the states in exposure to secondhand smoke (6).

Secondhand smoke is a major health risk to non-smokers through exposure in public places, such as bars and restaurants. Exposure to secondhand smoke among adults can cause coronary heart disease, lung and other types of cancer, stroke, and asthma (7). Children exposed to secondhand smoke are at an increased risk of Sudden Infant Death Syndrome (SIDS), acute respiratory infections, and ear problems (7). In the United States, secondhand smoke exposure costs over \$10 billion annually in excess medical care, mortality, and morbidity (8).

In order to fully protect adults and children from the harmful effects of secondhand smoke, smoking should be completely eliminated from indoor spaces (7,9). According to the World Health Organization, the only effective way to protect people from the dangers of secondhand smoke is to implement 100% smoke-free environments, and enforce legislation that requires all indoor public places be 100% smokefree (9). Over the last three decades there has been great progress in implementing smokefree policies throughout the United States, but Georgia still ranks below most states, with only 6.1% of the population covered by 100% smokefree restaurant laws and 3.5% of the population covered by 100% smokefree bar laws (10).

In May 2005, Governor Sonny Perdue signed the Georgia Smokefree Air Act into law; prohibiting smoking inside most public places and outlining specific guidelines for allowing smoking in and around establishments that serve the public (11). The purpose for the enactment of the Smokefree Air Act was to reduce secondhand smoke exposure for employees and patrons of establishments and protect the public, particularly children (12). The act requires that all restaurants and bars allowing access to or employing any person under the age of 18 must prohibit smoking, and establishments that do not comply with the law will be found guilty of a misdemeanor and fined. The primary aims of this study are to examine the change in smoking policy status among bars and restaurants since the law was enacted and identify restaurant and bar characteristics that are associated with allowing smoking.

Methods

Researchers at the Institute of Public Health at Georgia State University commissioned and used data from the Georgia Smokefree Indoor Air Survey; conducted in 2006 and adapted and repeated in 2012. This telephone-based survey was designed as a random sample of restaurant and bar owners in Georgia. Both surveys were representative samples of Georgia restaurant and bar owners, included more than 50 questions, and were designed to gather information about restaurant and bar smoking policy, as well as owner and manager compliance with and perceptions of the Georgia Smokefree Air Act of 2005.

The 2012 survey was administered between June 4, 2012 and July 6, 2012 (the 2006 survey was administered over an eight week period beginning in mid-May 2006). Both surveys were conducted at the University of Georgia Survey Research Center via computer assisted telephone interview. In order to ensure quality, the Survey Research Center conducted interviewer trainings prior to survey implementation and monitored approximately one fourth of all interviews administered. In 2012, 800 survey responses were required to ensure a representative sampling of Georgia restaurants and bars, and 843 surveys were completed. The sample size resulted from a disproportionate stratified random sample design based on specified Standard Industrial Classification (SIC) industry codes. Survey Sampling International supplied the telephone numbers for the interviews based on a database of businesses that includes the SIC for type of business and the Federal Information Processing Standard (FIPS) code for state and county

location. The sampling frame was stratified in order to remove bias and establishments were selected to be interviewed based on the probability sample within the strata.

The purpose of this study is to examine changes in smoking policy status, thus the 2012 survey questions were adapted from the 2006 survey of restaurants and bars in Georgia. The 2006 survey was implemented almost one year after the Smokefree Air Act was enacted. The aim of the original research was to “identify and analyze factors that predict behaviors related to the newly implemented Georgia Smokefree Air Act of 2005” (13). While similar instruments were used in both surveys, slight modifications were made to the survey in 2012; questions focusing on owner and manager experiences with the law were added, and questions relevant only to the 2005 implementation of the law were removed. As part of our research, we performed the same statistical analysis that was done in 2006 and analyzed the change in smoking policy status over time.

The dependent variable examined is smoking policy status of the establishment. The following restaurant and bar characteristics were evaluated: smoking allowed in dining room, waiting areas, bar area, and outside areas; prohibit smoking when minors are present; employees informed of policy; sign posted at the entrance; awareness of law; exemption from law; policy change since law; consider changing policy in future; seats for dining outdoors; seats for drinking outdoors; liquor license; percent gross sales from alcoholic beverages; and cost of a meal.

The data was analyzed using SPSS version 18.0. Basic descriptive analysis and paired samples t-tests were conducted to identify changes in smoking policy status and other variables over time. Chi-square analysis was performed to assess bivariate associations between restaurant characteristics and smoking status. Logistic regression analysis was also performed to assess the effect of each variable while controlling for the effects of other variables. In all analyses, statistical significance was determined by p-value less than .05 and 95% confidence intervals.

Results

The descriptive analysis showed that a large majority of restaurants and bars in Georgia do not allow smoking, had informed employees of their policy, posted signs at their entrance, were aware of the smokefree law, and were in favor of the law (Table 1). Interestingly, the descriptive analysis showed that the percent of restaurants and bars in Georgia allowing smoking almost doubled from 9.2% in 2006 to 18.2% in 2012, a statistically significant finding. In order to further examine why the percentage of smoking allowed restaurants and bars doubled we compared the descriptive characteristics of smoking allowed establishments in 2006 and 2012 and conducted paired samples t-test to identify significant changes over time (Table 2). We found that between 2006 and 2012 there was a statistically significant increase in percentage of restaurants and bars allowing smoking when minors are present (23.3% in 2006 and 62.7% in 2012). The analysis showed that there was a statistically significant decrease in the percentage of establishments permitting smoking in bar areas; the percentage of establishments allowing smoking in bar areas decreased from 68.6% in 2006 to 17.7% in

2012. Additionally, the analysis showed that the percentage of establishments allowing smoking in designated areas of dining rooms more than doubled from 22.4% in 2006 to 45.4% in 2012, but these results were not statistically significant. We also found that over 75% of smoking allowed restaurants and bars permitted smoking in outside areas, such as patios, but the change over time could not be assessed because establishments were not asked about their outdoor smoking policy in 2006. The majority of restaurants and bars allowing smoking had seats for dining and drinking outdoors.

Univariate analysis was done to determine the characteristics of restaurants and bars associated with allowing smoking and being smokefree (Table 3). The analysis found that restaurants and bars generating less than 25% of gross revenue from alcohol sales were associated with statistically significant increased odds of being a smokefree establishment. We also found that restaurants and bars that are considering changing their smoking policy in the future are more than three times as likely to currently allow smoking. Certain variables related to dining and drinking, such as having seats for dining outdoors, having seats for drinking outdoors, and having a liquor license, were also significantly associated with allowing smoking. Similar percentages of smoking and smokefree restaurants and bars informed their employees about their policy, had signs posted at the entry, and were aware of the smokefree law.

Direct logistic regression analysis was performed to assess the impact of a number of characteristics on the likelihood that a restaurant or bar allows smoking. The model contained four independent variables (seats for dining outdoors, seats for drinking

outdoors, having a liquor license, and percent of gross sales from alcohol). The full model containing all predictors was statistically significant, $\chi^2(4, N = 498) = 70.70, p < .001$, indicating that the model was able to distinguish between establishments that allowed and did not allow smoking. As shown in Table 4, three of the independent variables (having seats for dining outdoors, having a liquor license, and percent of gross sales from alcoholic beverages) made a unique statistically significant contribution to the model. The strongest predictor of allowing smoking was being an establishment that has seats for drinking outdoors. Establishments that have seats for drinking outdoors are over three times more likely to allow smoking than establishments that do not have seats for drinking outdoors, controlling for all other factors in the model.

Discussion

Our findings indicate that between 2006 and 2012 the percentage of restaurants and bars that allow smoking in Georgia nearly doubled from 9.2% in 2006 to 18.2% in 2012. Even though there is a smokefree law in place in Georgia, it is possible for the percentage of establishments allowing smoking to increase because the law is not comprehensive and it allows restaurants and bars to permit smoking during times that minors are prohibited, in separated dining areas, and in outdoors areas. The increase in smoking allowed establishments could be attributed to the increase in the percentage of establishments permitting smoking in designated dining areas, the increase in establishments permitting smoking when minors are present, and the large percentage of smoking establishments that permit smoking in outdoor areas.

The study showed that the percentage of smoking allowed establishments that permit smoking in designated dining areas more than doubled (22.4% in 2006 and 45.4% in 2012). Under the smokefree law, establishments are permitted to allow smoking in designated, enclosed dining areas. The findings suggest that between 2006 and 2012, restaurants may have added designated smoking dining areas in order to accommodate smoking patrons. While designated smoking areas in restaurants increased, we found that bars that allowed smoking indoors decreased dramatically.

In 2012, 76.3% of smoking establishments reported allowing smoking in outside areas. Outdoor areas are exempt from the smokefree law, thus the large percentage of smoking establishments permitting smoking in outside areas combined with the increase in establishments with outdoor dining and drinking areas could have led to the increase in establishments that allow smoking. We cannot assess if there was an increase in the number of establishments allowing smoking in outdoor areas because allowing smoking in outdoor areas was a new variable evaluated in 2012.

The researchers also found a significant increase in the percentage of establishments allowing smoking when minors are present (23.3% in 2006 and 62.7% in 2012). These findings show that there are now more establishments that are allowing smoking in the presence of minors, despite the fact that the law explicitly prohibits it. We do not know why more establishments are allowing smoking in the presence of minors, but presume it could be due to the fact that the smokefree law is now eight years old and enforcement of the law may not be as stringent as it was when the law was implemented.

The number of restaurants and bars allowing smoking may have increased so dramatically because under the current law, the exemptions allow restaurant and bar owners' significant opportunities to allow smoking. Further research focusing specifically on the characteristics of restaurants and bars that allow smoking is necessary to fully understand the reason why the number of restaurants and bars allowing smoking has increased.

The purpose of the Smokefree Air Act is to "preserve and improve the health, comfort and environment of the people of this State, including children, adults, and employees, by limiting exposure to tobacco smoke." (11). The increase in the number of establishments allowing smoking shows that the Smokefree Air Act has not meet its primary purpose and modifications should be made to the to the law. Studies have found that comprehensive smokefree laws are more effective at reducing secondhand smoke, improving air quality, and reducing negative health effects than laws with exceptions, such as Georgia's law (14-18).

Policy makers should reassess the Smokefree Air Act and consider strengthening the law to make restaurants and bars 100% smokefree without exemptions. Currently 35 states have laws implementing comprehensive smokefree laws in restaurants and 30 states have laws implementing comprehensive smokefree laws in bars (19). When the Smokefree Air Act was enacted in 2005, Georgia was a leader in tobacco control legislation because Georgia was the first major tobacco producing state to implement smokefree legislation.

Now, eight years later, Georgia has fallen behind most states in regards to smokefree laws. Georgia is one of only 15 states that does not have a 100% smokefree restaurant or bar law (19). The gap between Georgia and other states in terms of protection from secondhand smoke will continue to widen if policy makers do not support and implement stronger smokefree laws.

Knowing the characteristics of establishments that currently allow smoking will help policy makers and public health professionals craft targeted interventions and outreach. Our study found that establishments with alcohol sales making up greater than 25% of gross sales, establishments having a liquor license, and establishments that have seats for drinking outdoors are more likely to allow smoking. Restaurants and bars that have these characteristics may be more likely to oppose a comprehensive smokefree law and have fears about losing revenue and customers if they are mandated to go smokefree. Outreach and educational campaigns should be evidence-based and focus on the fact that smokefree laws do not negatively affect establishments (20-24). These campaigns should be specifically targeted to restaurants and bars that have characteristics associated with allowing smoking.

The strengths of this study were the use of a representative sample, random selection of participants, and the repeat aspect of the study. There were also limitations to this study, including the possibility of interviewee motivation to please the interviewer introducing response bias. Also, respondents may not readily know some of the answers or experience recall bias. The modification of the survey instrument in 2012 was both a

strength and limitation; the modification in 2012 allowed for the removal of questions that were no longer relevant and addition of useful questions, but findings from new questions did not have comparable data from 2006. We believe that these limitations would not affect the outcome or findings of the study.

In Georgia, community leaders and policy makers need to understand that the Smokefree Air Act is not sufficient in protecting and preserving the health, comfort, and environment of the people of Georgia, and action needs to be taken to reduce the number of public establishments that allow smoking. In Georgia, and other states without comprehensive laws, policy makers should support comprehensive smokefree laws because these policies are supported by a large body of research demonstrating that 100% smokefree policies improve the health of the public and save the state money. According to the American Cancer Society Cancer Action Network, making all Georgia workplaces, restaurants, and bars 100% smokefree would save the state approximately \$84.37 million, within a five year period, in costs associated with lung cancer, heart attack, and stroke (25). The findings of this study can help guide the development and implementation of comprehensive smokefree policies for restaurants and bars in Georgia, as well as other states and localities. Law makers and community leaders must act quickly to implement comprehensive smokefree legislation because 100% smokefree laws will save millions of dollars in health care expenses and save thousands of lives annually.

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| Table 1 - Descriptive Characteristics of Restaurants and Bars in Georgia, 2006^a and 2012 | | | | | |
|--|------------------|----------------|------------------|----------------|----------------|
| | 2006 | | 2012 | | |
| | N= 1150 | | N=843 | | |
| Variables | Frequency | Percent | Frequency | Percent | P-value |
| Smoking allowed | 106 | 9.2% | 153 | 18.2% | <.001 |
| Employees informed of policy | 1123 | 98.2% | 804 | 98.2% | .853 |
| Sign posted at entrance | 737 | 64.8% | 575 | 70.7% | .010 |
| Have seats for dining outdoors | 403 | 38.5% | 383 | 47.3% | .005 |
| Have seats for drinking outdoors | 339 | 29.5% | 310 | 38.4% | <.001 |
| Have a liquor license | 427 | 37.3% | 274 | 34.6% | .567 |
| Sales of alcoholic beverages is <25% of gross sales | 246 | 66.0% | 402 | 80.7% | .016 |
| Cost of typical meal is <\$10 | 761 | 67.8% | 460 | 58.5% | <.001 |
| Oppose law | 171 | 15.0% | 51 | 6.4% | .057 |
| Think exempt from law | 63 | 6.2% | 40 | 5.1% | .474 |
| Aware of smokefree law | 1056 | 92.6% | 696 | 86.6% | <.001 |
| Policy changed since law implemented | 217 | 19.2% | 87 | 12.0% | <.001 |
| Consider changing smoking policy in future | 27 | 2.4% | 25 | 3.2% | .206 |

^a2006 frequencies and percentages were obtained from: Madden M. Predictors of Being Smokefree and Compliant Among Restaurant and Bars Following the Implementation of the Georgia Smokefree Air Act of 2005 [master's thesis]. Atlanta (GA): Georgia State University; 2006.

| Table 2 - Descriptive Characteristics of Smoking Allowed Restaurants and Bars in Georgia, 2006 and 2012 | | | | | |
|--|------------------|----------------|------------------|----------------|----------------|
| Variables | 2006 | | 2012 | | P-value |
| | Frequency | Percent | Frequency | Percent | |
| Smoking allowed in dining areas | | | | | |
| Permitted without restriction | 23 | 27.1% | 14 | 9.2% | .919 |
| Permitted in designated areas | 19 | 22.4% | 69 | 45.4% | |
| Not allowed at all | 43 | 50.6% | 69 | 45.4% | |
| Smoking allowed in waiting areas | | | | | |
| Permitted without restriction | 19 | 21.8% | 12 | 7.9% | .531 |
| Permitted in designated areas | 7 | 8.0% | 18 | 11.8% | |
| Not allowed at all | 44 | 50.6% | 112 | 73.7% | |
| No waiting area | 17 | 19.5% | 10 | 6.6% | |
| Is smoking allowed in the bar areas | | | | | |
| Permitted without restriction | 46 | 51.7% | 16 | 10.5% | <.001 |
| Permitted in designated areas | 15 | 16.9% | 11 | 7.2% | |
| Not allowed at all | 23 | 25.8% | 76 | 50.0% | |
| No bar area | 5 | 5.6% | 49 | 32.2% | |
| Is smoking allowed in outside areas | | | | | |
| Permitted without restriction | NA | NA | 55 | 36.2% | NA |
| Permitted in designated areas | NA | NA | 61 | 40.1% | |
| Not allowed at all | NA | NA | 19 | 12.5% | |
| No outside areas | NA | NA | 17 | 11.2% | |
| Smoking allowed when minors are present | | | | | |
| Yes | 21 | 23.3% | 94 | 62.7% | <.001 |
| No | 69 | 76.7% | 56 | 37.3% | |
| Seats for dining outdoors | | | | | |
| Yes | 71 | 66.7% | 104 | 69.3% | .581 |
| No | 35 | 33.3% | 46 | 30.7% | |
| Seats for drinking outdoors | | | | | |
| Yes | 64 | 60.4% | 95 | 63.3% | .871 |
| No | 42 | 39.6% | 55 | 36.7% | |
| Liquor license | | | | | |
| Yes | 85 | 80.2% | 79 | 53.4% | <.001 |
| No | 21 | 19.8% | 69 | 46.6% | |
| Percent of gross sales from alcohol | | | | | |
| <25% | 29 | 27.6% | 49 | 56.3% | .023 |
| ≥25% | 77 | 72.4% | 38 | 43.7% | |

| Variables | Smoking Allowed | Smokefree | P-value |
|--|------------------------|------------------|----------------|
| Employees informed of policy | 99.3% | 97.9% | 0.25 |
| Sign posted at entrance | 69.4% | 71.0% | 0.70 |
| Seats for dining outdoors | 69.3% | 42.3% | <.001 |
| Seats for drinking outdoors | 63.3% | 32.7% | <.001 |
| Have a liquor license | 53.4% | 30.2% | <.001 |
| <25% of gross sales from alcoholic beverages | 56.3% | 85.9% | <.001 |
| Cost of a typical meal | 53.5% | 59.7% | 0.17 |
| Think exempt from law | 8.3% | 4.4% | 0.06 |
| Aware of smokefree law | 88.1% | 86.2% | 0.55 |
| Policy changed since law implemented | 13.2% | 11.7% | 0.61 |
| Consider changing policy in future | 8.2% | 2.0% | <.001 |

| Variable | OR (95% CI) |
|---|--------------------|
| Seats for dining outdoors | |
| Yes | .98 (.33, 2.89) |
| No | [Reference] |
| Seats for drinking outdoors | |
| Yes | 3.16 (1.06, 9.40) |
| No | [Reference] |
| Have a liquor license | |
| Yes | 2.70 (1.43, 5.10) |
| No | [Reference] |
| Percent of gross sales from alcoholic beverages | |
| < 25% | [Reference] |
| ≥ 25% | 2.04 (1.14, 3.64) |

Chapter III - Extended Discussion

In addition to the results discussed in the manuscript, our research found that, the majority of restaurant and bar owners and managers were more supportive of the smokefree law than when it was implemented in 2005 (Table 5). Also, opposition to the law decreased from 15% in 2006 to 6.4% in 2012. These findings demonstrate that support for smokefree legislation increases over time. Tang and colleagues conducted a study to examine attitudinal changes of bar owners and staff regarding a smoke-free bar law; they found that after four years, bar owners and staff experienced a positive and significant attitudinal change related to the smoke-free bar law (20). Similar studies were conducted in Scotland and New Zealand after the implementation of smokefree laws. Both studies found that bar workers approval of and attitudes toward smokefree laws increased over time (21,22). A systematic review of 50 studies reporting legislative smoking bans and restrictions affecting populations found that overall, there is an increase in support for and compliance with smoking bans after legislation is implemented (23). Our findings are consistent with other research that finds that although smokefree policies may be initially debated and contested, support for smokefree legislation increases as understanding of the policy and its benefits increase.

The large majority of restaurant and bar owners and managers surveyed reported that they support the implementation of 100% smokefree laws in their county or statewide in

Georgia (Table 5). Additionally, the majority of owners and managers also support strengthening the law and removing the exemption that allows adult only facilities to allow smoking. Our study also found that over 85% of restaurant and bar owners recognize that their employees prefer to work in a smokefree environment. When considering the implementation of comprehensive smokefree policies, law makers should consider that there is already majority support for 100% smokefree policies among restaurant and bar owners and managers, that support for smokefree policies has increased over time, and that the overwhelming majority of restaurant and bar employees prefer to work in a smokefree environment.

| Table 5 – Georgia Restaurant and Bar Owners’ and Managers’ Views, Opinions, and Perceptions Toward the Smokefree Air Act | | |
|---|------------------|----------------|
| | 2012 | |
| Variables | Frequency | Percent |
| Support 100% smokefree law in county or state | | |
| Yes | 599 | 73.9% |
| No | 197 | 36.1% |
| Do you personally favor or oppose the smokefree law | | |
| Favor | 586 | 73.5% |
| Oppose | 51 | 6.4% |
| Indifferent | 160 | 20.0% |
| More or less supportive of law since implementation | | |
| More | 519 | 90.3% |
| Less | 56 | 9.7% |
| Favor of strengthening law to remove "adult only" exemption | | |
| Yes | 367 | 52.7% |
| No | 329 | 47.3% |
| Employees prefer to work in a smokefree environment | | |
| Yes | 663 | 85.4% |
| No | 61 | 7.9% |
| Does not matter | 52 | 6.7% |
| How harmful is secondhand smoke | | |
| Very | 588 | 77.7% |
| Somewhat | 145 | 19.2% |
| Not at all | 24 | 3.2% |

We also assessed the change in restaurant and bar smokefree policies following the implementation of the Smokefree Air Act. In both 2006 and 2012, the majority of establishments did not report changing their policy in any way since the implementation of the law (Table 6). Of the small percentage of restaurants and bars that did change their policy, the majority became 100% smokefree. In 2012 we asked the establishments that became 100% smokefree how their revenue was affected. Almost 80% of owners and managers found no negative effect on revenues. These findings are consistent with the findings of other research on the economic effect of smokefree policies in restaurants and bars (24-27). Establishments that did not become 100% smokefree reported a variety of reasons for continuing to allow smoking. The most prevalent reasons were: “customers like to smoke” and “we having separate rooms for smokers”. These results show that the law did not cause most restaurants and bars to change their smoking policy status, but of those that did change their smoking policy, the majority became 100% smokefree and experienced a positive or neutral effect on revenues.

| Table 6 – Georgia Restaurants and Bars Change in Smokfree Policies in 2006* and 2012 | | | | |
|---|------------------|----------------|------------------|----------------|
| | 2006 | | 2012 | |
| | N=1150 | | N=843 | |
| | Frequency | Percent | Frequency | Percent |
| Did your smoking policy change since July 2005 | | | | |
| Yes | 217 | 19.2% | 87 | 12.0% |
| No | 915 | 80.8% | 640 | 88.0% |
| If yes, how has your policy changed | | | | |
| 100% smokefree | 166 | 76.5% | 71 | 81.6% |
| Restricted | 50 | 23.0% | 13 | 15.0% |
| Other | 1 | 0.5% | 3 | 3.4% |
| If 100% smokefree, how has revenue been affected | | | | |
| Increased | NA | NA | 12 | 16.9% |
| Stayed same | NA | NA | 44 | 61.9% |
| Decreased | NA | NA | 6 | 8.5% |
| Don't know | NA | NA | 9 | 12.7% |
| If restricted or other, why did you decide not to make establishment 100% smokefree | | | | |
| Customers like to smoke | NA | NA | 3 | 20.0% |
| Competition allows smoking | NA | NA | 1 | 6.7% |
| Don't allow minors | NA | NA | 1 | 6.7% |
| Don't think cigarettes are harmful | NA | NA | 1 | 6.7% |
| Have separate room for smokers | NA | NA | 4 | 26.7% |
| Have good ventilation system | NA | NA | 1 | 6.7% |
| Other | NA | NA | 7 | 46.7% |

*2006 data was obtained from: Madden M. Predictors of Being Smokefree and Compliant Among Restaurant and Bars Following the Implementation of the Georgia Smokefree Air Act of 2005 [master's thesis]. Atlanta (GA): Georgia State University; 2006.

Univariate analysis and logistic regression analysis of compliance and various restaurants and bars characteristics were conducted in order to determine which characteristics are

associated with non-compliance. In order to measure compliance with the Georgia Smokefree Air Act, a new composite variable was created. The purpose of the variable was to measure true compliance rather than self-reported compliance. Establishments were classified as compliant if smoking is not permitted or minors are prohibited when smoking is allowed, a sign is posted at the entrance, and employees are informed of the smoking policy. Establishments were classified as non-compliant if they allow smoking when minors are permitted or do not post a sign or do not inform employees of smoking policy. Table 7 illustrates the details of the composite variable and its contributing factors.

| Table 7 - Descriptive Analysis of Variables Used to Create Composite Compliant Variable, 2012 | | |
|--|------------------|----------------|
| New composite variable | Frequency | Percent |
| Compliant (n=815) | 505 | 62.0% |
| Variables making up the composite | Frequency | Percent |
| Smoking allowed (n=842) | 153 | 18.2% |
| Sign posted at entrance (n=813) | 575 | 70.7% |
| Employees informed of policy (n=819) | 804 | 98.2% |
| Minors prohibited (n=150) | 56 | 37.4% |

By creating the composite variable, we found that in 2012 only 62% of restaurants and bars were actually compliant. Survey respondents were asked if they believed themselves to be compliant; this was called perceived or self-reported compliance. Perceived or self-reported compliance among restaurant and bar owners was much higher than actual compliance; in 2012 95.4% of establishments perceived themselves to be compliant (Table 8). Between 2006 and 2012, actual compliance and self-reported compliance stayed almost the same.

| | 2006 | | 2012 | |
|------------------------------------|------------------|----------------|------------------|----------------|
| | N=1150 | | N=843 | |
| Variables | Frequency | Percent | Frequency | Percent |
| Actual compliance | 717 | 63.6% | 505 | 62.0% |
| Perceived/self-reported compliance | 963 | 98.1% | 765 | 95.4% |

Univariate analysis of compliance showed that establishments with seats for dining outdoors, establishments with seats for drinking outdoors, establishments that have a liquor license, and establishments generating $\geq 25\%$ of gross sales from alcoholic beverages are associated with statistically significant increased odds of being non-compliant (Table 9).

| Variables | Compliant | Non-compliant | P-value |
|--|------------------|----------------------|----------------|
| Seats for dining outdoors | 43.8% | 53.3% | .009 |
| Seats for drinking outdoors | 33.0% | 47.7% | <.001 |
| Have a liquor license | 29.2% | 43.0% | <.001 |
| <25% of gross sales from alcoholic beverages | 84.6% | 74.0% | .004 |
| Cost of a typical meal | 60.3% | 54.5% | 0.11 |
| Think exempt from law | 5.8% | 3.7% | 0.20 |
| Aware of smokefree law | 87.4% | 85.4% | 0.41 |
| Policy changed since law implemented | 13.3% | 9.8% | 0.15 |
| Consider changing policy in future | 2.9% | 3.7% | 0.56 |
| Employees prefer smokefree | 87.3% | 82.3% | 0.06 |

Direct logistic regression was performed to assess the impact of the statistically significant variables on the likelihood that a restaurant or bar is non-compliant. The model contained four independent variables (seats for dining outdoors, seats for drinking outdoors, having a liquor license, and percent of gross sales from alcohol). The full

model containing all predictors was statistically significant, $\chi^2(4, N = 492) = 32.58, p < .001$, indicating that the model was able to distinguish between establishments that were compliant and non-compliant. As shown in Table 10, two of the independent variables, seats for drinking outdoors and having a liquor license, made a unique statistically significant contribution to the model. The strongest predictor of being non-compliant was being an establishment that has seats for drinking outdoors. Establishments that have seats for drinking outdoors are over three times more likely to be non-compliant than establishments that are compliant, controlling for all other factors in the model.

| Table 10 - Logistic Regression Predicting Likelihood of Being Non-compliant | |
|--|--------------------|
| Variable | OR (95% CI) |
| Seats for dining outdoors | |
| Yes | .50 (.23, 1.09) |
| No | [Reference] |
| Seats for drinking outdoors | |
| Yes | 3.05 (1.37, 6.79) |
| No | [Reference] |
| Have a liquor license | |
| Yes | 1.90 (1.22, 2.98) |
| No | [Reference] |
| Percent of gross sales from alcoholic beverages | |
| < 25% | [Reference] |
| ≥ 25% | 1.07 (.63, 1.80) |

Analysis of the data indicate that establishments having seats for dining outdoors and/or establishments that have a liquor license are more likely to allow smoking and be non-compliant. Policy makers should be aware that establishments with these characteristics may be more likely to voice opposition to comprehensive smokefree laws. The findings

highlight the importance of smokefree outreach and education focused on restaurants and bars that have seats for drinking outdoors and establishments that have a liquor license.

The results of this study find that in Georgia, the percentage of smoking allowed restaurants and bars almost doubled between 2006 and 2012. Even though there is a smokefree law in place in Georgia, it is possible for the percentage of establishments allowing smoking to increase because the law is not comprehensive and it allows restaurants and bars to permit smoking during times that minors are prohibited, in separated dining areas, and in outdoors areas. The increase in smoking allowed establishments could be attributed to the increase in the percentage of establishments permitting smoking in designated dining areas, the increase in establishments permitting smoking when minors are present, and the large percentage of smoking establishments that permit smoking in outdoor areas.

These results indicate that the Smokefree Air Act does not sufficiently preserve and improve the health, comfort, and environment of the people of Georgia by limiting exposure to tobacco smoke. When this law was enacted in 2005, Georgia was a leader in tobacco control legislation because Georgia was the first major tobacco producing state to implement smokefree legislation. Now, eight years later, Georgia has fallen behind most states in terms of smokefree laws. Georgia is one of 15 states that does not have a 100% smokefree restaurant or bar law (13).

According to the American Cancer Society Cancer Action Network, making all Georgia workplaces, restaurants, and bars 100% smokefree would save the state approximately \$84.37 million, within a five year period, in costs associated with lung cancer, heart attack, and stroke (28). The evidence shows that 100% smokefree laws improve the health of the public, save lives, and save millions of dollars in health care expenses. The public and public health officials should urge lawmakers in Georgia, and other states without comprehensive smokefree laws, to urgently enact and successfully implement comprehensive smokefree legislation.

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Appendix A

Georgia Smokefree Air Act 2005

Chapter 290-5-61

**RULES
OF
DEPARTMENT OF HUMAN RESOURCES
PUBLIC HEALTH**

**CHAPTER 290-5-61
GEORGIA SMOKEFREE AIR ACT OF 2005**

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Georgia Smokefree Air Act 2005**Chapter 290-5-61**

290-5-61-.01 Authority. The Department of Human Resources and the county boards of health and their duly authorized agents are authorized and empowered to enforce compliance with the Georgia Smokefree Air Act of 2005, and the rules and regulations adopted and promulgated in connection therewith. The county boards of health may annually request other governmental and educational agencies having facilities within the area of the local government to establish local operating procedures in cooperation and compliance with this chapter.

Authority O.C.G.A. Secs. 31-2-4, 31-12A-10, 31-12A-11, 31-12A-12.

290-5-61-.02 Purpose. These regulations establish standards in accordance with Title 31 Chapter 12A to protect the citizens of Georgia from exposure to secondhand smoke in most enclosed indoor public areas to which the public is invited or in which the general public is permitted. The purpose of the Georgia Smokefree Air Act of 2005 is to preserve and improve the health, comfort and environment of the people of this State, including children, adults, and employees, by limiting exposure to tobacco smoke.

Authority O.C.G.A. Secs. 31-2-4, 31-12A-12.

290-5-61-.03 Applicability. These rules shall apply as follows:

- (1) Smoking shall be prohibited in all enclosed public places in this state except as permitted in Code Section 31-12A-6.
- (2) Smoking shall be prohibited in all enclosed areas within places of employment except as permitted in Code Section 31-12A-6.
 - (a) Such prohibition on smoking shall be communicated to all current employees and to all prospective employees upon their application for employment.
 - (1) The building owner, agent, operator, person in charge or proprietor of a public place shall conspicuously post the work place policy pertaining to smoking in a position clearly visible to all employees.
 - (2) The building owner, agent, operator, person in charge or proprietor of a public place shall provide the work place policy pertaining to smoking in materials provided to new employees.
- (3) These rules and regulations shall not be construed to permit smoking where it is otherwise restricted by other applicable laws.
- (4) These rules and regulations shall be liberally construed so as to further the purposes of the Smokefree Air Act of 2005.

Authority O.C.G.A. Secs. 31-2-4, 31-12A-4, 31-12A-5, 31-12A-12, 31-12A-13.

Georgia Smokefree Air Act 2005**Chapter 290-5-61**

290-5-61-.04 Definitions. The following definitions shall apply in the interpretation of these rules and regulations:

- (a) "Act" means the Smokefree Air Act of 2005.
- (b) "County Board of Health" means a board established in accordance with Chapter 3 of Title 31 of the Official Code of Georgia Annotated. There is established a county board of health in each and every county of this State empowered to exercise authority in all matters within the county pertaining to health unless the responsibility for enforcement of a matter belongs to another agency under law.
- (c) "Department" means Georgia Department of Human Resources.
- (d) "Private Club" means a facility that is not available for public use, control, or participation and is intended for or restricted to the use of a particular group or class of persons.
- (e) "Reasonable Distance" means that smoking shall occur at a distance outside any enclosed area where smoking is prohibited sufficient to ensure that tobacco smoke does not enter the area through entrances, windows, ventilation systems or any other means, and to ensure that those indoors and those entering or leaving the smokefree area are not involuntarily exposed to secondhand tobacco smoke.
- (f) "Ventilation System" means the continuous supply and removal of air with respect to a space, either by natural or mechanical means, to control chemical and physical hazards well as to maintain temperature and relative humidity.

Authority O.C.G.A. Secs. 31-2-4, 31-12A-10, 31-12A-2, 31-12A-12.

290-5-61-.05 Signage. The following specifications must be met to comply with the requirement related to 'No Smoking' signs.

- (1) Visibility. 'No Smoking' signs or signs bearing the international 'No Smoking' symbol shall be easily readable, be conspicuously posted, and shall not be obscured in any way.
- (2) Format. The words 'No Smoking', 'Smoking Permitted', 'Smoking Permitted, No One Under the Age of 18 Allowed', and 'No Smoking Beyond this Point' shall not be less than 1.5 inches in height. These signs shall bear the applicable annotated code section, 'O.C.G.A. § 31-12A-1 et seq.'
- (3) Smokefree Public Place. In a public place where smoking is prohibited, the building owner, agent, operator, person in charge or proprietor shall conspicuously post a sign bearing the words 'No Smoking' or conspicuously post the international 'No Smoking' symbol on all entrances or in a position clearly visible on entry into the place.

Georgia Smokefree Air Act 2005**Chapter 290-5-61**

(4) Smoking Area in a Public Place. In a public place where smoking is allowed in an enclosed area, the building owner, agent, operator, person in charge or proprietor shall conspicuously post a sign bearing the words 'Smoking Permitted, No One Under the Age of 18 Allowed' on all entrances or in a position clearly visible on entry into the place.

(a) The building owner, agent, operator, person in charge or proprietor shall conspicuously post a sign inside the exit of all smoking areas, if the exit leads to a smokefree area. The sign shall bear the words, 'No Smoking Beyond this Point' or bear the international 'No Smoking' symbol.

(5) Exempt Status. The building owner, agent, operator, person in charge or proprietor of a public place that is exempt from the Act shall conspicuously post a sign using the words 'Smoking Permitted, No One Under the Age of 18 Allowed' on all entrances or in a position clearly visible on entry into the place. A private residence is not required to comply with this provision unless such residence is used as a licensed child care, adult care, or health care facility.

Authority O.C.G.A. Secs. 31-2-4, 31-12A-6, 31-12A-7, 31-12A-8, 31-12A-12.

290-5-61-.06 Air Handling Systems.

(1) Statement. The building owner, agent, operator, person in charge or proprietor of a public place that includes an enclosed area in which smoking is permitted shall keep on file a written statement from a conditioned air contractor licensed by the State of Georgia or from an appropriately certified professional that the air handling system serving the enclosed area meets the requirements as set forth in the Act.

(2) Air Balancing Firm Statement. The building owner, agent, operator, person in charge or proprietor of a public place that includes an enclosed area in which smoking is permitted shall provide, upon request by the Department, county boards of health, or their duly authorized agents, a written statement from a certified air balancing firm that the air handling system performs as designed so as to meet the requirements as set forth in the Act.

(3) Manufacturer Guidelines. The building owner, agent, operator, person in charge or proprietor of a public place that includes an enclosed area in which smoking is permitted shall keep on file manufacturer guidelines and specifications for the air handling systems(s) in use.

(4) Maintenance Records and Logs. The building owner, agent, operator, person in charge or proprietor of a public place that includes an enclosed area in which smoking is permitted shall keep on file all the maintenance records and logs for the current and previous year for the air handling system(s) in use.

Georgia Smokefree Air Act 2005**Chapter 290-5-61**

(5) Access to Records. The building owner, agent, operator, person in charge or proprietor of a public place shall provide records requested by the Department, county boards of health, or their duly authorized agents within three working days of the request.

Authority O.C.G.A. Secs. 31-2-4, 31-12A-6, 31-12A-12.

290-5-61-.07 Hours of Operation. A smokefree public place must prohibit smoking twenty four hours per day in any area that does not meet the requirements pertaining to enclosed areas and smoking areas as specified in the Act.

Authority O.C.G.A. Secs. 31-2-4, 31-12A-2, 31-12A-6, 31-12A-12.

290-5-61-.08 Outdoor Smoking Areas.

(1) Reasonable Distance. The building owner, agent, operator, person in charge or proprietor of a public place may designate an outdoor smoking area that is located a reasonable distance from any entrance, exit, window, vent, or air intake system of a building where smoking is prohibited.

(a) If the location of an entrance, exit, window, vent, or air intake system of a building where smoking is prohibited or if the location of a barrier, such as a wall, property line, parking lot, or street makes the reasonable distance requirement impossible to meet, then the building owner, agent, operator, person in charge or proprietor of a public place shall maximize the distance between the outdoor smoking area and the entrance, exit, window, or air intake system of a building where smoking is prohibited.

(2) Ashtrays. Any ashtrays located in an outdoor smoking area shall be placed a reasonable distance from any entrance, exit, window, vent, or air intake system.

Authority O.C.G.A. Secs. 31-2-4, 31-12A-12.

290-5-61-.09 Enforcement

(1) The Department, county boards of health, and their duly authorized agents shall enforce the Act.

(a) Any citizen who desires to register a complaint under the Act may initiate enforcement with the Department, county boards of health, and their duly authorized agents.

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(b) The Department, county boards of health, and their duly authorized agents may, while an establishment is undergoing otherwise mandated inspections, inspect for compliance with the Act.

(c) In addition to the remedies provided by the Act, the Department, county boards of health, or their duly authorized agents may apply for injunctive relief to enforce the provisions of the Act in any court of competent jurisdiction.

(2) An owner, manager, operator, or employee of an establishment regulated by these rules and regulations shall inform persons violating these rules and regulations of the appropriate provisions.

(3) The enactment of any other local law, rules and regulations of state or local agencies, and local ordinances prohibiting smoking that are more restrictive than the Act are enforceable.

(4) The Act shall not be construed to permit smoking where it is otherwise restricted by other applicable laws.

Authority O.C.G.A. Secs. 16-12-2, 31-2-4, 31-5-9, 31-12A-10, 31-12A-11, 31-12A-12, 31-12A-13.

290-5-61-.10 Penalties. Individuals found in violation of the Act shall be guilty of a misdemeanor and, if convicted, shall be punished by a fine not less than \$100.00 and not more than \$500.00.

Authority O.C.G.A. Secs. 16-12-2, 31-2-4, 31-5-8, 31-12A-12.

Appendix B

Georgia Smoke free Indoor Air Survey

May 31, 2012

Hello, my name is [NAME], and I'm calling from the University of Georgia in Athens. The Survey Research Center is assisting Georgia State University in conducting a short study today about your establishment's experience with the Georgia Smokefree Law that took effect in July 2005 and we would like to speak with the owner of the establishment or the general manager. Is that who I am speaking with?

[INTERVIEWER: THE INTERVIEW SHOULD LAST ABOUT 15 MINUTES]

1. Yes
2. No [MAY I SPEAK WITH THE OWNER OR THE GENERAL MANAGER?]

[INTERVIEWER: RE-SCHEDDLE CALLBACK FOR MORE APPROPRIATE TIME IF NECESSARY;
RE-INTRODUCE STUDY IS NECESSARY]

[INTERVIEWER: IF YOU REACH A HOTEL, ASK FIRST IF THE ESTABLISHMENT INCLUDES A DINING ROOM OR BAR IF "YES," ASK TO SPEAK TO THE DINING ROOM AND BAR MANAGER]

Great. As I mentioned, we'd like to ask you about your experiences with the Georgia Smokefree law. Before we begin though, I want to let you know that all of the information that you provide will be kept strictly confidential. The interview is voluntary, and if you don't want to answer any particular question, just tell me and we'll skip to the next one. Also, my Supervisor may listen to part of the interview for quality control purposes. Before I get started I need to ask a few questions to make sure your establishment is eligible to participate in the study.

S1 - Does your establishment include an enclosed dining or drinking area? [IF ASKED, AN ENCLOSED AREA MEANS NOT OPEN TO THE OUTSIDE EXCEPT FOR CLOSABLE WINDOWS AND DOORS]

1. Yes
2. No [TERMINATE WITH "I'm sorry, but we need to speak to establishments that include an enclosed dining or drinking area. But thank you for your help."]

9. RefJDKINA

S2 - Is your establishment open to the general public during all operating hours?

1. Yes
2. No [TERMINATE WITH "I'm sorry, but we need to speak to establishments that are open to the public during all hours. But thank you for your help."]

9. RefJDKINA

Okay, good, your establishment qualifies for participation in the study. To begin

Q1 - Is smoking allowed anywhere in your establishment?

- | | |
|--------------------|----------------------------|
| 1. Yes | 7. Refused [SKIP TO Q3] |
| 2. No [SKIP TO Q3] | 8. Don't Know [SKIP TO Q3] |

Q2 - For each of the following areas of your restaurant indicate whether smoking is allowed without restriction, permitted in designated areas only, or not allowed at all.

Q2.1 - The Dining area (is smoking allowed in the dining area without restriction, permitted in designated areas only, or not allowed at all?)

- | | |
|---------------------------------------|---------------|
| 1. Allowed without restriction | 7. Refused |
| 2. Permitted in designated areas only | 8. Don't know |
| 3. Not allowed at all | |

Q2.2 - The Waiting area

- | | |
|---------------------------------------|---------------|
| 1. Allowed without restriction | 7. Refused |
| 2. Permitted in designated areas only | 8. Don't know |
| 3. Not allowed at all | |
| 4. No waiting area | |

Q2.3 - The Bar area

- | | |
|---------------------------------------|---------------|
| 1. Allowed without restriction | 7. Refused |
| 2. Permitted in designated areas only | 8. Don't know |
| 3. Not allowed at all | |
| 4. No bar area | |

Q2.4 - Outside areas such as patios

- | | |
|---------------------------------------|---------------|
| 1. Allowed without restriction | 7. Refused |
| 2. Permitted in designated areas only | 8. Don't know |
| 3. Not allowed at all | |
| 4. No outside areas | |

Q2.5 - You mentioned that smoking is allowed in your establishment. Do you prohibit smoking when minors are present?

- | | |
|---|---------------|
| 1. Yes | 7. Refused |
| 2. No | 8. Don't know |
| 3. No minors allowed in our establishment | |

[SKIP TO Q5]

Q3 - What are employees instructed to do if a customer lights up?

- | | |
|--------------------------|---------------|
| 1. Enter response: _____ | 7. Refused |
| | 8. Don't Know |

Q4 -When was your establishment's smoke free policy implemented?

- | |
|---|
| 1. Before the July 2005 Georgia Smokefree Law |
| 2. After the July 2005 Georgia Smokefree Law |
| 7. Refused |
| 8. Don't know |

Q5 - Have all employees been informed of your restaurant's smoking policy, either by your written or oral communication or as a part of training?

- | | |
|--------|---------------|
| 1. Yes | 7. Refused |
| 2. No | 8. Don't know |

Q6 - Who is responsible for enforcing the smoking policy for your restaurant?

1. Local health department
2. State health department
3. Corporate headquarters or franchising operation
4. Business owner
5. Other [SPECIFY _____]
7. Refused
8. Don't Know

Q7 - Do you have a sign posted at the entry of your restaurant to inform patrons about your smoking policy?

- | | |
|--------|---------------|
| 1. Yes | 7. Refused |
| 2. No | 8. Don't know |

Q8 - Are you aware that a smokefree law took effect in Georgia in July 2005? [The law was actually signed by Governor Perdue in May 2005].

- | | |
|--------|---------------|
| 1. Yes | 7. Refused |
| 2. No | 8. Don't know |

Q9 – Have you received any information from the health department about the law within the last year?

1. Yes, from the Georgia Department of Public Health (Local Government)
2. Yes, from the State Department of Public Health (State Government)
3. No
4. Don't know

Q10. Do you think that your establishment is exempt from the GA smokefree indoor air law?

- | | |
|---------------------|-----------------------------|
| 1. Yes | 7. Refused [SKIP TO Q12] |
| 2. No [SKIP TO Q12] | 8. Don't know [SKIP TO Q12] |

Q11 - Why do you think your establishment is exempt from the GA smokefree indoor air law?

1. We deny access to any person under the age of 18 and only employ individuals over the age of 18
2. We have designated smoking areas with their own ventilation system
3. Smoking is restricted to certain times of the day
4. All of the above
7. Refused
8. Don't know

Q12 - To what extent do you feel your restaurant is compliant with the GA smokefree law? Would you say not at all, partially, or fully?

1. Not at all compliant
2. Partially compliant
3. Fully compliant

Q13 - Are you aware of penalties for non compliance with the smoke free law?

- | | |
|--------|---------------|
| 1. Yes | 7. Refused |
| 2. No | 8. Don't know |

Q14 - Have you ever been fined for non compliance?

- | | |
|---------------------|-----------------------------|
| 1. Yes | 7. Refused [SKIP TO Q16] |
| 2. No [SKIP TO Q16] | 8. Don't know [SKIP TO Q16] |

Q15 - How much were you fined?

1. Answer _____
7. Refused
8. Don't Know

Q16 - Did your restaurant's smoking policy change in any way since July 1, 2005?

1. Yes
2. No [SKIP TO Q18]
7. Refused [SKIP TO Q18]
8. Don't know [SKIP TO Q18]

Q17 - How has your restaurant's smoking policy changed? Did your establishment become 100 % smokefree, did it change to an adults only establishment (that is, no persons under the age of 18 admitted as patrons or employed), was smoking restricted to certain times of the day, was smoking restricted to certain parts of the establishment, or did it change in some other way

1. 100% smokefree
2. Restricted to adults only [SKIP TO 17.2]
3. restricted to certain times of day [SKIP TO 17.2]
4. restricted to certain parts of the establishment [SKIP TO 17.2]
5. Other [SPECIFY _____] [SKIP TO 17.2]
7. Refused [SKIP TO Q18]
8. Don't know [SKIP TO Q18]

Q17.1 - How was your revenue been affected by having a smokefree policy?

1. Revenue increased
2. Revenue stayed the same
3. Revenue decreased
4. Don't know

[INTERVIEWER – SKIP TO Q18]

Q17.2 – Why did you decide not to make your restaurant 100% smoke free [CHOOSE ONE OR MORE]:

1. Our customers like to smoke
2. Our competition allows smoking
3. We don't allow minors in our restaurant
4. We don't think cigarette smoke is harmful
5. We have a separate room for smokers
6. We have a good ventilation system
7. Other [OPEN ENDED]
8. Refused
9. Don't Know

Q18 - Is your restaurant considering changing its smoking policy in any way in the future?

1. Yes
2. No [SKIP TO Q21]

Q19 - In what ways might your policy be changed?

1. Enter response: _____
7. Refused [SKIP TO Q21]
8. Don't know [SKIP TO Q21]

ASK Q20 AND Q21 ONLY IF Q17 = 4]

Q20 - Earlier you indicated that smoking is allowed in certain parts of the restaurant. Are the parts where smoking is allowed closed off from the non-smoking parts of the restaurant?

- | | |
|--------|---------------|
| 1. Yes | 7. Refused |
| 2. No | 8. Don't know |

Q21 - Are the parts of the restaurant where smoking is allowed ventilated by a separate HVAC system than the system used for the non-smoking parts of the restaurant?

- | | |
|--------|---------------|
| 1. Yes | 7. Refused |
| 2. No | 8. Don't know |

Q22 - Does your restaurant have seats for dining outdoors?

- | | |
|--------|---------------|
| 1. Yes | 7. Refused |
| 2. No | 8. Don't know |

Q23 - Does your restaurant have seats for drinking outdoors?

- | | |
|--------|---------------|
| 1. Yes | 7. Refused |
| 2. No | 8. Don't know |

Q24 - Do you personally favor or oppose the GA smokefree indoor air law, or doesn't it make any difference

- | | |
|-------------------------------|---------------|
| 1. Favor | 7. Refused |
| 2. Opposed | 8. Don't know |
| 3. Does not make a difference | |

Q25 Would you support a 100% smokefree law in your county or throughout the state of Georgia?

- | | |
|--------|---------------|
| 1. Yes | 7. Refused |
| 2. No | 8. Don't know |

Q26 - Would you say you are more supportive or less supportive of the law than you were when it took effect in July 2005

1. More supportive
2. Less supportive [SKIP TO Q28]
7. Refused [SKIP TO Q29]
8. Don't Know [SKIP TO Q29]

Q27 Why are you more supportive of the law? (Respondents may choose more than one answer)

1. Customers are supportive of the law
2. Establishments revenues have increased
3. The establishment is cleaner
4. Employees are healthier
5. Other _____\

Q 28 Why are you less supportive of the law? (Respondents may choose more than one answer)

1. Customers are unhappy
2. A majority of the establishments customers are smokers
3. Establishments revenues have gone down
4. Employees are unhappy
5. The law infringes on individual and business rights
6. Other _____

Q29 - Are you in favor of strengthening the GA smoke free air law to remove the exemption for "adult only" establishments?

- | | |
|--------|---------------|
| 1. Yes | 7. Refused |
| 2. No | 8. Don't know |

Q30 - Do you think your competition complies with the GA smokefree law?

- | | |
|--------|---------------|
| 1. Yes | 7. Refused |
| 2. No | 8. Don't know |

[CATI PROGRAMMER: ASK Q31 ONLY IF Q1 = 1]

Q31 - Do you think your employees prefer to work in a smokefree environment?

- | | |
|--------------------|---------------|
| 1. Yes | 7. Refused |
| 2. No | 8. Don't know |
| 3. Does not matter | |

Q32 - How often do you receive comments from customers about your restaurant's smoking policy? Would you say almost every day, once or twice per week, a few each month, a few every year, or almost never?

- | | |
|--------------------------|---------------|
| 1. Almost every day | 7. Refused |
| 2. Once or twice per day | 8. Don't know |
| 3. A few each month | |
| 4. A few every year | |
| 5. Almost never | |

[ASK Q33 ONLY IF Q 32 = 1, 2, 3, OR 4 AND Q 1 = 1]

Q33 - Would you say most of the comments you get are from patrons who like your 'smoking allowed' policy or from patrons who don't like the smoke in your restaurant, or are the comments about equal?

- | | |
|---------------------------------------|---------------|
| 1. More comments like policy | 7. Refused |
| 2. More comments don't like the smoke | 8. Don't know |
| 3. About equal | |

[SKIP TO Q36]

[ASKQ34 ONLY IF Q 32 = 1,2,3, OR 4 AND Q1 =2]

Q34 - Would you say most of the comments you get are from patrons who like your 'smokefree' policy or from patrons who don't like the policy, or are the comments about equal?

- | | |
|---------------------------------------|---------------|
| 1. More comments like policy | 7. Refused |
| 2. More comments don't like the smoke | 8. Don't know |
| 3. About equal | |

Q35 - Would you allow someone to smoke an electronic or e-cigarette in your restaurant or bar?

1. Yes
2. No
7. Refused
8. Don't Know

Q36 - How much does it cost for a typical meal at your restaurant, excluding alcoholic beverages? Would you say less than \$10, between \$10 and \$20, between \$20 and \$30, or more than \$30?

- | | |
|-----------------|---------------|
| 1. < \$10 | 7. Refused |
| 2. \$10 - \$20 | 8. Don't know |
| 3. \$20 - \$30 | |
| 4. \$30 or more | |

Q37 - Including yourself, how many people work at your restaurant?

- | | |
|--------------|---------------|
| _____ people | 7. Refused |
| | 8. Don't know |

Q38 - How many of these are full-time?

_____ people

7. Refused

8. Don't know

Q39 - Have you ever smoked?

1. Current smoker [SKIP TO Q41]
2. Past smoker
3. Never smoked [SKIP TO Q41]

Q40 - How long ago did you quit?

1. Within the last year
2. 1-5 years ago
3. 5-10 years ago
4. Over 10 years ago

Q41 - How harmful do you think it is for employees to breathe secondhand smoke while at work?

1. Very harmful
2. Somewhat harmful
3. Not at all harmful
7. Refused
8. Don't Know

Q42 - What is the maximum number of patrons your restaurant seats in all public areas, including the bar but excluding seats solely for private parties?

_____ people

7. Refused

8. Don't know

Q43 - Do you have a liquor license?

1. Yes
2. No

7. Refused

8. Don't know

Q44 - About what percent of your gross sales come from the sale of alcoholic beverages? Would you say less than 25, 25 - 49, or 50 or more?

1. < 25 (1/4)
2. 25 - 49 (1/4 to 1/2)
3. 50 or more (1/2 or more)

7. Refused

8. Don't know

Q45 - May we contact you again in the future if we have additional questions?

1. Yes
2. No [SKIP TO END]

7. Refused [SKIP TO END]

8. Don't Know [SKIP TO END]

Q46 - May I please have your name so I can ask specifically for you? Please remember that your name will be kept strictly confidential, and will be stripped from the responses you have provided.

_____ Name

Those are all of the questions I have and I want to thank you for taking time out of your busy schedule to assist us today. Goodbye.

IMPORT AREA CODE AND TELEPHONE NUMBER