DEVELOPING A LEGAL ANALYSIS PROTOCOL FOR COUNTY-LEVEL SMOKEFREE ORDINANCES IN GEORGIA

by

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(Under the Direction of M. Mahmud Khan, PhD)

ABSTRACT

Background: Tobacco use and exposure to secondhand and thirdhand smoke pose significant public health challenges. The 2005 Smokefree Air Act established baseline protections against tobacco use in Georgia but left a substantial list of exemptions. Several local jurisdictions have enacted additional smokefree ordinances to address these gaps. However, disparities in the scope, coverage, and enforcement of these ordinances create uneven health protections against tobacco-related harm.

Objective: This study aimed to develop and apply a legal analysis protocol to systematically evaluate county-level smokefree ordinances in Georgia, assess their strength, and explore associations between ordinance strength and socio-demographic characteristics and smoking prevalence trends.

Methods: A legal epidemiology framework was employed by developing a coding protocol and a quantitative scoring framework to assess ordinances of 30 counties as of December 31, 2023. The counties were purposively selected based on changes in smoking prevalence between 2015 and 2021. Correlation analyses and t-tests were used to explore associations and test hypotheses.

Results: Thirteen of the 30 sampled counties had codified local smokefree regulations. Significant heterogeneity was found in ordinance scope, coverage, and enforcement provisions. Ordinance strength scores varied widely, with Gwinnett County (84/111 points) demonstrating a "Strong" policy, while many counties relied on minimum state standards. Stronger ordinances were generally associated with lower smoking rates, dense population, less rurality, and higher socioeconomic indicators. Counties with the most improved smoking rates between 2015 and 2021 have stronger smokefree ordinances, ($p < .001$).

Conclusion: This study successfully developed a replicable protocol for analyzing county-level smokefree ordinances. The findings highlight substantial disparities in local smokefree protections.

INDEX WORDS: Tobacco use prevention, Smokefree laws, Legal epidemiology.

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DEDICATION

I dedicate this work to all working in tobacco use control.

To Mom and Dad, I wish you were here to celebrate with me. All your hard work and sacrifices to help your children have a better life were not in vain. Rest in peace!

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I honor God Almighty for blessing me with this chance and resources to pursue this academic goal. Your name be exalted forevermore!

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CHAPTER 1

INTRODUCTION

Legal epidemiology framework

Until recently, it was difficult to analyze public health law disparities effectively and show empirical evidence of the differences and the effect of laws on population health (Burris et al., 2010). The field of Legal Epidemiology was developed precisely to fill this gap. Legal epidemiology, defined as the scientific study and deployment of law as a factor in the cause, distribution, and prevention of disease and injury in a population (Burris et al., 2016), plays a crucial role in analyzing how legal frameworks influence health outcomes. It examines the distribution and impact of laws and regulations, such as smokefree laws, on populations, providing evidence-based insights into their effectiveness in promoting health and preventing disease. By combining legal research with epidemiological methods, legal epidemiology can assess public health laws' reach, enforcement, and impact, offering policymakers data-driven recommendations for improving health through legal interventions (Burris et al., 2016).

The application of legal epidemiology is crucial for informing evidence-based policymaking in public health. By providing a rigorous framework for evaluating the impact of laws on health outcomes, legal epidemiology enables policymakers to identify effective interventions, optimize resource allocation, and promote health equity. This approach ensures that legal measures are grounded in scientific evidence and tailored to different populations' specific needs and contexts, ultimately leading to more effective and equitable public health outcomes.

Legal epidemiology methods

Several methodological approaches are employed in legal epidemiology, including: *Legal analysis:* Systematic identification and documentation of laws and policies across jurisdictions; *Quantitative analysis:* Application of statistical techniques to evaluate correlations and causal relationships between legal interventions and health outcomes; *Qualitative analysis:* Examination of contextual and procedural factors to better understand how legal measures function in practice; and *Policy Surveillance:* Ongoing, systematic collection and analysis of laws and policies to detect changes and evaluate impact over time (ChangeLab Solutions, 2019).

Legal epidemiology, particularly through legal analysis, has been used in several studies to demonstrate the impact of laws on public health. In tobacco prevention, variations in policy scope and enforcement have been shown to significantly influence exposure levels and the adverse health impacts of secondhand smoke (SHS) and third-hand smoke (THS) (Azagba et al., 2020; Chriqui et al., 2011; Cork & Forman, 2008; Hahn et al., 2008; Hill et al., 2013; Nguyen et al., 2021; Nykiforuk et al., 2007; Yang et al., 2024).

This study used legal analysis as the primary method to document and analyze county-level smokefree laws across Georgia. By coding the content of each ordinance, this study assessed variations in comprehensiveness, scope, and enforcement mechanisms; generated a quantifiable measure of ordinance strength; and correlated the strength of tobacco law with county population-level health indicators and demographic profiles.

Public health significance of smokefree policies

Tobacco use poses a significant public health challenge, with its adverse effects impacting both smokers and non-smokers. Cigarette smoking has been linked to a range of respiratory and cardiovascular diseases, as well as a heightened risk of cancer (Office of the Surgeon General (US), 2004; Hyland et al., 2012). Additionally, Environmental tobacco smoke

(ETS), a combination of secondhand and thirdhand smoke, has been shown to cause substantial harm to individuals exposed to it. Secondhand smoke (SHS) is a mixture of smoke exhaled by smokers and smoke from the burning end of a cigarette (National Center for Chronic Disease Prevention and Health Promotion, 2014). Third-hand smoke (THS), the residual nicotine and other chemicals from tobacco smoke that settle on surfaces such as walls, furniture, equipment, and carpets after active cigarette smoking has ceased, is raising alarm among public health practitioners (Acuff et al., 2015; Bell, 2014; Yildirim-Ozturk et al., 2024; Tuma, 2010). Therefore, continued efforts are needed to educate the public and implement effective strategies to mitigate the risks associated with SHS and THS and protect the health of the population at large.

Enacting comprehensive smokefree laws is a proactive and highly effective public health intervention aimed at protecting individuals from the harms of tobacco use, encouraging smoking cessation among users, and preventing initiation (CDC, 2022a; CDC, 2022b; Nguyen et al., 2021; Onor et al., 2017; Tynan et al., 2016). These laws contribute to the denormalization of smoking by reducing its social acceptability and fostering a culture of health within society (Levy et al., 2018; Thomson et al., 2015). Crucially, smokefree laws protect non-smokers, including vulnerable populations like children and individuals with pre-existing health conditions, by significantly reducing involuntary exposure to secondhand smoke (Frazer et al., 2016). The U.S. Surgeon General has consistently reported that there is no safe level of exposure to secondhand smoke and that comprehensive smokefree laws are the most effective way to protect non-smokers (National Center for Chronic Disease Prevention and Health Promotion (US) Office on Smoking and Health, 2014).

The Georgia Context

The State of Georgia implemented the Smokefree Air Act (Georgia Code §§ 31-12A-1 through 31-12A-13) on July 1, 2005, to reduce tobacco exposure and promote public health (Georgia Smokefree Air Act of 2005, 2005). Noticeably, the Act includes multiple exemptions, allowing smoking in certain locations, thereby limiting its protective effect. However, the law does not include a preemption clause, meaning local jurisdictions retain the authority to enact stronger smokefree ordinances. This autonomy has allowed cities and counties to adopt more comprehensive tobacco control policies in response to community needs.

Yet, this decentralized approach has led to a patchwork of smokefree ordinances across the state, with significant variation in legal scope, coverage of indoor and outdoor spaces, and enforcement practices. While some counties have enacted robust policies, others continue to operate under the minimum state standard, resulting in geographic disparities in exposure to the effects of tobacco use. This variation poses challenges to public understanding and compliance and may reduce the overall effectiveness of tobacco control efforts.

Legal epidemiology provides a systematic approach for analyzing these disparities, identifying law gaps, and offering evidence-based recommendations to strengthen and harmonize tobacco control policies statewide.

The Role of Government in U.S. Tobacco Control

The U.S. operates under a federal system, distributing authority across national, state, and local levels. In tobacco control, each level of government plays a distinct role. The federal government passed the 2009 Family Smoking Prevention and Tobacco Control Act, implemented through agencies such as the FDA and CDC to regulate tobacco manufacturing, advertising, and distribution, and fund prevention and cessation initiatives *(Family Smoking*

Prevention and Tobacco Control Act, 2009). State governments develop and enforce tobacco laws, implement state-wide health promotion campaigns, and operate cessation support programs. The State of Georgia adopted the 2005 Smokefree Air Act implemented by the Georgia Department of Public Health (*Georgia Smokefree Air Act of 2005, Ga. Code Ann. § 31-12A-1 et Seq., 2005*). Local governments (counties and municipalities) are responsible for adopting and enforcing state laws through ordinances that respond to community-specific needs (State & Local Public Health: An Overview of Regulatory Authority, n.d.).

With the floor preemption clause, local governments have the legal authority to adopt regulations beyond the state's minimum standards. Georgia's smokefree law does not preempt local action, granting counties and cities the discretion to develop tailored, more stringent tobacco control policies (Georgia Department of Human Resources, Division of Public Health., 2005)hacker This local flexibility provides an opportunity for community-based innovation in public health law and allows for more responsive policymaking. Each of Georgia's 159 counties serves as a key administrative and political subdivision, thereby playing a critical role in implementing localized public health interventions (Association of County Commissioners of Georgia, 2024; Vyas, 2002). As such, there is a possibility of having at least 159 different ordinances in the state.

Rationale for the Study

Although Georgia's legislative framework permits local jurisdictions to enact stronger smoke-free laws, these ordinances' content and strength have not been comprehensively or systematically evaluated. Between 2006 and 2023, 31 counties and municipalities adopted more restrictive smokefree laws (Georgia Department of Public Health, 2024). However, the extent of variation in the strength of these laws and their association with public health outcomes remains

poorly understood. This study addresses this gap by developing and exploring the application of a standardized protocol to assess the comprehensiveness and enforcement strength of smokefree laws at the county level.

A key objective was to quantify the legal provisions and enable cross-county comparisons using legal epidemiology methods. This approach will provide a consistent evaluation framework to assess the landscape of ordinances, identify gaps in legal protections, highlight best practices, and offer insights for strengthening tobacco control policies across Georgia. This evidence can inform future legislative efforts and help ensure more equitable tobacco control across the state while allowing for useful decentralized adoption.

Research questions

The following research questions guide the study:

- How do county-level smoke-free laws in Georgia differ in terms of scope, coverage, and enforcement mechanisms?
- What are the key elements of county-level smoke-free laws in Georgia, and how can these elements be standardized for comparative assessment?
- Are there associations between the strength of county smoke-free laws and a county's social, economic, and demographic characteristics, and are there associations significantly different?
- What recommendations can be made to improve tobacco control policies across the state that can guide policymakers in reducing tobacco-related health disparities?

Study Objectives

The primary objective of this study is to develop and apply a protocol to systematically evaluate county-level smokefree ordinances in Georgia, assess their strength, explore

associations with socio-demographic characteristics, and propose recommendations. This study will use the legal evaluation framework, which involves systematically collecting and coding laws related to specific health topics at a defined time and creating databases that can reveal differences between jurisdictions or institutions.

Specifically, the study aims to:

1. Develop and apply a coding protocol and scoring system to compare the scope, coverage, and enforcement provisions of county smokefree ordinances.
2. Quantify ordinance strength for comparative assessment and describe the observed variation among counties.
3. Examine associations between county-level smokefree laws and their select social, economic, and demographic characteristics and test the significance of the differences. The study tested the hypothesis that counties with the most improved smoking rates between 2015 and 2021 have stronger smokefree ordinances than counties with the least improvement or an increase in smoking rates during the same period.
4. Propose evidence-informed recommendations for improving local tobacco control laws, with an emphasis on reducing disparities and enhancing population-level protections.

Significance of the study

This research contributes to the growing field of legal epidemiology by demonstrating a replicable methodology for evaluating local tobacco control laws. The standardized coding protocol and scoring framework developed here enables structured comparison across jurisdictions and provides actionable insights for policymakers and public health practitioners. Beyond its immediate application, the tool may serve as a model for similar evaluations in other states or policy domains of public health laws adopted at local jurisdiction levels (e.g., alcohol

regulations and sports equipment mandates). The findings shed light on substantial inconsistencies in ordinance strength, which may translate to unequal protection from secondhand and thirdhand smoke exposure. By linking legal provisions to public health outcomes, the study supports advocacy for stronger local laws and offers a data-driven foundation for improving health equity across Georgia.

Chapter Summaries

This chapter has outlined the study's rationale, theoretical foundations, and methodological focus, emphasizing the importance of legal epidemiology in public health research. Chapter 2 reviews the existing literature on legal epidemiology, the role of governmental actors in tobacco control, population factors that affect public health law adoption, and the health impacts of smokefree policies. Chapter 3 presents the research design and methodology, including the development of the coding and scoring framework. Chapter 4 details the study results, and Chapter 5 concludes by discussing the findings and implications and offering recommendations for future policy and research.

CHAPTER 2

LITERATURE REVIEW

Legal Epidemiology

Legal epidemiology, defined as the scientific study and deployment of law as a factor in the cause, distribution, and prevention of disease and injury in a population (Burris et al., 2010), represents an innovative intersection of public health and legal studies. Legal epidemiology provides a scientific approach to studying the impact and effectiveness of laws on health and can be used to track changes in laws and their associated effects. Burris et al. identified three basic elements of legal epidemiology that can be employed to conceptualize the implementation and impact of laws on population behavior and environment: Legal etiology, the study of laws and legal practices as causes of disease and injury; Legal prevention and control, the study and application of laws and legal practices as interventions to prevent disease and injury and as enablers of effective public health administration and Policy surveillance, the ongoing, systematic collection, analysis, and dissemination of information about laws and other policies of importance to health (Burris et al., 2016). Policy surveillance is connected to legal etiology and legal prevention and control in that it uses advanced research and analysis methods to evaluate the impacts of laws.

Steps of legal analysis

Legal epidemiology involves capturing key features of laws and policies and identifying how those laws vary across jurisdictions in a process called legal analysis (ChangeLab Solutions, 2019). Legal analysis involves the systematic collection and coding of laws related to specific health topics, creating databases that can reveal differences between jurisdictions or institutions.

Legal analysis can be performed as a longitudinal surveillance study, which involves collecting data over time and creating longitudinal data sets or trends of the landscape of law; in the same way, surveillance of a health condition is done. It can also be conducted as a cross-sectional study, collecting data at one point to provide an overview, as public health practitioners conduct a needs assessment. Legal analysis, whether as a surveillance or an assessment, is an iterative process, meaning the findings from one cycle can inform the start of a new, more refined research cycle and follow six specific steps, as shown in Figure 2.1.

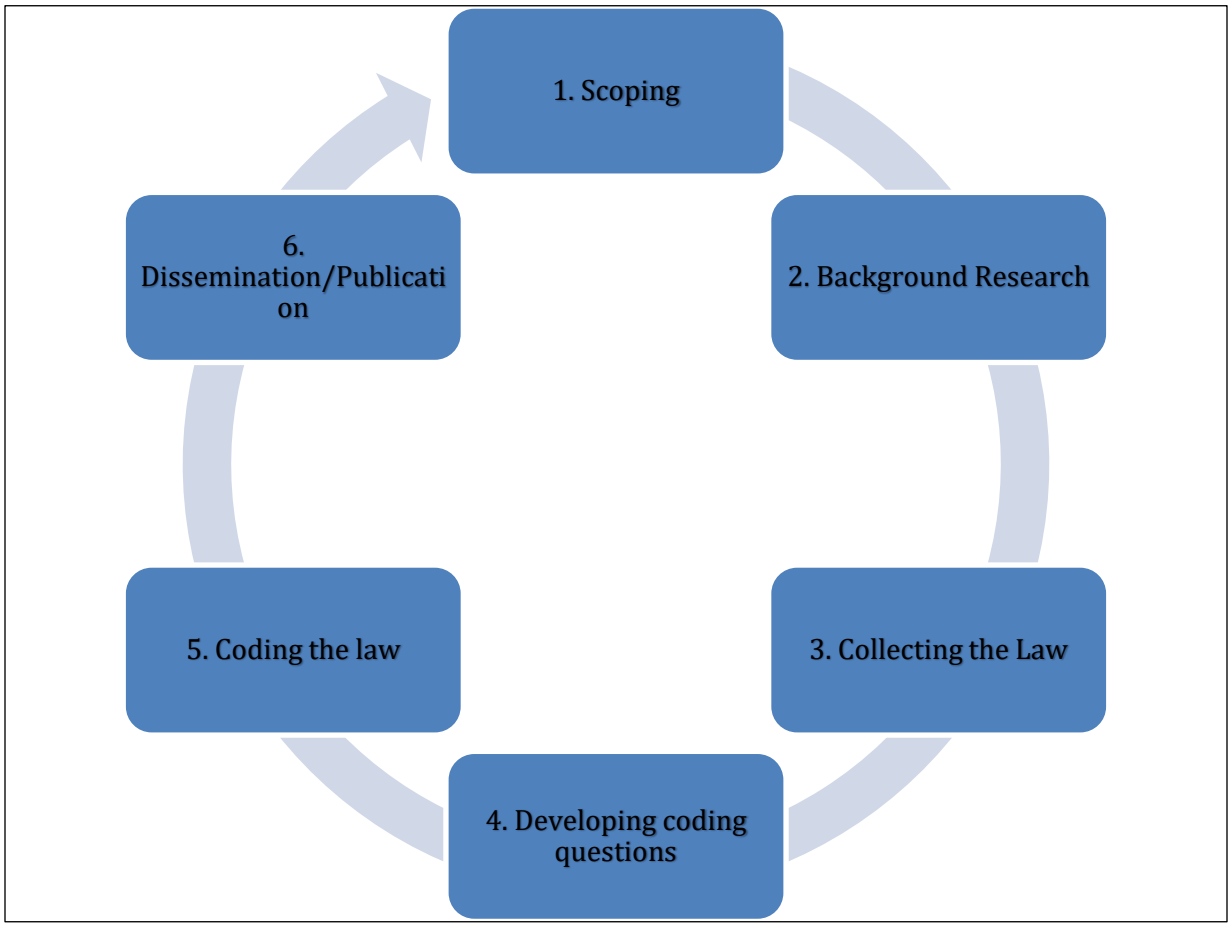


Figure 2.1: Legal Analysis Framework Steps

Studies employing legal analysis

Legal epidemiology, particularly through legal analysis, has been used in several studies to demonstrate the impact of laws on public health. For instance, Herman et al. (2022) used legal analysis to study the impact of mandatory helmet use law for high school girls' lacrosse games and found that compulsory use in Florida led to a significant decrease in concussion rates compared to states without such mandates. Similarly, a Cochrane review reported that consistent bicycle helmet use reduces the risk of head, brain, and severe brain injury by 63 to 88 percent compared to non-use. The National Highway Traffic Safety Administration (NHTSA) found that proper seatbelt use reduces the risk of fatal injury to front-seat passengers by 45 percent and the risk of moderate-to-critical injury by 50 percent (Sauber-Schatz et al., 2014). These studies illustrate the effectiveness of legal epidemiology in providing evidence-based insights into health outcomes.

Research has employed legal analysis to analyze smokefree legislation in diverse contexts. Legal epidemiology methods were used in New Orleans to show that implementing the comprehensive smokefree law significantly reduced second-hand smoke exposure in public places and improved respiratory health among casino workers. Legal epidemiology also helped evaluate the effects of smokefree policies on second-hand smoke exposure in multi-unit housing, demonstrating reduced exposure levels and associated health benefits (Hahn et al., 2008; Azagba et al., 2020; Nguyen et al., 2021).

Variations in law scope and enforcement have been shown to significantly influence exposure levels and the adverse health impacts of secondhand smoke (SHS) and thirdhand smoke (THS). A study in Indiana found that stronger smokefree laws, with comprehensive coverage of workplaces and public places, were associated with decreased smoking rates (Hahn

et al., 2008). Studies show that it is not only the passing or adoption of policies that affects the variations in impact, but other population social characteristics also show different effects. Hill et al. (2013) examined the impact of a comprehensive smokefree law across neighborhoods with varying socioeconomic statuses. They found that higher socioeconomic areas had better enforcement and awareness, leading to more favorable perceptions, while lower socioeconomic neighborhoods faced challenges such as a lack of information and inconsistent enforcement. A correlational, cross-sectional qualitative study in Kentucky found that adoption of stronger smokefree policies was lower in communities with higher smoking rates, higher tobacco production, and smaller population (Hahn et al., 2012; Rayens et al., 2012), putting these populations more at risk of preventable health outcomes. Cork & Forman (2008) investigated the legal and political obstacles to smokefree regulation in Minnesota, identifying opposition from the hospitality industry and unclear local charters as significant barriers. Their analysis demonstrated that public support and coalition-building could overcome such resistance, while clear legal frameworks facilitated smoother policy adoption. Nykiforuk et al. (2007) explored the role of public participation in developing municipal smokefree bylaws, revealing that robust public engagement was critical for aligning policies with community values. Municipalities with active advocacy groups and high public involvement were more likely to pass stronger regulations.

The use of legal epidemiology methods is gaining recognition worldwide. Robertson et al. (2018) explored the implementation of a 100 percent smokefree law in Uganda, highlighting the crucial role of civil society organizations (CSOs) in public education and enforcement. Despite limited resources and business resistance, collaboration between CSOs and government agencies was key to the policy's success. Yang et al. (2024) used policy mapping and thematic

coding to document the variety of smokefree laws across different regions in Mainland China, emphasizing the influence of enforcement capacity, public awareness, and socio-cultural attitudes on policy effectiveness.

This approach provides valuable insights for policymakers to craft more effective and equitable smokefree laws by helping us identify effective interventions and avoid unintended consequences. This knowledge enhances the use, replication, and adaptation of successful laws to different jurisdictions and health risks.

Overview of smoking-related health risks

Throughout history, tobacco was regarded as a natural plant with purported health benefits, particularly when used for spiritual and medicinal purposes. As noted by Godlaski (2012), early archaeologists supported this view. However, the commercialization of tobacco and the rise of cigarettes transformed it into a dangerous product, harmful both to users and those exposed to its byproducts.

The World Health Organization (WHO) reported in 2020 that 22.3 percent of the world's population used tobacco. In many developed countries like the United States, noncommunicable diseases (NCDs), which account for nearly 70 percent of all premature deaths, are closely tied to tobacco use as a common risk factor (Peruga et al., 2021). According to the Centers for Disease Control and Prevention (CDC), cigarette smoking in the United States has been declining, from about 21 percent in 2005 to 11.5 percent in 2021, and tobacco use still contributes to over 480,000 deaths annually (CDC, 2019; Centers for Disease Control and Prevention, 2022).

Furthermore, Acuff et al. (2015), in their research on THS, the residual of nicotine and other chemicals from tobacco smoke after the active smoke has dissipated, found that THS contains tobacco-specific nitrosamines (TSNAs), which are known carcinogens. This meta-

analysis of studies concluded that THS should be considered an indispensable component of a broader tobacco control strategy since tobacco residues can linger for months, posing ongoing health risks (Acuff et al., 2015). Other studies have shown that THS exposure has been linked to respiratory complaints in children (Merritt et al., 2012) and can cause serious health outcomes in various organs, including the lungs, liver, skin, heart, and nervous system (Vanzi et al., 2023). Effects of tobacco use on smokers.

It is well-documented that tobacco smoke contains about seven thousand chemicals, many of which are carcinogenic and harmful to nearly every organ in the body (World Health Organization, 2023; CDC, 2024. Effects of continued smoking and changes in tobacco products were presented in a 2013 study on Smoking-Related Mortality Trends among participants aged 55 years or older in the United States. This study found that the rate of death from chronic obstructive pulmonary disease (COPD) continued to increase among both male and female smokers who continued to smoke, compared to a significant decrease among men who had never smoked or quit smoking, but the increase is not due to aging. In fact, death rates among those who quit were equal to those who never smoked. The study concluded that smoking cessation at any age dramatically reduced death rates (Thun et al., 2013). Smoking cessation, studies have shown, is better promoted and adhered to in smokefree environments.

Health Effects of Secondhand Smoke on Nonsmokers

The harmful effects of tobacco use extend beyond smokers. According to the Surgeon General Report, there is no safe level of second-hand smoke (National Center for Chronic Disease Prevention and Health Promotion, 2014). Secondhand smoke (SHS) contains harmful chemicals that are dangerous to the health of individuals who work and patronize establishments that allow smoking indoors and/or on patios. Studies have shown that these individuals have an

increased risk of heart attack because tobacco smoke contains toxic chemicals that can trigger sudden blood clots, heart attacks, and stroke (Onor et al., 2017). Studies have shown that these harmful chemicals weaken tumor-fighting cells, increasing the risk of cancer in almost any part of the body.

Exposure to SHS, even brief, can rapidly induce mechanisms that contribute to an increased risk of respiratory infections, pulmonary cancer, and cardiac diseases in non-smokers at a younger age (Al-Sayed & Ibrahim, 2012; Flouris et al., 2010; Siegel, 2007; Khan et al., 2021; Landers et al., 2017; Office on Smoking and Health (U.S), 2014). A study on biological evidence for the acute health effects of second-hand smoke exposure by Flouris et al. evaluated the acute health impacts of second-hand smoke (SHS) exposure on various biological systems, with a significant focus on the respiratory system. The study found that SHS exposure triggers airway obstruction like that seen in smokers.

Other studies found that a brief SHS exposure can contribute to chronic lung disease, and clinical symptoms like nasal congestion, irritation, and increased rhinitis develop within two hours of exposure (Flouris et al., 2010). Another study found that nonsmokers exposed to environmental smoke had a relative risk of coronary heart disease of 1.25 (95 percent confidence interval, 1.17 to 1.32) as compared with nonsmokers not exposed to smoke (He et al., 1999). However, some researchers have warned about highlighting the effects of brief exposure to SHS on cardiovascular health among nonsmokers. Siegel emphasizes that public messaging needs to emphasize the cumulative dangers of chronic exposure risks, and solutions should aim to promote public health policies that protect nonsmokers from the harms of SHS exposure (Siegel, 2007).

Specific populations bear a disproportionate burden from tobacco use and should be

protected by all means necessary. For instance, pregnant women who smoke face heightened risks of preterm birth, low birth weight infants, and sudden infant death syndrome (SIDS) (Office on Smoking and Health (US), 2004). Children exposed to SHS are more susceptible to respiratory infections, asthma exacerbations, and impaired lung development (American Lung Association, 2020a). Individuals with pre-existing health conditions, such as cardiovascular or respiratory diseases, experience worsened outcomes and increased mortality due to tobacco exposure (Khan et al., 2021). These populations should be on policymakers' priority list when planning decisions about population health.

The health effects of thirdhand smoke on population health

An emerging concept on further dangers of exposure to cigarette smoking products that linger on surfaces and objects long after active smoking has ceased, Thirdhand smoke (THS), is gaining momentum among advocates (Acuff et al., 2015; Jacob et al., 2016; Yildirim-Ozturk et al., 2024; Tuma, 2010). THS is composed of numerous toxic compounds, including nicotine, TSNAs (tobacco-specific nitrosamines), and VOCs (volatile organic compounds), which persist on surfaces and can react with indoor pollutants to form even more toxic substances. Initially dismissed as a joke in the 1990s, recent years have seen it legitimized within the broader context of tobacco control (Bayer & Colgrove, 2004), and there is considerable knowledge about the concept among both smokers and nonsmokers. One study used BRFSS data to assess the health beliefs of adults regarding the dangers of THS to children and found that 65.2 percent of nonsmokers and 43.3 percent of smokers agreed that THS harms children’s health (Winickoff et al., 2009).

While this concept is relatively recent, some studies have provided evidence that THS poses significant health risks, particularly to vulnerable populations such as infants and children,

and can cause serious health outcomes in various organs, including the lungs, liver, skin, heart, and nervous system (Hang et al., 2017; Merritt et al., 2012; Vanzi et al., 2023; Winickoff et al., 2009). It is evident that continued research is needed to understand the long-term health effects of THS further. Understanding and addressing these beliefs is crucial for mitigating these risks and protecting nonsmokers from tobacco smoke exposure by promoting preventive measures such as effective smoking bans (Hang et al., 2017; Winickoff et al., 2009). Therefore, continued efforts are needed to educate the public and implement effective strategies to mitigate the risks associated with SHS and THS and protect the health of the population at large.

The History of Tobacco Regulation

The history of tobacco regulation is marked by controversy, as tobacco has not always been viewed negatively. In North America, tobacco held significant social, industrial, economic, and even medicinal importance (McGrew, 1972). In 1686, a French visitor observed that smoking was a common social activity in America, practiced during work, leisure, and even religious services (US National Commission on Marihuana and Drug Abuse, n.d.). Smoking was believed to have medicinal value and was thought to ward off cold, hunger, and thirst. In 1614, a Scottish doctor praised tobacco for its ability to prepare the stomach for food and clear the voice (McGrew, 1972).

As tobacco was a primary cash crop, its use was not widely condemned or discouraged. The Tobacco Control Act (United States Code: 7 U.S.C. §§ 1281-1407, 1938) was enacted to regulate tobacco production, primarily to ensure high-quality leaves rather than high quantity. This act was further strengthened by the Agricultural Adjustment Act of 1938, which subsidized tobacco production.

Early opposition to tobacco use was not always based on public health concerns. For

instance, in 1575, the Roman Catholic Church banned tobacco use in churches in Mexico due to its perceived immorality (Buescher, 2017). In 18th-century Germany, policies were primarily focused on mitigating the risk of fires caused by smoking.

However, it was not until the early 20th century that discussions about smokefree public spaces gained momentum in the United States (Proctor, 1996). In 1910, the Non-smokers Protective League advocated for smokefree zones, particularly in hotels and restaurants, while proponents of smoking rights defended smokers' autonomy. The 1960s marked a turning point, as scientific research increasingly identified the dangers of secondhand smoke exposure.

Literature has explored the factors influencing this gradual acceptance and expansion of smokefree policies, emphasizing the pivotal role of scientific evidence, public health campaigns, and shifting societal norms (Alamar and Glantz, 2004; Chapman et al., 1999; Hafez et al., 2019; Hyland et al., 2012; U.S. Surgeon General, 1972).

The current evidence provides more robust support for the previous conclusions that the introduction of a legislative smoking ban, or Clean Indoor Air Acts (CIAA), does lead to improved health outcomes through a reduction in tobacco use prevalence rates and increased cessation among tobacco users and a reduction on the harms of ETS to nonsmokers.

Smokefree Regulations through Clean Indoor Air Acts (CIAA)

The fight for smoke-free environments, through legislation, has been going on globally and locally. Regulation for health at the global level was first implemented in Ireland, which became the first country in the world to pass a nationwide comprehensive smokefree workplaces law on 29 March 2004 (Mullally et al., 2009). The law banned smoking in all enclosed workplaces, including bars and restaurants. Even though the harmful effects of tobacco use have been recognized for quite some time, it was not until 2005 that the WHO labeled commercial

tobacco use as a carcinogen (WHO, 2005). In the US, deliberations on smokefree public spaces only gained traction in the early 20th century.

In 1910, the Nonsmokers Protective League advocated for smokefree zones, specifically in hotels and restaurants, while proponents of smoking rights lobbied for the autonomy of smokers. The 1960s marked a turning point when scientific research increasingly identified the dangers of second-hand smoke exposure. In 1972, the first U.S. Surgeon General's report highlighted the potential harm of secondhand smoke, prompting early policy actions (National Center for Chronic Disease Prevention and Health Promotion (US) Office on Smoking and Health, 2014), but there is no national smokefree law in the US.

One of the earliest statewide efforts to regulate smoking in public places began with local ordinances in Minnesota that led to the passing of the Minnesota Clean Indoor Air Act in 1975 (Minnesota Session Laws, 1975, Public Health Law Center, 2022). Subsequent decades saw increasing adoption of CIAAs (Tynan et al., 2016), with California becoming the first state to enact a smokefree policy for restaurants in 1995, followed by bars in 1998 (Cowling & Bond, 2005; Hyland et al., 2012). This trend has gained popularity even among smokers, particularly in places frequented by children, such as playgrounds and school grounds. Support for smokefree regulations on school grounds increased from 67 percent to 78 percent between 2002 and 2008 (Thomson et al., 2015). The factors influencing this gradual acceptance and expansion of smokefree policies, including the pivotal role of scientific evidence, public health campaigns, and evolving societal norms, have been extensively explored in the literature (Boderie et al., 2023; Hyland et al., 2012; McGrew, 1972).

Benefits of CIAA

Substantial research has demonstrated that implementing comprehensive and robust smokefree legislation can play a crucial role in protecting nonsmokers from the harmful effects of secondhand and thirdhand smoke exposure, including its impact on COPD (Salvi & Barnes, 2010; Salvi, 2014). In Kentucky, a longitudinal study on the effect of local ordinances on smoking prevalence found that counties with stronger smokefree ordinances, even after adjusting for relevant factors such as demographic, socioeconomic, and geographic factors, including a trend in decreasing prevalence throughout the study region had a 5 to 6 percent lower smoking prevalence than counties without an ordinance. (Christian et al., 2019).

Another study, also in Kentucky, examined the effect of municipal smokefree laws on the likelihood of preterm birth for pregnant persons included in the study who were exposed to the smokefree policy for at least a portion of their pregnancy and concluded that pregnant persons living in counties with comprehensive laws were 9 percent less likely to have a preterm birth than those living in counties without a smokefree ordinance (odds ratio, 0.91; 95 confidence interval, 0.89-0.94; P<.001). There was no difference in the likelihood of preterm birth between those living in counties with moderate or weak laws and those unprotected by any smokefree ordinance in their county of residence.

Other studies on the effects of smokefree legislation on the incidence of acute myocardial infarction indicated that smokefree laws led to a 15 percent decline in the incidence of acute myocardial infarction (Lightwood & Glantz, 2009; Lin et al., 2013), have been associated with a reduction in respiratory illnesses among children and adults, a decrease in hospital admissions for asthma, and improvements in overall lung function (American Lung Association, 2020a; Centers for Disease Control and Prevention, 2022b).

Smokefree policies have benefits beyond health; they also contribute to substantial economic benefits. By decreasing the prevalence of smoking-related diseases, these policies alleviate the burden on healthcare systems, resulting in significant cost savings. Smokefree environments enhance worker productivity by reducing absenteeism due to illness and promoting a healthier workforce (Frazer et al., 2016). Additionally, smokefree policies protect businesses from potential liabilities associated with exposing employees and customers to SHS, fostering a more favorable economic climate.

Despite this clear evidence, advocates maintain that laws affecting tobacco have been far fewer and weaker than those aimed at other substances like alcohol. As McGrew noted in the History of Tobacco Regulation, there has never been a time when tobacco was prohibited throughout the United States like alcohol was during the prohibition period. Rather, tobacco consumption under certain circumstances has been forbidden at various times in different jurisdictions, showing inequities in tobacco use by place of residence (McGrew, 1972). According to Leas et al. (2022), there are significant inequities in smoking prevalence in the US between census tracts within states (71.9 percent of the total variation), suggesting that there may be geographically defined pockets of resistance to tobacco control programs.

At the global level, tobacco regulation continues to evolve. During the tenth session of the Conference, the Global Alliance for Tobacco Control recently accepted a proposal urging countries to go beyond the minimum obligation to protect citizens' health from tobacco use. Article 2.1 states, “Forward-Looking Tobacco Control Measures” states that *“In order to better protect human health, Parties are encouraged to implement measures beyond those required by this Convention and its protocols, and nothing in these instruments shall prevent a Party from imposing stricter requirements that are consistent with their provisions and are in accordance*

with international law." (Global Alliance on Tobacco Control, 2024). Similarly, the Georgia smoke-free law encourages local jurisdictions to go beyond the state law to protect citizens. Georgia enacted the Smokefree Air Act into law effective July 1, 2005 *(Ga. Comp. R. & Regs. R. 511-3-7, 2005.* Even though the law in Georgia is not comprehensive, there is no preemption on the smoke-free law; therefore, local jurisdictions can adopt and implement more comprehensive regulations than state laws.

The Role of the federal government system in tobacco control

The U.S. system of government is a federal structure that balances power between the national, state, and local governments. The federal government, composed of the executive (President), legislative (Congress), and judicial (Supreme Court) branches, handles national concerns like defense and interstate commerce. State governments, led by governors and state legislatures, manage intrastate matters such as education and public safety. Local governments, including counties and municipalities, address community needs through ordinances and services like policing and public health.

In tobacco control, the federal, state, and local governments each play distinct but complementary roles. The federal government, through national agencies like the FDA, sets nationwide regulations on tobacco manufacturing, distribution, and marketing, and funds public health initiatives via the CDC. State governments enact and enforce their state tobacco laws, which can be stricter than federal regulations, and run statewide public health campaigns and cessation programs. Local governments implement and enforce local ordinances.

When a state does not have preemption (when a "higher" level of government eliminates or limits the authority of a "lower" level of government to regulate a particular issue) in place, local governments have greater autonomy to enact and enforce local laws and regulations on

various topics, including tobacco control. Georgia does not have a preemption clause for the state's smokefree law. Without preemption, local governments (counties and cities) can enforce stricter regulations than the state's. By collaborating with various stakeholders, cities, and counties can develop comprehensive tobacco control strategies that are stronger than those of the state and address the unique needs and challenges of their locality, potentially leading to more effective public health outcomes and greater protection for their communities.

However, having local jurisdictions enact their laws introduces disparities and inequities in the coverage of local smoke-free laws. The American College of Preventive Medicine (ACPM) recommends closing existing gaps in clean indoor air policies and strengthening clean indoor air policies for workplaces, stand-alone bars, restaurants, and multi-use family housing such as apartment buildings, education institutions, and city landmarks to shift social norms further and protect the health of children, adolescents, and adults. Identifying patterns in coverage can inform state efforts to address related disparities. (Huang et al. 2015. It is essential, however, to show the evidence-based impact of these laws on health (Chriqui et al., 2011). To do so, public health researchers have been using the emerging field of legal epidemiology.

Georgia Context

The Georgia Smokefree Air Act (GA Code Title 31 Chapter 12A) was enacted on July 1, 2005. The purpose of the Georgia Act was to preserve and improve all Georgia residents' health, comfort, and environment by limiting exposure to second-hand smoke in many, but not all, enclosed indoor public areas to which the public is invited or to which access of the general public is permitted. As stipulated in the law, the Act of 2005 exempted some areas, such as bars and restaurants that deny access and employment to individuals under 18 years, private residences not used by a licensed provider for childcare services, and private and semi-private

rooms in healthcare facilities. The law does not address smoking in other outdoor public areas where most people, including children, may be exposed to secondhand and thirdhand smoke, such as outdoor entertainment areas, parks, and public transportation.

Georgia laws allow local jurisdictions to adopt more restrictive local laws, rules, and regulations than the state law (Ga. Comp.. R. & Regs. R. 511-3-7-.09, 2005), thereby allowing the included jurisdictions to provide broader protection against tobacco use to all its citizens. Leaning on this allowance, several cities and counties in Georgia have independently adopted more restrictive smokefree laws than the state law. However, having local jurisdictions enact individual laws has resulted in a lack of uniformity in terms of what tobacco products are prohibited and where tobacco use is prohibited, with variations in policy constructs such as outdoor smoking and exemptions reflecting the values of local policymakers. Additionally, there are differences in enforcement responsibilities and penalties for violations across counties and cities, indicating variations in implementation strategies based on local resources and values. These inconsistencies may result in unintended gaps and disparities in health protection by jurisdiction (Huang et al., 2015; Nguyen et al., 2021) and are often difficult to identify.

The American College of Preventive Medicine (ACPM) recommends closing existing gaps in clean indoor air policies and strengthening clean indoor air policies for workplaces, stand-alone bars, restaurants, and multi-unit family housing such as apartment buildings, university campuses, secondary school campuses, primary schools, child care centers, and city landmarks to shift social norms further and protect the health of children, adolescents, and adults. Identifying patterns in coverage can inform state efforts to address related disparities. (Huang et al., 2015).

Gaps in Literature

Current literature lacks a standardized, replicable tool for systematically evaluating the strength and effects of local smokefree laws. Chriqui et al. (2011) evaluated clean indoor air policies that participated in the ASSIST Project by employing a nine-item rating system to assess the comprehensiveness of state-level legislation. This framework evaluated smokefree mandates across various settings, including government and private worksites, schools, childcare facilities, restaurants, retail stores, and recreational/cultural facilities, as well as the presence of penalties and enforcement mechanisms. Although this tool was helpful, particularly for states with preemption, it is not suitable for assessing local-level smokefree laws for states like Georgia, where local jurisdictions are not preempted from enacting stricter smokefree laws that may vary significantly.

Currently, Georgia relies on the American Non-smokers' Rights Foundation (ANRf) to assess the strength of local ordinances (ANRf, 2022). However, the ANRf does not offer a public, replicable standard tool for researchers to objectively measure these variations in scope, coverage, and enforcement. This study aimed to address this gap by developing an accessible tool that can be applied uniformly across jurisdictions and over time. It is also intended that this tool will enable future researchers to evaluate the correlation between ordinance strength and population health outcomes, an area beyond the scope of the current study.

This study utilized legal analysis to develop an accessible and standardized tool for assessing county-level smokefree laws uniformly. By examining variations in policy provisions and enforcement mechanisms, this research aims to contribute to the field of legal epidemiology and provide insights for identifying gaps in protection and informing future policy efforts in tobacco control and public health.

CHAPTER 3

METHODOLOGY

Scope of the study

The scope of this study involved developing a tool, the protocol, to conduct a comprehensive analysis of county-level smokefree laws in Georgia. To accomplish this, the study adapted the legal analysis framework, as described by Burris et al. (Burris et al., 2016; ChangeLab Solutions, 2019), to systematically examine key components of the enacted ordinances. Using the framework, we developed a standardized protocol to analyze the observable characteristics of the county-level smokefree laws, focusing on ordinance scope, implementation, and enforcement mechanisms. Additionally, we converted the legal text into quantitative data and synthesized and analyzed the data for accessible comparison across the counties included in the study.

Research Design

Study Sample

This study integrated legal and epidemiological principles to examine county-level smokefree ordinances across Georgia. All counties were included in the sampling frame to ensure inclusivity, but a purposive sample of thirty counties was drawn based on the trend of smoking prevalence rates between 2015 and 2021. The sample was divided into two equal groups: 15 counties that showed the most decrease in adult smoking prevalence between 2015 and 2021 (indicating substantial progress), and 15 counties that increased in smoking rates (indicating stagnation or worsening trends). This sampling strategy allowed for a balanced

representation of counties with contrasting tobacco use experiences. The level of smoking prevalence rates in the community is assumed to be an indication of secondhand and thirdhand exposure to tobacco use for non-smokers; therefore, the higher the smoking rate, the higher the risk of smoking-related health outcomes to the county population at large.

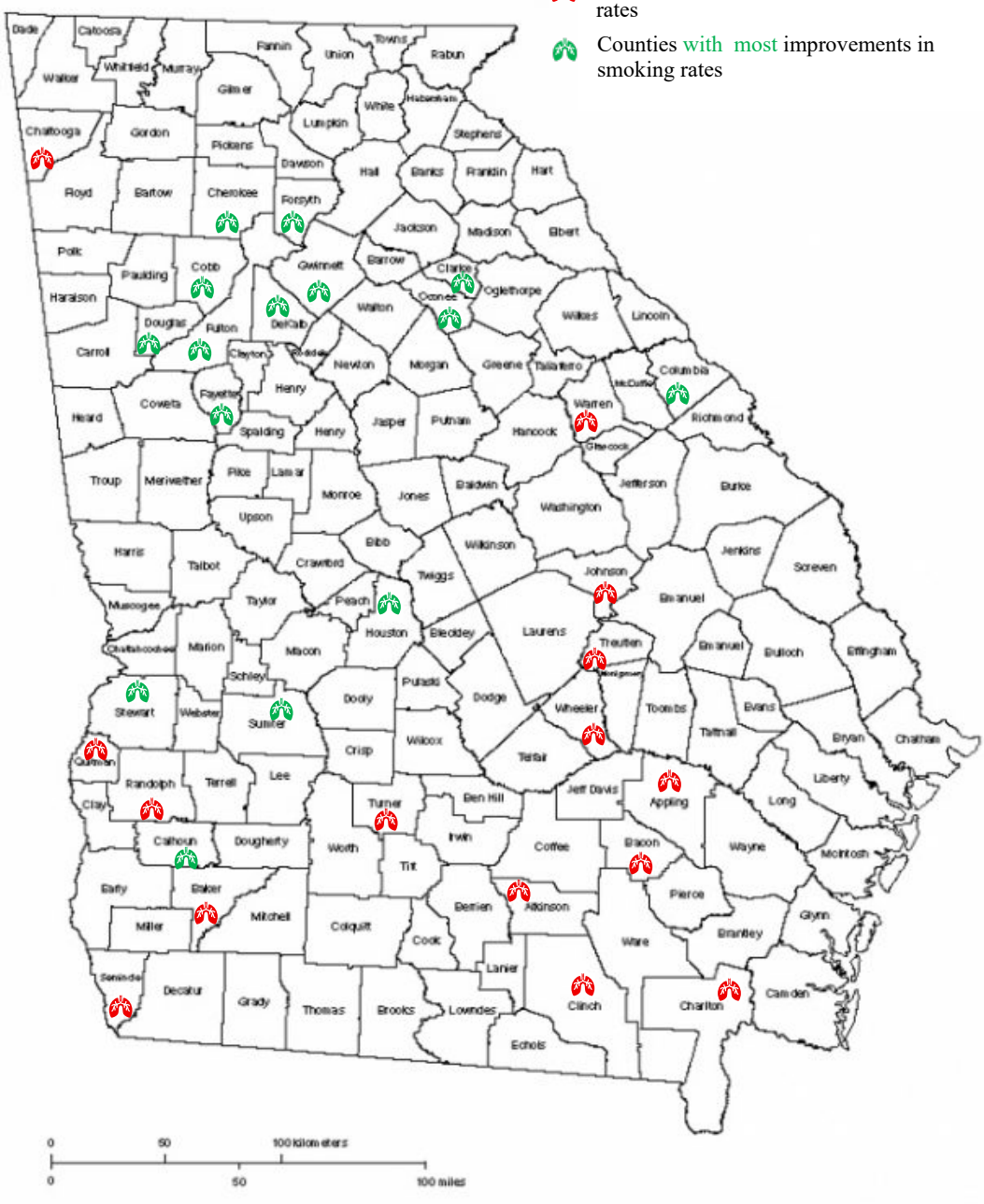
The smoking prevalence rates were obtained from the Centers for Disease Control and Prevention's Population-Level Analysis and Community Estimates (CDC PLACES) database. The CDC PLACES database is a free, interactive CDC web tool that provides small area estimates (SAE) for chronic disease measures, including smoking rates, at the county level. CDC PLACES utilizes data collected from the Behavioral Risk Factor Surveillance System (BRFSS), a comprehensive national health survey conducted via telephone that gathers data on health-related behaviors and conditions among U.S. adults, the U.S. Census population data, and the American Community Survey data. These data support local health decision-making by offering detailed insights into geographic variations in population health (Centers for Disease Control and Prevention, 2023). Table 3.1 lists the 30 counties included in the sample, with the 2015 and 2021 smoking prevalence rates and the percentage difference, the selection criteria, during the period.

Table 3.1: Selected Georgia counties by smoking prevalence rates and percentage change in the rate of smoking between 2015 and 2021.

	Smoking Rate		
County	**2015**	**2021**	**Percentage Change**
Georgia (All counties)	**0.18**	**0.16**	**-11.11**
Counties with the least improvement in smoking rates during the study period			
Treutlen	0.18	0.26	44.44
Johnson	0.18	0.25	38.89
Elbert	0.17	0.23	35.29
Randolph	0.20	0.27	35.00
Seminole	0.16	0.21	31.25
Clinch	0.21	0.27	28.57
Bacon	0.18	0.23	27.78
Charlton	0.18	0.23	27.78
Quitman	0.18	0.23	27.78
Appling	0.19	0.24	26.32
Turner	0.19	0.24	26.32
Warren	0.19	0.24	26.32
Chattooga	0.20	0.25	25.00
Baker	0.19	0.23	21.05
Atkinson	0.21	0.25	19.05
Counties with the most improvements in smoking rates during the study period			
Calhoun	0.27	0.25	-7.41
Sumter	0.22	0.20	-9.09
Douglas	0.18	0.16	-11.11
Houston	0.18	0.16	-11.11
Stewart	0.24	0.21	-12.50
Cherokee	0.15	0.13	-13.33
Columbia	0.15	0.13	-13.33
Gwinnett	0.15	0.13	-13.33
Fayette	0.13	0.11	-15.38
Oconee	0.13	0.11	-15.38
Forsyth	0.12	0.1	-16.67
DeKalb	0.16	0.13	-18.75
Fulton	0.16	0.13	-18.75
Athens-Clarke	0.20	0.16	-20.00
Cobb	0.15	0.12	-20.00

The map below shows where the counties included in the sample are located. Counties shaded with green lungs indicate a decreasing smoking rate during this period, while those marked with

Figure 3.1: Map of Georgia showing counties included in the sample by smoking rate trend between 2015 and 2021



Study Framework

The legal analysis methodology uses an observational framework to conduct a systematic content analysis of critical features of laws and policies. This methodological approach identifies variations in adopting and implementing legal measures across jurisdictions. The analysis can be done over time, policy surveillance, or, at one time, cross-sectional. (ChangeLab Solutions, 2019; Lane & Stergachis, 2024). The study is a cross-section considering county-level smokefree ordinances in effect by December 31, 2023. Ordinances were retrieved, reviewed, and analyzed using a structured legal coding protocol developed specifically for this study. To develop the protocol, the study followed these steps:

1) Scoping - Scoping refers to defining the objectives, boundaries, and parameters of a study. This involved identifying the specific laws, policies, or legal issues to be examined, determining the jurisdictions or populations to be analyzed, and setting up research priorities.
2) Background Search – This step involved thoroughly reviewing existing literature, statutes, regulations, case law, and other legal documents related to the smokefree regulations at the county level.
3) Collecting the law – At this step, we systematically gathered all relevant legal texts (e.g., statutes, regulations, administrative codes, judicial decisions, ordinances) from the jurisdictions and periods identified during the scoping phase between 2005 and December 2023, and involved accessing county legal databases and websites. We decided on this period because the state law, which is the floor, was adopted in 2005, and 2023 was the cutoff boundary we decided during scoping.

4) Developing the coding protocol – This involved designing a systematic and standardized method for extracting specific, measurable information from the collected legal texts. This included identifying key variables, defining the variables, establishing coding rules, and creating a codebook. The developed protocol included a structured questionnaire to guide systematic content analysis.
5) Coding the law – This involved applying the developed coding protocol to each collected ordinance or regulation, reading through the legal texts and extracting the predefined variables, and entering the data into a Qualtrics database according to the established coding rules.
6) Ordinarily, this step creates a database that is disseminated at this stage. However, this study adapted this step to include scoring the ordinances to quantitatively assess the strength of each ordinance for comparison. For this purpose, the study developed a scoring framework to convert the legal text into quantitative data. The ordinances were scored using the scoring framework we developed. The framework was also used as a strategic approach to identify disparities in smokefree legal protections at the county level.

The goal was to generate useful insights for policymakers, public health professionals, and community stakeholders to support efforts to strengthen and expand equitable tobacco control policies throughout Georgia. This research focused only on county-level ordinances and did not include city-level policies. The primary areas of analysis were the scope, coverage, and enforcement mechanisms of the county ordinances.

Instrument Development

Scoping

This step involved gathering comprehensive information to understand the context and

framework of the legal issue being studied. We defined the criteria for the sampled counties and drew the sample at this step. Additionally, during this step, we collected a sample of laws and reviewed the existing laws related to the topic of interest, which is prohibiting smoking in public places. The sampled laws helped to determine the initial constructs to focus on. Determining constructs is iterative and was reviewed and revised during questionnaire development and coding. The initial sample of laws included the Georgia Smokefree Air Act, which was used as a baseline for scope only.

Additionally, the model public places smokefree laws developed by ANRf was consulted to help set the parameters of the study. The Georgia Smokefree Air Act (Appendix A1.1) and ANRf (Appendix A1.2) model policies are presented for reference in **Appendix 1**. This step and the next are iterative.

Background Search

As part of the background research, a literature review was conducted to examine existing smokefree ordinances and identify relevant sources of legal text. To inform the development of the study protocol, a sample of five laws representing the state of Georgia and four counties (Athens, Calhoun, Charlton, and Johnson) was analyzed. This preliminary review helped identify common themes and legal elements, which were then used to generate initial search terms for identifying additional county-level ordinances.

After a few cycles of scoping and more background research, a set of legal constructs was established. Constructs refer to key legal features or provisions that vary across jurisdictions (Burris et al., 2016; ChangeLab Solutions, 2019). In this study, the constructs are features for documentation, scope (where the ordinance applies and specific prohibitions), and enforcement

mechanisms, such as collaboration and penalties. Details of the legal constructs are presented in the **Coding Protocol, Appendix 2**. Once these preliminary constructs were defined, they served as the foundation for developing the coding questions used in the content analysis.

Collecting the law

To identify relevant smokefree ordinances, we conducted targeted searches using the keywords "smoking," "smokefree," "tobacco," and "clean air.". Supplemental searches were conducted through official county government websites for counties in which no responsive ordinance was identified in Municode; however, these searches did not yield any usable ordinance documents beyond what was found in Municode, often referencing unrelated topics such as smoke detectors, fire safety regulations, or tobacco retail zoning. Attempts to obtain ordinances by directly contacting county offices also produced limited results. Therefore, the legal review was based on ordinance texts available as of December 31, 2023, primarily accessed through Municode. Where no codified county-level smokefree law was found, it was assumed that the county operated solely under the provisions of the Georgia Smokefree Air Act of 2005.

Developing Coding Protocol

Developing a protocol is a critical step in legal epidemiology research. A well-defined protocol ensures that the data collection and analysis process is systematic, rigorous, and reproducible. The coding protocol is meant to identify gaps and inconsistencies that may undermine the effectiveness of interventions for smokefree environments in Georgia. The findings will provide a solid foundation for harmonizing and strengthening smokefree regulations statewide, contributing to healthier environments and reducing tobacco-related harm.

A detailed legal coding protocol was developed to ensure a consistent and objective

approach to comparing smokefree ordinances across counties. The protocol was designed to identify key legal constructs related to ordinance scope, coverage, exemptions, implementation, and enforcement. The Georgia Smokefree Air Act of 2005 served as a baseline reference, while model policies from organizations such as Americans for Nonsmokers' Rights (ANRf) informed the criteria for comprehensive coverage. A structured questionnaire guided the coding process, ensuring transparency and standardization. Each question in the protocol is designed to capture a specific dimension of a smokefree ordinance, contributing to a comprehensive understanding of its strength, scope, and potential effectiveness. The complete legal coding protocol is presented in **Appendix 2 – Coding Protocol**, with a corresponding codebook detailing variable names, questions, values, and coding instructions included in **Appendix 3 - Codebook**.

Coding the Law

County ordinances identified in effect December 31, 2023, were systematically reviewed and coded using the established protocol and questionnaire. The coding process was based solely on information explicitly stated within publicly available ordinances. Each coding item required a response; if ordinance language was absent or ambiguous, the option "not specified" or "not mentioned" was selected. All unclear provisions were documented in the comment section of the coding tool for traceability. Key ordinance components coded included: law existence and source, scope (indoor and/or outdoor), environments covered (e.g., public places, workplaces), presence of exemptions or designated smoking areas, enforcement mechanisms, and penalties. Additional coding addressed mitigation and compliance strategies such as signage requirements, ashtray removal, and public education. Details of the coded ordinances are presented in **Appendix 4- Coded Dataset_Select GA Counties.**

Developing the Scoring Framework

The Scoring Framework for analyzing the smokefree ordinances in Georgia is a quantitative instrument designed to systematically evaluate and score the strength of county-level smokefree policies. The framework operates by deconstructing each ordinance into three primary dimensions: 1) Ordinance Documentation, 2) Ordinance Coverage and Scope, and 3) Ordinance Implementation and Enforcement. Each dimension contains several subcategories assigned weighted scores that reflect their relative public health importance. A total law strength score is generated by summing the scores from each dimension, allowing for comparative analysis across jurisdictions and identifying specific areas for law improvement. The Scoring Framework and detailed explanations of the scoring dimensions are presented in the next section.

Scoring Framework for Analyzing County Smoke-free Ordinances in Georgia

This scoring framework evaluates smoke-free policies by assigning scores to policy scope and coverage dimensions. Each dimension is divided into subcategories, with weighted scores reflecting their importance. The total score represents the overall policy strength, aiding in comparative analysis and identifying areas for improvement.

1. **Ordinance Documentation** (Possible Maximum Score: **10 points,** as a standalone ordinance and part of a broader policy are mutually exclusive)

    - Codified Ordinance – Stand alone: **5 points**
    - Part of Broader Policy: **3 points**
    - Rationale for policy: **3 points**
    - Dated ordinance: **2 points.**

2. Policy Coverage and Scope (Possible Maximum Score: 70 points)

Prohibiting smoking/vaping in all government buildings, Workplaces, Restaurants, Bars, and Hotels are heavily weighted because these venue types represent the most significant sources of occupational and public secondhand smoke exposure. Hotels are included here, while individually they may be less frequently visited, this venue heavily affects everyone, including children, and could be a significant source of thirdhand smoke exposure.

A. Indoor Applicability (25 Points) Aggregate all sites mentioned in the law. If a site is not listed, count as "Other" each site separately to a maximum of 3 points.

- All enclosed Public Places: **15 points (**These include: All government buildings, Workplaces, Restaurants, Bars, Hotels)
- Public Transportation: **1 point**
- Government Vehicles: **1 point**
- Private Clubs: **1 point**
- Common areas in MultiUnit residences: **1 point**
- Parking facilities/garages: **1 point**
- Polling places: **1 point**
- Service lines: **1 point**
- Other (Specify): **1 point for each** place not covered above, for a maximum of 3.

B. Restrictions Near Entrances, Windows, and Ventilation (10 points)

Requiring a significant smoke-free buffer (e.g., 15 feet or more) around openings into enclosed non-smoking areas is crucial to prevent infiltration and protect people entering/exiting. These categories are mutually exclusive, so only one of the following four

categories will be valid for a county.

- No restrictions: 0 points
- Restriction not specified distance: 2 points
- Restriction specified with a clear distance (Reasonable - 15 feet): 5 points
- Restriction specified with a clear distance (15 or more feet): 10 points.

C. Outdoor Applicability (25 points)

While secondary to indoor coverage, outdoor restrictions in outdoor workplaces, outdoor dining patios, parks and playgrounds, public transit waiting areas, and stadiums/arenas are essential to offer significant public health benefits, the points are added for each of the categories mentioned below. Since three options are allowed in the dimension "other", the maximum achievable points will be 25.

- Outdoor Employment areas: **3 points**
- Outdoor dining areas: **3 points**
- Parks and recreational areas: **3 points**
- Public transit areas: **3 points**
- Outdoor arena/stadiums/event: **3 points**
- Playground: **3 points**
- Common regions of multi-unit residences: **1 point**
- Outdoor service lines: **1 point**
- Outdoor shopping mall: **1 point**
- Parking lots: **1 point**
- Other (Specify): **1 point for each** place not covered above, for a maximum of 3.

D. Exemptions (5 Points) 5 points if no exemptions, however, for each site exempted, a reduction of 1 point for a maximum of 10 reductions.

Exemptions create loopholes that undermine the effectiveness and equity of a law. A law with **no exemptions** offers the strongest protection. Ordinances that explicitly state "No exemptions" should receive this construct's maximum (5) points. Policies with several or broad exemptions result in a score of negative points. These categories are mutually exclusive, so only one of the following four categories will be valid for a county.

- No exemptions: **5 points**
- Not mentioned: **0 points**
- Exemptions allowed: **-1 point** for each exempted area mentioned

E. Designated Smoking Areas (5 points if no designated smoking areas; however, for each designated site, a reduction of 1 point for a maximum of 5 reductions)

Allowing designated indoor smoking areas, even if separately ventilated, does not fully protect against secondhand and thirdhand exposure. Ordinances that explicitly state "No designated smoking areas" should receive this construct's maximum (5) points. These categories are mutually exclusive, so only one of the following four categories will be valid for a county.

- No designated smoking areas: **5 points**
- Not mentioned: **0 points**
- Permitted smoking areas: **-1 point** for each exempted area mentioned

3. Policy Implementation and Enforcement (Maximum Score: 31)

A policy is only effective if implemented and enforced. Implementation strategies such as

mandatory signage and ashtray removal are important environmental cues supporting the policy and enforcement. Education programs or handbooks are also valuable components that ensure the policy is known to increase compliance. Clearly identifying an enforcement agency (e.g., health department, police, code enforcement) and defining their authority (e.g., inspection powers) is critical for a successful policy outcome. Additionally, specifying penalties, particularly specified fines or disciplinary actions (potentially escalating for repeat offenses), provides a clear deterrent and mechanism for enforcement. Inter-agency collaboration might also be beneficial for enforcement and shared responsibilities.

A. **Implementation Strategies (12 points)**. Points for each category are added together to obtain total points on this dimension.

- Signage: **3 points**
- Handbooks: **3 points**
- Education: **3 points**
- Removal of ashtrays: **3 points**
- No implementation strategy mentioned: **0 points.**

B. **Penalties for Violations (9 points).** Points for each category are added together to obtain total points on this dimension.

- Specified fines: 3 points
- Warning: 3 points
- Disciplinary Action: 3 points
- No fines specified: 0 point
- No penalties mentioned: 0 points.

C. **Collaboration with Other Agencies (10 points)**. These categories are mutually exclusive, so only one of the following four categories will be valid for a county.

- Collaboration explicitly mentioned with named partners: 10 points
- Collaboration mentioned but not specific: 5 points
- No collaboration mentioned: 0 points.

Using these dimensions and sub-dimensions, an aggregate **Policy Strength Score** was derived for each county in the sample. Ordinance documentation (10 points) + Policy Coverage (70 points) + Policy enforcement (31 points) = Total Score (111 points)

  - 84 or more: Strong policy
  - 57-83: Moderate policy
  - 28 - 56: Weak policy
  - Below 27: Minimum policy.

Data Sources and Data Collection

Three primary data sources were used in this study: county ordinances, smoking prevalence estimates, and county-level demographic and socioeconomic indicators.

- **County Ordinances.** The primary source for county-level smokefree ordinances was the Municode database, a widely used online repository of municipal and county codes nationwide (CivicPlus, 2024).
- **Smoking Prevalence Rates.** County-level adult smoking prevalence data for 2015 and 2021 were obtained from the CDC PLACES database. These estimates were used to identify counties for inclusion in the purposive sample.
- **County Characteristics.** Data on social, economic, and demographic characteristics at the county level were obtained from the 2023 County Health Rankings & Roadmaps (CHR&R).

Extracted variables included: adult smoking prevalence (latest CHR estimate), high school completion rate, unemployment rate, social association rate, median household income, racial and ethnic composition (including percentages of Non-Hispanic White, African American, Hispanic, Asian, American Indian/Alaska Native, and Native Hawaiian/Other Pacific Islander populations), percentage of the population not proficient in English, and level of rurality. These data points were derived centrally from the 2023 CHR report, which compiles data from multiple sources. The sources for the selected variables as cited within the report include the BRFSS, the American Community Survey (ACS), the Bureau of Labor Statistics (BLS), Census Population Estimates, Small Area Income and Poverty Estimates (SAIPE), and County Business Patterns. The definitions of these county characteristics and their sources are provided in the **appendix, Table 3.2**.

Data Analysis

Evaluating and Scoring of Ordinances

Of the 30 counties in the purposive sample, 17 had ordinances responsive to the keyword search. Of those, four were excluded for lack of relevancy (e.g., references to smoke detectors rather than tobacco-related smoke). 13 counties were ultimately identified as having relevant smokefree ordinances and were coded.

Once the ordinance coding process was completed and verified using the developed protocol, data for each of the 30 counties were entered into a standardized scoring rubric as described above. Points were assigned based on the rubric's predefined allocation rules to produce a final quantitative score representing the overall strength of each ordinance. This framework evaluated each ordinance's comprehensiveness based on legal scope, environmental coverage, ordinance implementation, and enforceability. Total scores ranged from 26 to 111 points, where 26 points

reflected minimum protections under state law, and higher scores represented more comprehensive and stronger coverage, implementation, and enforcement ordinances. Scores were adjusted for exemptions or allowances for designated smoking areas, two features known to reduce the effectiveness of the smokefree ordinance's protective impact. Jurisdictions that included broad exemptions or permitted designated smoking areas received point deductions, ensuring the scores accurately reflected each ordinance's potential real-world effects. After scoring, the ordinances were classified into quartiles to support interpretation and enable comparison across jurisdictions. Ordinances were classified into four categories:

- 84 or more points - Strong (top quartile),
- 57 – 83 points - Moderate (second quartile),
- 28 – 56 points - Weak (third quartile),
- Below 27 - Minimum (bottom quartile, only state law applies).

These quartile ranges were applied after all adjustments to ensure consistency across the dataset.

Assessment for Associations

A correlation analysis was performed using Excel to explore potential associations between the strength of smokefree ordinances and county-level characteristics. Specifically, Pearson correlation coefficients were calculated to assess the relationship between ordinance strength scores (scored using the scoring framework) and selected county characteristics as listed in Table 3.2, including socioeconomic and demographic indicators obtained from the 2023 County Health Rankings. Analyses were conducted for the full sample of 30 counties, grouped into counties with the most improved and worsened smoking rates. To assess any association

with the strength of the adopted ordinance, analysis was performed for the subset of 13 counties with codified smokefree ordinances.

Hypothesis Testing

In addition to the correlation analyses, a hypothesis was tested to explore whether variation in ordinance strength distinguished counties with highly divergent smoking rate trends. The hypothesis was that counties with the most improved smoking rates between 2015 and 2021 have stronger smokefree ordinances compared to counties with the least improvement or increased smoking rates during the same period. An independent sample t-test assuming unequal variances was conducted.

CHAPTER 4

FINDINGS

Following the legal analysis framework described in Chapter 3, we developed the protocol to analyze the county smokefree ordinances and the scoring framework used to determine the strength of the county smokefree ordinances. The study also sought to explore whether the county population's social, economic, and demographic characteristics influence the adoption and implementation of stronger county smokefree ordinances. This chapter presents the results and the conclusion of the hypothesis we tested.

Background information

The county-level smoking prevalence data analysis from 2015 to 2021 revealed substantial variation in trends across Georgia. Overall, the state experienced an 11.11% relative reduction in adult smoking rates during this period. However, when examining individual counties, the magnitude and direction of change differed markedly. Some counties achieved significantly greater reductions than the state average, while others experienced a significant percentage increase. As shown in **Table 4.1**, DeKalb and Fulton (-18.75) and Cobb and Athens-Clarke (-20.00) registered a significant most decrease, while Treutlen (+44.44), Johnson (+38.89), and Randolph (+35.00) showed a considerable percentage increase in smoking rates among adults in the county.

Legal Analysis Findings

Local jurisdictions, counties, and cities can enact and codify stronger local ordinances. As a result, a patchwork of county-specific ordinances with differing constructs and strengths

exists. For example, counties like Douglas and Gwinnett have established dedicated clean indoor air ordinances, demonstrating proactive efforts to reduce exposure to secondhand smoke. Some counties, such as Cherokee and Cobb, have implemented limited no-smoking policies within county facilities, promoting smokefree environments in government-operated spaces, and yet some have no mention of the law in their county codes. As shown in Table 4.1, out of the 30 counties included in the sample, 13 have some codified language about prohibiting tobacco use in public places to varying restriction levels.

Table 4.1: Selected Georgia counties by ordinance presence, December 31, 2023

County	Smoking Percentage Change	Has a Smokefree Ordinance	Ordinance Location in County Codebook / Notes, if applicable
Georgia (All counties)	-11.11	State law	Georgia Smokefree Air Act O.C.G.A. §§ 31-12A-1 through 31-12A-13, 2005
Counties with the least improvement in smoking rates			
Treutlen	44.44	Not found	Not Available
Johnson	38.89	Yes	Smoke-free facility - Sec. 2-31 - Res of 1-10-2000; Sec. 1-8
Elbert	35.29	Not found	Not Available
Randolph	35.00	Not found	Not Available
Seminole	31.25	Not found	Not Available
Clinch	28.57	Not found	Not Available
Bacon	27.78	Not found	Not Available
Charlton	27.78	Yes	Sec. 12-1 (h); Ord. No. 27 of 2023, 5-18-2023)
Quitman	27.78	Not found	Not Available
Appling	26.32	Not found	Not Available
Turner	26.32	Not found	Not Available
Warren	26.32	Not found	Not Available
Chattooga	25.00	Not found	Not Available
Baker	21.05	Not found	Not Available
Atkinson	19.05	Not found	Not Available
Counties with the most improvement in smoking rates			
Calhoun	-7.41	Yes	(Ord. No. 773, § 59-1, 12-8-2003)
Sumter	-9.09	Not found	Not Available
Douglas	-11.11	Yes	Ord. of 1-18-05; Article VIII; Ord. of 5-1-07
Houston	-11.11	Not found	Not Available
Stewart	-12.50	Not found	Not Available
Cherokee	-13.33	Yes	Sec. 2-5; Ord. No. 2015-O-002, § 1, 6-16-15
Columbia	-13.33	Yes	Article IV; Ord. No. 04-08, § 1(46-69), 9-21-2004
Gwinnett	-13.33	Yes	Article V; Ord. No. GCID2022-0543(SFA-2022), Exh. A, 5-24-2022
Fayette	-15.38	Yes	Sec. 18-16; (Ord. No. 2013-17, § 1(14-16), 1-23-2014)
Oconee	-15.38	Not found	Not Available
Forsyth	-16.67	Yes	Chapter 54 - Sec. 54-22
DeKalb	-18.75	Yes	Chapter 16; Article VI; Division 2; Ord. No. 12-17, Pt. I, 10-23-12
Fulton	-18.75	Yes	Chapter 50 - Parks and Recreation; Sec.50-50; 16-0817, 9-21-16
Athens-Clarke	-20.00	Yes	Chapter 4-3; Ord. of 8-1-2023(5), §§ 1, 2
Cobb	-20.00	Yes	Chapter 94 – Personnel; Sec 94 – 2; Mo. of 4-28-87; Code 1977, § 3-2-11.1

Source: Municode, CIViCplus, 2024

Coded Ordinances

After the protocol was finalized, the sample of county ordinances was analyzed based on the identified key criteria in the protocol, including the extent of indoor and outdoor smoking restrictions, exemptions, penalties for violations, designated collaboration agencies, and implementation strategies at the county level and effective after 2005, ensuring alignment with the state law. State law is the floor, so the state law applies if a county does not have a regulation addressing tobacco use in its county codes. Utilizing the standardized coding questionnaire, derived from the comprehensive Codebook (Appendix 3), we documented answers for each county. We ensured that each field was filled with either a direct response or "not available" and used comments and annotations to highlight areas of uncertainty. By applying a structured legal analysis approach, the study generates data set for the sampled counties. **Table 4.2** in the Appendix shows the summary of coded ordinances and the distribution of key ordinance features across the 30 Georgia counties analyzed.

As indicated, the data reveal that 13 of the 30 counties in the sample had codified smoke free ordinances referring to tobacco smoke at some level by December 31, 2023, potentially addressing localized public health concerns more directly. Of these 13 counties, it was observed that 2 of the counties (Johnson and Calhoun) were early adopters with smokefree ordinances before the state law, but have not updated since then. Only 11 (36.7%) of the 30 counties had policies enacted or updated after the passage of the 2005 state law, indicating limited post-legislation law advancement at the local level. Among those 11 counties, 5 (16.7%) adopted comprehensive policies, whereas limited-scope policies were more common (n=6, 20%). Additionally, 9 (Athens-Clarke, Cherokee, Cobb, Columbia, DeKalb, Douglas, Fayette, Forsyth, Fulton, and Gwinnett) specifically addressed prohibiting smoking in outdoor public places,

offering more protection from tobacco use.

Figure 4.1 presents the distribution of the county smoke free ordinances across the 30 Georgia counties analyzed. Approximately 43.3% of the counties (n=13) had enacted a local smokefree ordinance, while 56.7% (n=17) operated solely under the provisions of the Georgia Smokefree Air Act of 2005. Further, the data reveals that of the counties that have adopted local smokefree ordinances, only one-third (10 out of 30) provide expanded protections from tobacco smoke in outdoor public spaces, highlighting a significant opportunity to strengthen public health policies across Georgia. Figure 4.2, the map of Georgia, shows the location of the 13 counties with a codified smokefree ordinance. It is observed that most (80 percent) of the expanded protection ordinances are near the Atlanta metro area.

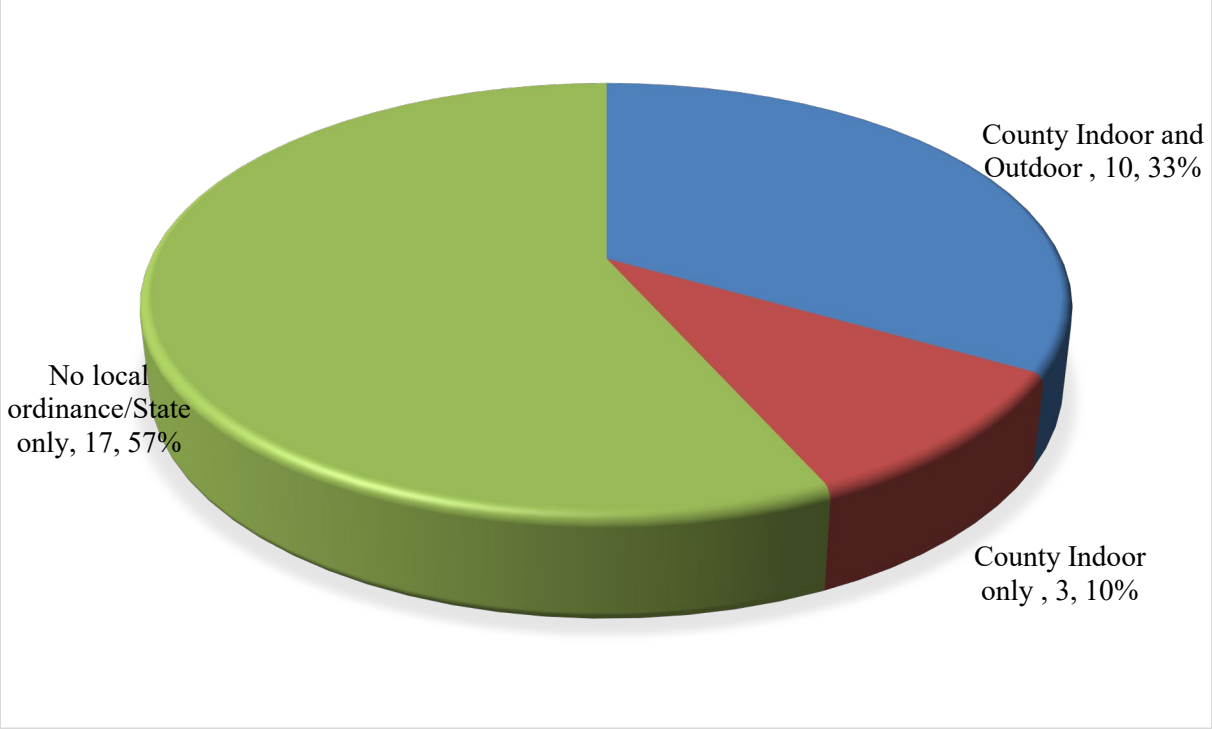
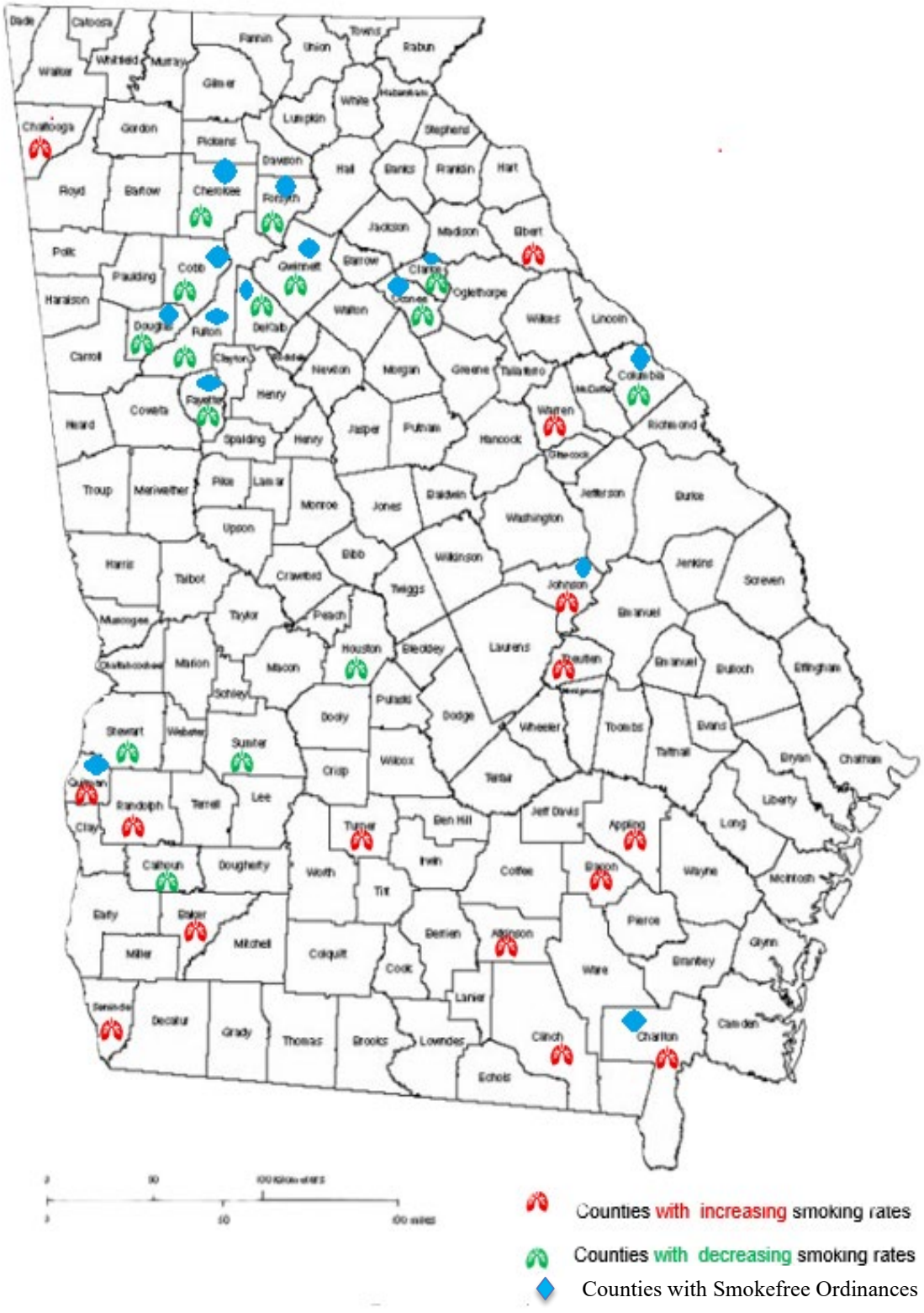


Figure 4.1: Number of counties by type of smokefree law, Georgia, 2023

Figure 4.2: Map of sampled counties with presence of smokefree ordinance, Georgia 2023.



Analysis by construct is shown in **Figure 4.3** and reveals that a rationale for the ordinance was stated in only five counties (16.7%), highlighting a missed opportunity for public health framing. Exemptions to smokefree rules were prevalent and mentioned in 27 (90%) of the ordinances, and over half (56.7%, n=17) allowed designated smoking areas. Penalties for violations were specified in 40% (n=12) of counties, and an enforcement agency was named in just 33.3% (n=10). Only 43.3% of the sample (n=13) included at least one compliance strategy, such as signage, ashtray removal, or public education, with signage being the most frequently mentioned tactic.

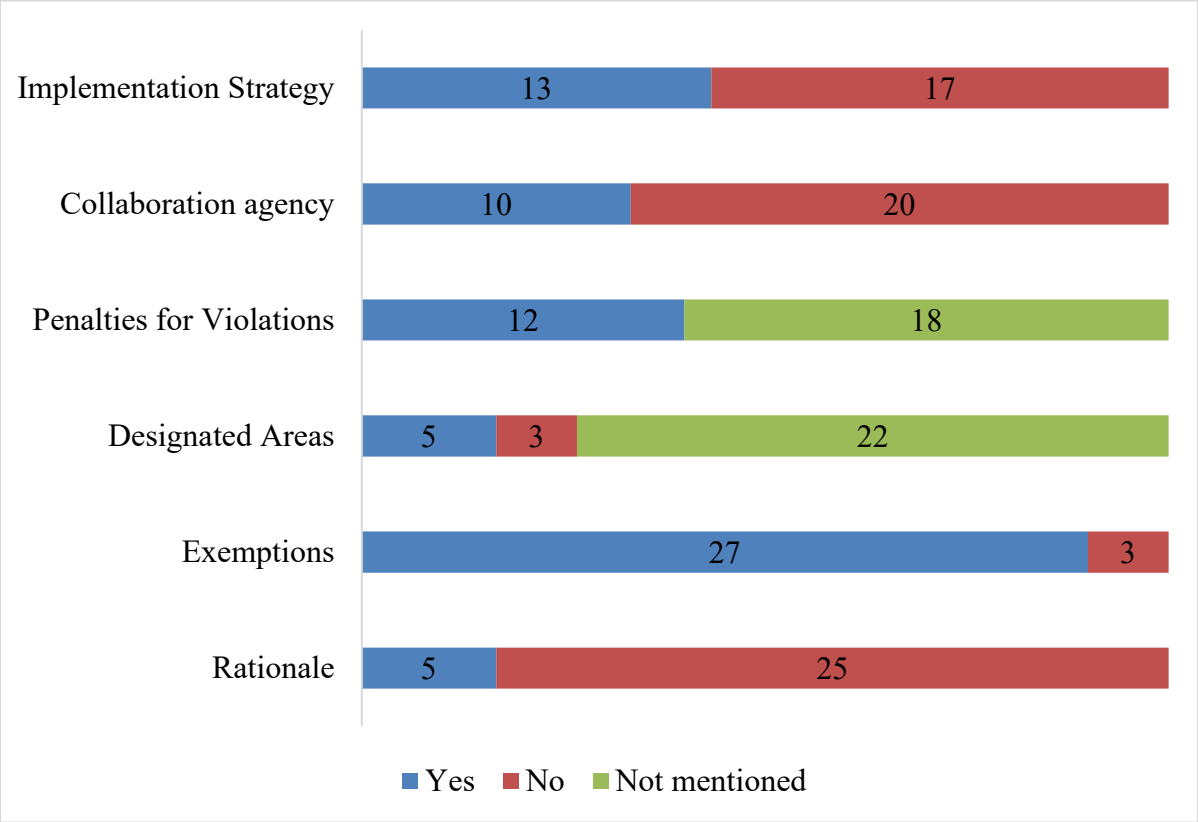


Figure 4.3: Number of counties by construct of smokefree county law, Georgia, 2023, (n=30)

These findings illustrate the uneven landscape of smokefree law adoption and implementation across Georgia counties. Notably, the spread of local smokefree ordinances does

not appear to follow a uniform pattern. These variations are consistent with patterns described in the law diffusion literature, in which local governments adopt policies at different times and in various forms depending on local political will, resources, or neighboring models, and raise questions about the effectiveness of voluntary or decentralized smokefree policymaking frameworks in achieving uniform public health protections.

Ordinance Scores

The Georgia Smokefree Air Act sets a minimum baseline of protection, the floor, therefore all counties, regardless of whether they have a codified ordinance, receive at least 26 points. Each regulation was evaluated based on its scope, coverage, enforcement, and implementation mechanisms. A detailed breakdown of the scoring is provided in the methodology presented in Chapter 3, Scoring Framework, with summary results in **Table 4.3.** These scores support cross-jurisdictional comparisons and help identify opportunities for strengthening local smokefree policies.

Exemptions and designated smoking areas create loopholes that undermine the effectiveness and equity of smokefree laws; therefore, points are deducted if these dimensions exist in the law, and zero if the law is silent. If the law specifically states “no exemptions” or “no designated areas allowed,” the law would receive 5 points.

Table 4.3: Summary of Ordinance Scores, select counties (n=30) Georgia 2023

County	Documentation Score (Max 10)	Ordinance Coverage Sc (Max 60)	**Negative points for Exemptions (Max 5)	**Negative points for Designated Areas (Max 5)	Implementation and Collaboration Strategies (Max 31)	Total Score (Max 111)	Ordinance Strength Category
Counties with least improvements in smoking rates							
Appling	5	15	-9	-2	17	26	Minimum
Atkinson	5	15	-9	-2	17	26	Minimum
Bacon	5	15	-9	-2	17	26	Minimum
Baker	5	15	-9	-2	17	26	Minimum
Charlton	7	15	-9	-2	27	40	Weak
Chattooga	5	15	-9	-2	17	26	Minimum
Clinch	5	15	-9	-2	17	26	Minimum
Elbert	5	15	-9	-2	17	26	Minimum
Johnson	7	15	0	0	12	34	Weak
Quitman	5	15	-9	-2	17	26	Minimum
Randolph	5	15	-9	-2	17	26	Minimum
Seminole	5	15	-9	-2	17	26	Minimum
Treutlen	5	15	-9	-2	17	26	Minimum
Turner	5	15	-9	-2	17	26	Minimum
Warren	5	15	-9	-2	17	26	Minimum
Counties with the most improvement in smoking rate							
Houston	5	15	-9	-2	17	26	Minimum
Oconee	5	15	-9	-2	17	26	Minimum
Stewart	5	15	-9	-2	17	26	Minimum
Sumter	5	15	-9	-2	17	26	Minimum
Fayette	5	24	0	-1	0	28	Minimum
Cobb	6	25	0	-2	8	37	Weak
Cherokee	5	37	-1	-1	0	40	Weak
Forsyth	7	26	-1	0	9	41	Weak
Douglas	10	20	-4	0	20	46	Weak
Calhoun	10	17	0	0	20	47	Weak
Athens-Clarke	7	24	-3	0	20	48	Weak
Fulton	5	27	0	0	19	51	Weak
Columbia	7	31	-5	-2	28	59	Moderate
DeKalb	10	44	-5	0	28	77	Moderate
Gwinnett	10	49	-2	-1	28	84	Strong

*** Points are subtracted for having exemptions or designated areas, zero points if silent, and 5 points if specifically indicated no loopholes.*

The evaluation of smokefree ordinances across selected Georgia jurisdictions revealed significant variation in ordinance strength. Gwinnett County received the highest total score (84 out of 111), making it the only "Strong" law among the policies analyzed. DeKalb and Columbia counties followed with scores of 77 and 59, respectively, categorizing them as having "Moderate" policies. Most of the counties with a local ordinance fell into the "Weak" category, except for Fayette, which is classified in the minimum category. All the other remaining counties that do not have a local codified smoke prevention regulation were classified as "Minimum" law strength, and each received a score of 26, indicating the presence of only basic state-level protection.

The scoring framework identified exemptions and designated smoking areas as major contributors to lower total scores, highlighting opportunities for improvement through law revision. Overall, this analysis underscores wide disparities in the comprehensiveness and enforceability of smokefree laws across the state. The final scores are presented in **Figure 4.4.** The figure presents the county-level distribution of local smoke-free ordinances in Georgia Counties shaded green represent those with adopted local smoke-free ordinances, while counties shaded red have no ordinance in place. The figure visually demonstrates the uneven adoption of smoke-free policies.

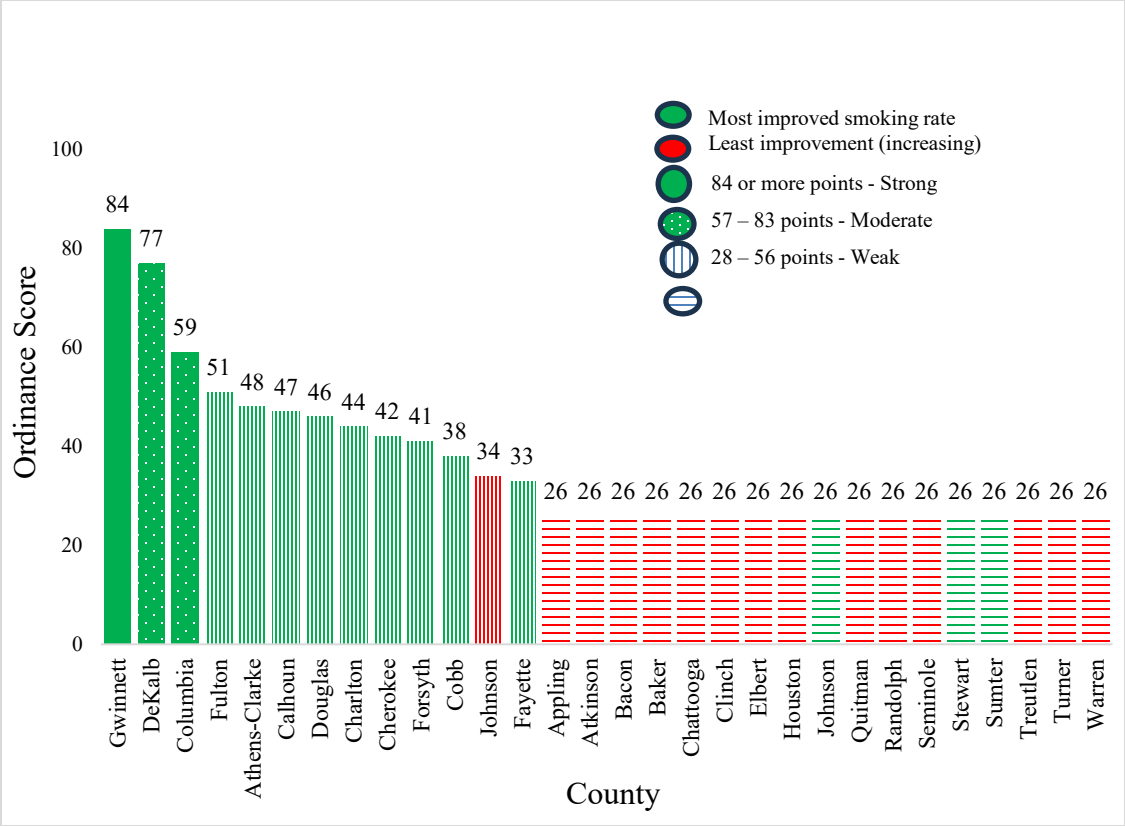


Figure 4.4: Total County Ordinance Scores by presence of codified law and smoking trend

Association between the county's characteristics and the strength of the smokefree ordinance

The study conducted descriptive and correlation analyses to explore if there was any association between the county population's social, economic, and demographic characteristics and the county's smokefree ordinance. **Table 4.4 in the Appendix** shows the socioeconomic and demographic characteristics of the counties in the sample and by the calculated ordinance strength.

Descriptive Analysis of Select County Characteristics

Table 4.4 presents select social, economic, and demographic characteristics of Georgia counties included in this study, grouped by the presence or absence of a codified local smokefree ordinance. The findings highlight considerable variation across counties in multiple dimensions.

Smoking

We found that smoking rates vary substantially within both groups. Among counties with codified regulations, Adult smoking rates exhibit wide variability across both groups of counties. Among counties with a codified ordinance, smoking prevalence ranges from 11.2% in Forsyth County to 26.8% in Johnson County. Similarly, among counties without local smokefree regulations, Clinch County reports the highest smoking rate at 28.6%, followed by Randolph (27.3%) and Chattooga (26.5%) counties. The lowest prevalence in this group is observed in Oconee County (12.4%). These findings suggest that the presence of local smoking ordinances does not uniformly align with lower county-level smoking rates.

Socioeconomic Factors

High School Completion: Generally, counties with a decreasing trend in adult smoking report higher levels of high school completion. Within this group, rates range from 71.0% in Stewart County to 96.0% in Oconee County, with several counties, such as Houston, Cherokee, Columbia, Fayette, Forsyth, Fulton, and Cobb, exceeding 90%. In contrast, counties experiencing an increase in smoking tend to report lower educational attainment, with high school completion rates ranging from 66.8% in Atkinson County to 85.9% in Seminole County.

When comparing regulated and unregulated counties, although there are some outliers, high school completion rates are generally higher in counties with smoke-free regulations. All counties in this group report rates exceeding 75% high school completion rates; the lowest is

Johnston at 75.2 percent. In contrast, six of the 17 counties in the subset with no local ordinance have high school graduation rates lower than 75%. Atkinson and Quitman have substantially lower levels of educational attainment at 66.8% and 68.9%, respectively. Additionally, four other counties, Chattooga, Clinch, Stewart, and Warren, have high school graduation rates lower than 75%. Interestingly, it is noticeable that Oconee County, despite lacking a local smokefree ordinance, has the highest overall high school completion rate in the sample at 96.0%.

Median Household Income: Median household income shows an apparent disparity between the two groups. Counties with a decreasing smoking trend tend to report substantially higher income levels. Several counties in this group report median incomes exceeding $70,000, including Houston, Gwinnett, DeKalb, Fulton, and Cobb, while others, such as Cherokee, Oconee, and Forsyth, report incomes above $100,000. In contrast, counties experiencing an increase in smoking predominantly fall in the lower income brackets, with values ranging from $34,882 in Randolph County to $47,229 in Charlton County.

Considering regulation, median household income for counties with codified smokefree ordinances has some of the highest-income areas in the state, such as Forsyth ($120,919), Cherokee ($96,997), and Fayette ($92,319). Again, Oconee ($112,581) is the outlier in the subgroup with no smokefree regulation, and Houston ($71,609) reports relatively high-income levels. All the other counties in this group have a median income of less than $47,000.

Unemployment: Both groups of counties with decreasing and increasing trends include a range of unemployment rates; however, counties with decreasing smoking trends include several with notably low rates. For example, Oconee (2.20%), Forsyth (2.50%), Cherokee (2.60%), Columbia (2.70%), and Fayette (2.90%) all report rates under 3%. In comparison, the increasing trend group presents a slightly higher concentration of counties with unemployment rates above

4%, including Turner (6.40%), Randolph (5.20%), and Warren (4.70%).

Environmental and Contextual Factors

Social Association: Rates of social association, measured as the number of associations per 10,000 residents, vary across the sample. Counties with an increasing smoking trend report a broader range in social association ratios, from 0.00 in Quitman and Baker to 19.00 in Turner. Some of the highest levels of social association, including Clinch (18.20), appear in counties without smokefree ordinances and increasing smoking rates. Counties with decreasing trends show more moderate levels of social associations, ranging from 4.50 in Stewart to 13.30 in Fayette. However, there is no clear pattern by ordinance adoption as evidenced by rates in counties such as Charlton (3.0) and Stewart (4.5), one with and one without a local ordinance, reporting the lowest levels of social association.

Rurality: Rurality patterns distinguish the two groups. Counties with increasing smoking trends are more consistently rural, with many reporting rurality rates above 50% and several at 100%, such as Warren, Baker, and Atkinson. While some counties with decreasing smoking trends are also entirely rural (e.g., Calhoun and Stewart), others are highly suburban or urban. Several counties in this group, Douglas, Houston, Cherokee, Columbia, Fayette, Forsyth, DeKalb, Fulton, Athens-Clarke, and Cobb, report rurality rates below 20%, and some, such as Gwinnett, DeKalb, and Cobb, are nearly entirely urban with rurality rates under 1%. Only 15 percent (2 out of the 13) counties with a regulation report a rurality of more than 50 percent.

Population density: Rurality and population density are strongly correlated; the more rural the county is, the fewer people it has per square mile. In this study, we observe that counties with the least improvements consistently exhibit low population density, with most reporting fewer than 80 persons per square mile. Several counties, such as Baker (8.4), Clinch

(8.3), and Quitman (14.8), have exceptionally sparse populations. While some counties with the most improvements in smoking trends also have low population densities (e.g., Stewart at 11.6 and Calhoun at 19.9), the group is overwhelmingly composed of highly dense suburban or urban areas. Many counties in this group, including Douglas, Houston, Cherokee, and Columbia, report densities of several hundred people per square mile, while core metro counties like Gwinnett (2,222), Cobb (2,255), and DeKalb (2,855) are densely populated with over 2,000 people per square mile.

Limited English Proficiency: Both groups include counties with relatively low percentages of residents not proficient in English. However, counties with decreasing smoking trends include some of the highest values, such as Stewart (15.10%), Gwinnett (7.90%), and DeKalb (4.3). In the increasing trend group, Atkinson stands out with 12.30%, while most other counties report values below 4%. Stewart (15.1) and Atkinson (12.3) have the highest rates of residents not proficient in English.

Demographic Factors

Race/Ethnicity: Counties with decreasing smoking trends tend to be more diverse, with notably high Hispanic populations in Stewart (34.9%) and Gwinnett (22.2%) and the highest Asian populations in Forsyth (17.9%) and Gwinnett (13.2%). In contrast, counties with increasing smoking trends generally have higher proportions of White residents, such as Bacon (72.7%) and Elbert (62.8%), while decreasing trend counties like Stewart (22.4%) and DeKalb (29.5%) have much lower White populations. Black populations are prominent across both groups, with Randolph (60.1%) and Warren (56.6%) in the increasing group and Calhoun (60.7%) and DeKalb (53.4%) in the decreasing group. The results also show that the regulated counties are the most diverse, with Gwinnett County being the most diverse, 33.2% White,

28.9% Black, 22.2% Hispanic, and 13.2% Asian residents. In contrast, counties that lack codified regulation, such as Oconee (83.2% White), Chattooga (82.1% White), Randolph (60.1% Black), and Warren (56.6% Black), are more racially homogeneous.

Correlation Analysis of County Characteristics with Ordinance Adoption

We conducted a statistical correlation to find if county characteristics were associated with the adoption of a strong local smokefree ordinance. **Figure 4.5** shows the correlation of the attributes studied with all counties included and among counties with local regulations only. The results present notable differences in both the strength and direction of associations when comparing the full sample of counties to the subset with a local smokefree ordinance. In the full sample, ordinance strength showed a strong negative correlation with the adult smoking rate ($r = -0.567$), indicating that counties with lower smoking rates were more likely to have stronger ordinances. However, this relationship weakened substantially in the subset of counties with local regulations, where only a weak negative correlation was found ($r = -0.243$). This shift suggests that once a smokefree ordinance is adopted, smoking prevalence becomes a less influential factor in determining its relative strength. It also highlights the importance of considering regulatory context when interpreting associations between public health policies and community-level health behaviors.

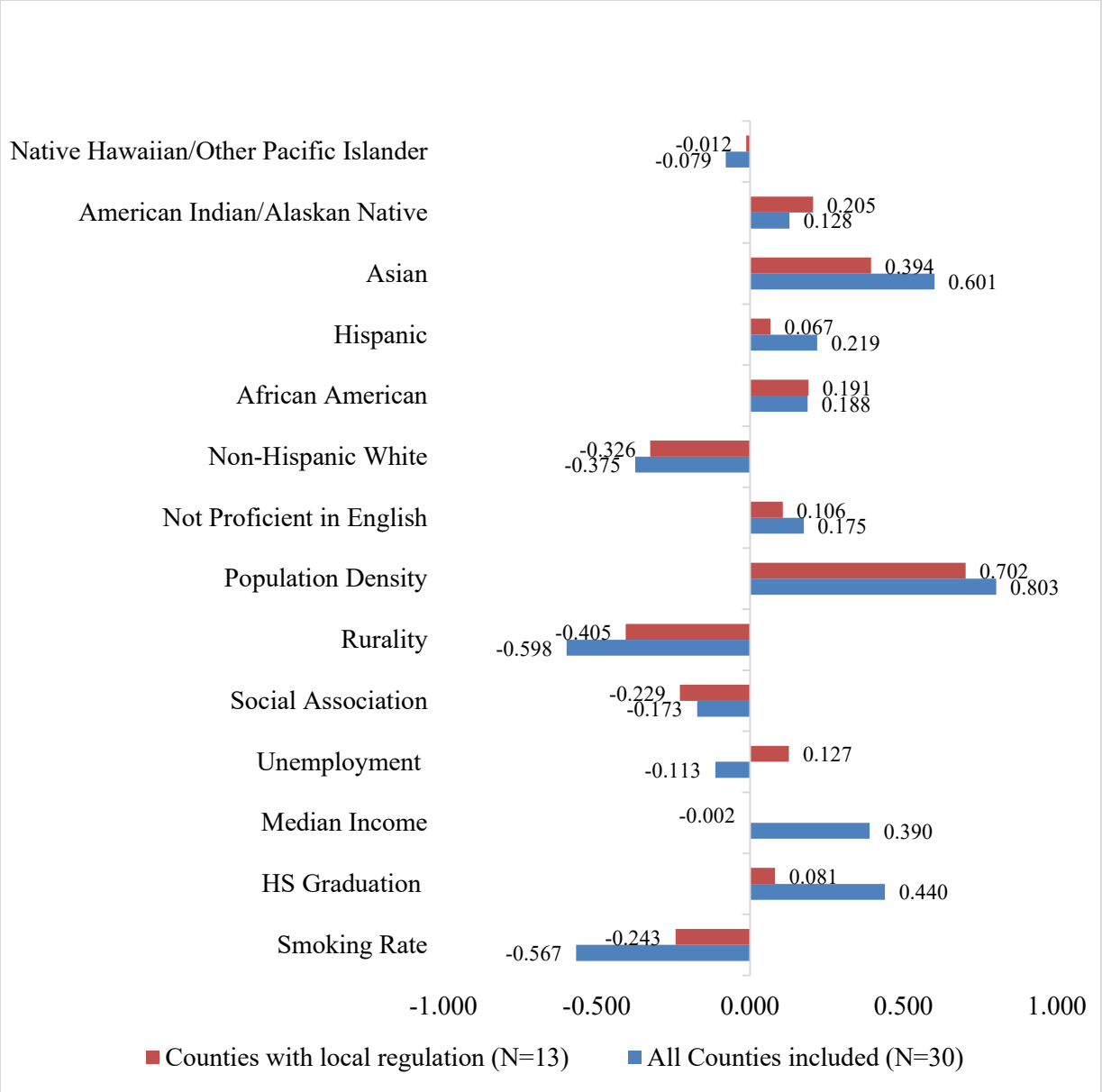


Figure 4.5 Correlation coefficients between studied characteristics with all counties and among counties with a local regulation

Socioeconomic Factors:

The analysis revealed significant shifts in the strength and direction of correlations when comparing the whole sample to the subset with local smokefree ordinances. The moderate positive correlation between ordinance strength and high school graduation rates observed across

the sample (r = 0.440) became negligible in the subset with ordinances (r = 0.081). A similar pattern emerged for median household income, where the moderate positive correlation seen in the full sample (r = 0.390) was not present among regulated counties (r = -0.002).

In contrast, the unemployment rate showed a notable reversal. While the full sample indicated a weak negative correlation (r = -0.113), the subset with local ordinances demonstrated a moderate positive correlation (r = 0.127), suggesting that in counties with existing smokefree laws, the strength of the law may be associated with higher levels of unemployment.

Environmental and Contextual Factors:

There is a weak negative association with social association rates in the overall sample (r = -0173) to a moderate negative correlation in the regulated subset (r = -0.229). The negative correlation between ordinance strength and rurality persisted across both analyses but was weaker among regulated counties (r = -0.405) compared to the overall sample (r = -0.598). There is a strong positive correlation between ordinance strength and population density overall, in all counties (r=.803) or when only looking at regulated counties (r=.702), suggesting that more urban, densely populated counties are more likely to adopt a stronger law than a rural, sparsely populated county. These findings underscore how contextual variables may influence ordinance strength differently depending on whether a local regulation is already in place.

Demographic Factors (Race/Ethnicity):

In the subset of counties adopting a smokefree ordinance, several demographic correlations with ordinance strength became more pronounced compared to the full sample of counties. The negative correlation with the percentage of Non-Hispanic White residents weakened slightly (r = -0.326), relative to the full sample (r = -0.375), suggesting that counties with lower proportions of Non-Hispanic White residents were more likely to implement stronger

smokefree laws. The positive correlation with the percentage of Hispanic residents decreased substantially from r = 0.219 to r = 0.067). The relationship with African American residents grew slightly stronger (from r = 0.188 to r = 0.191), while the correlation with Asian residents, though still positive, decreased from r = 0.601 in the full sample to r = 0.394 in the subset. Correlations with American Indian/Alaskan Native were positive but weak, and negative but very weak for the Native Hawaiian/Other Pacific Islander populations.

Correlation Analysis among counties with an ordinance

When analyzing if there was a correlation between ordinance strength and county characteristics among counties with an ordinance, regardless of whether they potrayed a decreasing or increasing trends, a statistically significant moderate positive correlation was observed between ordinance strength and both high school completion rate ($r = 0.479$, $p = 0.007$) and median household income ($r = 0.427$, $p = 0.019$). Additionally, a strong and statistically significant negative correlation was found with rurality ($r = -0.633$, $p = 0.000$), indicating that more rural counties generally had weaker ordinances. Again, a moderate positive correlation with the percentage of Asian residents was also statistically significant ($r = 0.599$, $p = 0.000$). The other variables, such as unemployment rate, social association ratio, and percentages of Hispanic, Black, and White residents, showed weak to moderate correlations; none reached statistical significance.

Hypothesis Testing

To assess whether there was a statistically signifcicant difference between ordinance strength of counties with most improved and least improved smoking rates, an independent-sample t-test assuming unequal variances was performed.

Table 4.5: Results of Independent-Samples t-Test Comparing Mean Ordinance Strength Between Counties with Decreasing vs. Increasing Smoking Rates (N=30)

	Least improved counties	*Most improved counties*
Mean	26.5	44.1
Variance	16.3	329.8
Observations	15	15
Hypothesized Mean Difference	0	
df	14	
t Stat	-3.72921	
P(T<=t) one-tail	0.001122	
t Critical one-tail	1.76131	
P(T<=t) two-tail	0.002244	
t Critical two-tail	2.144787	

The analysis revealed a significant difference in ordinance strength between the groups, t (Stat) = -3.73, $p < .001$ (two-tailed). As hypothesized, the group experiencing the highest improvements in smoking rate showed significantly higher mean ordinance strength scores (M = 44.1) compared to the group with the least decrease or an increase (M = 26.5). Due to the sampling methodology concentrating on extreme groups, these results primarily indicate that ordinance strength is a distinguishing characteristic between these high- and low-performing counties regarding smoking rate change.

CHAPTER 5

DISCUSSION, RECOMMENDATIONS, AND CONCLUSION

Summary of Key Findings

This study reveals a significant patchwork of public health protections against tobacco smoke across Georgia, where the strength of local ordinances is inconsistent and appears linked to the socioeconomic status of the community. The primary aim of this research was to develop a standardized, replicable tool for objectively analyzing county-level smokefree ordinances and to apply this tool to understand the current landscape of such ordinances in Georgia, focusing on their scope, coverage, implementation, and enforcement mechanisms. By developing and applying a novel legal analysis protocol, this research provides a new tool for assessing these disparities and demonstrates that while many counties have taken steps to close gaps left by the state's 2005 Smokefree Air Act, the resulting legal landscape is highly uneven. This chapter interprets these findings, discusses their implications for public health law and equity, and outlines directions for future research.

Synthesis of Answers to Research Questions

- **RQ1 (Differences in Ordinances):** County-level smokefree ordinances in Georgia differ substantially in their existence, comprehensiveness of indoor and outdoor coverage, types of places covered, inclusion of exemptions, and specificity of enforcement mechanisms and penalties.

- **RQ2 (Key Elements and Standardization):** Key elements include ordinance documentation, scope (indoor/outdoor), coverage (public places, workplaces, etc.), exemptions, designated smoking areas, penalties, enforcement responsibilities, and compliance strategies. The developed protocol provides a standardized approach to assess these elements.
- **RQ3 (Associations with County Characteristics):** Ordinance strength was associated with lower smoking rates, lower rurality, higher income, and higher education levels in the overall sample. In the subset of counties with local laws, stronger ordinances were linked with greater linguistic diversity, higher Hispanic population share, lower White population share, and, unexpectedly, higher unemployment.
- **Hypothesis (Ordinance Strength and Smoking Rate Change):** The hypothesis was supported; counties with the most improvements in smoking rates rates had significantly stronger smokefree ordinances.

Interpretation of Findings

A Novel Protocol for Legal Analysis

The development of a systematic legal analysis protocol, complete with a coding questionnaire and a scoring framework, represents a significant methodological advancement. This protocol proved highly effective in systematically evaluating and quantifying the strength of county-level smokefree ordinances, providing data-driven, replicable tools to identify gaps and strengths in smokefree protections, thereby facilitating evidence-based solutions for health equity across the state. The protocol's ability to transform complex legal texts into quantifiable data for public health analysis and action is a defining characteristic of legal epidemiology and policy surveillance (Wagenaar et al., 2023).

Variability in Ordinances

Significant heterogeneity exists among Georgia counties regarding the presence, scope, coverage, and enforcement provisions of their smokefree ordinances. The findings demonstrate substantial disparities in how Georgia counties approach smokefree legislation. While the Georgia Smokefree Air Act of 2005 provides a baseline and allows local governments to adopt stronger local ordinances, the lack of local codification in many sampled counties suggests underutilization of this opportunity, leading to a patchwork of protection across the state. Even among counties with local ordinances, the depth of coverage (e.g., inclusion of outdoor spaces, types of public places covered) and the robustness of enforcement mechanisms (e.g., specified penalties, designated enforcement agencies) vary significantly, as highlighted by the wide range in the strength of ordinances, from "Minimum" (26 points for counties with no local ordinance, relying on state law minimums for coverage but lacking local enforcement mechanisms) to "Strong" (e.g., Gwinnett County with 84 point). This variability implies inequitable protection from secondhand smoke for Georgia residents depending on their county of residence.

This observed variability aligns with broader public health literature, which indicates a slow diffusion of smoke-free laws, particularly among low SES populations (Hiscock et al., 2012). This evidence collectively suggests that the mere existence of a state law does not guarantee uniform protection or consistent enforcement at the local level. The "patchwork" of public health protections observed in Georgia is not merely an administrative issue; it directly drives health inequities. This pattern underscores that while state-level policies provide a foundational floor, local action is imperative for achieving comprehensive and equitable protection, particularly in diverse and socioeconomically varied regions.

Associations with County Characteristics

The correlational analyses provide insights into factors potentially associated with the adoption and strength of smokefree ordinances. In the overall sample, the findings are generally consistent with public health literature, suggesting that more urban and socioeconomically advantaged areas may have greater capacity or political will to enact stronger health protections. Stronger ordinances are moderately to strongly associated with lower smoking rates (r = -0.567), less rurality (r = -0.598), higher population density (r = 0.803), higher high school graduation rates (r = 0.440), and higher median income (r = 0.390). This suggests that more urban and socioeconomically advantaged areas may have a greater capacity or political will to enact stronger health protections. The positive correlation with the Asian population percentage (r=.601) warrants further exploration.

The shift in correlational patterns within counties that have adopted local regulations is particularly revealing. The weakened link to smoking rates, income, education, and rurality suggests that different dynamics might be at play in the *strengthening* of ordinances once the initial step of adoption is taken. It could be that in more diverse communities or those facing specific economic challenges, once a local ordinance is on the books, there is a different set of socio-political factors or advocacy efforts driving its comprehensiveness. For example, communities with significant non-English speaking populations might advocate for more explicit and more comprehensive protections due to potential vulnerabilities or targeted advocacy.

The positive correlation with unemployment in this subset is counterintuitive and requires cautious interpretation and further investigation; it could reflect complex underlying socio-political factors in those specific counties. These differing patterns underscore the complexity of law adoption versus law strengthening and highlight that a "one-size-fits-all" understanding of

determinants may not apply, and that strategies aimed at promoting initial law adoption may need to be tailored differently from those designed to strengthen existing policies. Understanding these nuanced dynamics is essential for developing equitable and impactful public health interventions.

The positive correlation between stronger ordinances and higher unemployment in the subset of counties with existing local laws is counterintuitive and requires cautious interpretation and further investigation. This unexpected correlation signifies a need for deeper qualitative inquiry to uncover the complex, unmeasured socio-political factors that might be at play. For instance, it could indicate a heightened awareness of health disparities within economically vulnerable communities, leading to more vigorous advocacy for protective health policies. Alternatively, a different political economy might exist in these areas, where economic challenges could diminish the influence of business interests traditionally opposing smokefree laws. This finding highlights the inherent limitations of purely quantitative correlational studies in complex social phenomena.

Causal Inference and Effectiveness – Hypothesis Testing

Confirming the hypothesis that counties with the most significant decreases in smoking rates had significantly stronger ordinances is a critical finding. While the purposive sampling for extreme groups and the cross-sectional nature of the ordinance analysis limit causal inference, this association strongly suggests that more comprehensive local smokefree laws are a component of successful tobacco control efforts at the county level. It aligns with the broader evidence base supporting the effectiveness of strong smokefree policies in reducing smoking prevalence (Callinan et al., 2010; Centers for Disease Control and Prevention, 2019.

The study's finding of an association between stronger ordinances and reduced smoking

rates is a core contribution. This local observation is not isolated but consistent with a vast body of global and national evidence (American Lung Association, 2020a; Centers for Disease Control and Prevention, 2019; Centers for Disease Control and Prevention, 2022b; Centers for Disease Control and Prevention, 2024; Centers for Disease Control and Prevention., 2019; Hyland et al., 2012; Lightwood & Glantz, 2009; Mendes, 2014; Winickoff et al., 2009; Yang et al., 2024). The extensive supporting literature provides overwhelming evidence for the effectiveness of smoke-free policies on SHS exposure, smoking rates, and various health outcomes. This consistency lends considerable weight to the plausibility of a causal link between comprehensive local smokefree laws and improved public health outcomes. This strengthens the law imperative, indicating that even without a perfect experimental design for this specific study, aligning its findings with a robust body of established literature provides strong justification for advocating for and implementing comprehensive local smokefree ordinances as a proven strategy for public health improvement.

Comparison with Model Policies

The Georgia Smokefree Air Act of 2005, while a step forward at the time, is not comprehensive by current standards it allows for numerous exemptions and designated smoking areas. The study's findings show that many counties have not advanced beyond the minimum requirements set by this state law. In contrast, model policies, such as those from Americans for Nonsmokers' Rights (ANRf) and the WHO FCTC Article 8, advocate for 100% smokefree environments in all workplaces and public places, including outdoor areas, with minimal or no exemptions as the best practice for population health.

The scoring rubric developed in this study implicitly reflects these best practices, awarding higher scores for more comprehensive coverage and fewer exemptions. Gwinnett

County's ordinance, for example, serves as a local illustration of a law that aligns more closely with these comprehensive model policies than many others examined in the sample. However, understanding the rationale and specific dimensions underlying these laws is crucial for local jurisdictions to adopt such comprehensive policies successfully. The constructs and specific questions embedded within this study's protocol are designed to contribute to this understanding. The observation that Georgia's 2005 Act is the minimum and counties have the power to adopt stronger ordinances, but have not utilized this opportunity, reveals a critical law gap. The developed protocol fills this vital role of identifying and closing these gaps.

While the coding protocol was applied consistently using the categories of documentation, scope, and enforcement, it may not have captured all unique differences in local ordinances. Some counties have added provisions that were not included in the original protocol. This is a limitation that will be addressed in future research and publications. Scores should be interpreted with this in mind.

Implications of the Findings

For Policy and Practice

The replicable, data-driven protocol developed in this study is a valuable tool for various stakeholders working to advance smokefree environments. Policymakers can use the scoring rubric and legal analysis to assess the strength of existing ordinances, pinpoint areas for improvement, and craft legislation that exceeds the minimum requirements of the Georgia Smokefree Air Act. Public health practitioners can draw on the clear association between stronger local ordinances and improved smoking outcomes to support evidence-based advocacy and inform program planning. Meanwhile, community stakeholders, including grassroots organizations and concerned residents, can use the protocol's findings to compare their county's

policies with others, identify disparities, and advocate for stronger protections aligned with national best practices.

A key takeaway from this study is the importance of local codification, which transforms broad state mandates into actionable, enforceable regulations that directly impact community health. The emphasis on local codification, which transforms broad state mandates into actionable, enforceable regulations, represents a crucial understanding of policy implementation. It highlights that state law, while providing a foundational framework, is often insufficient to achieve desired public health outcomes. The actual impact on community health materializes through the specific, detailed local ordinances that translate general mandates into concrete, enforceable rules. This is the point where policy transitions from theory to practical application, directly affecting residents' daily lives. This underscores that effective public health policy necessitates a multi-level governance approach (Pronk et al., 2021), where state frameworks enable, but local jurisdictions are empowered and supported to tailor and enforce policies that meet diverse community needs. The study's developed protocol directly facilitates this process by providing a tool for local assessment and continuous improvement.

For Public Health

Stronger, more comprehensive smokefree ordinances are essential for protecting the public from secondhand smoke, denormalizing tobacco use, and ultimately reducing tobacco-related health disparities. The observed inequities in ordinance strength across Georgia counties translate to inequitable health protection. Addressing these disparities through law improvement is a public health imperative.

To prevent the exacerbation of disparities in tobacco use among vulnerable populations, who often exhibit higher smoking rates, comprehensive tobacco control efforts, including

smokefree air laws, must be implemented equitably and consistently across all population groups (Hiscock et al., 2012). Adopting a social determinants of health approach in tobacco prevention and control is thus essential for achieving health equity and eliminating tobacco-related disparities (Hiscock et al., 2012). Health equity is defined as the pursuit of fairness and justice in health, ensuring that all individuals have equitable access to the resources, opportunities, and healthcare necessary to achieve their full health potential, irrespective of their socioeconomic, racial, or geographical backgrounds (Braveman et al., 2017). Policies represent a key opportunity to improve health outcomes and reduce disparities affecting marginalized populations; however, their implementation must meaningfully integrate health equity as a core focus (Hacker et al., 2022).

The study's finding that "observed inequities in ordinance strength across Georgia counties translate to inequitable health protection" establishes a direct link between law and health equity. This is not merely a consequence but a manifestation of broader health inequities, which are fundamentally driven by social determinants of health (Braveman & Gottlieb, 2014; Hacker et al., 2022; Hiscock et al., 2012). If policy adoption and strength are indeed linked to socioeconomic status, as discussed in earlier sections, then the resulting "patchwork" of protections directly creates unequal exposure to secondhand smoke, disproportionately affecting vulnerable populations. This elevates the discussion from specific law gaps to a fundamental public health and social justice issue. It emphasizes that achieving health equity requires not just general public health interventions but also targeted law improvements that explicitly address the underlying social determinants that create and perpetuate these disparities.

Strengths of the Study

This study offers several notable strengths that enhance its contribution to public health law research. The study contributes to the field of legal epidemiology by providing a practical example of developing and applying a systematic protocol for legal mapping and policy surveillance, as advocated by Burris et al. (2016). It demonstrates how such methods can be used to translate complex legal texts into quantifiable data for public health analysis and inform actionable policy actions.

Foremost is the development of a novel protocol tailored specifically to Georgia's tobacco use prevention legal and public health landscape, yet designed with adaptability in mind for broader application across jurisdictions and topics. By grounding the research in a systematic legal epidemiology methodology, the study ensured a transparent and replicable process, promoting rigor in both data collection and interpretation. This methodology provides a stable and consistent framework that allows for diverse analyses and policy implementations to proceed with clear direction and comparable outcomes.

The study's comparative focus, which involved examining counties with contrasting smoking rate trends, provided an opportunity to explore how variations in ordinance strength may relate to tobacco use, generating hypotheses for future causal research. Most importantly, the study produced a practical, action-oriented tool that public health professionals, policymakers, and advocates can use to assess, compare, and strengthen smokefree county laws, supporting long-term efforts to reduce tobacco-use-related harm and advance health equity.

The field of legal epidemiology itself underscores the importance of objective inquiry and consistent and rational measurement of laws in informing public health interventions (Burris et al., 2010). The protocol developed in this study functions as a tool for public health action. Its

adaptability empowers various stakeholders to conduct assessments, identify local gaps, and advocate for change. This expands the research's impact beyond academia, fostering public health action.

Limitations of the Study

Despite the study's methodological strengths, several limitations should be acknowledged to contextualize the findings appropriately. First, incomplete or inconsistent access to updated ordinance data posed a challenge, even with Municode and official county websites, potentially leading to missed or outdated information. Additionally, variability in ordinance documentation formats, such as whether policies were embedded within broader legal texts or presented as stand-alone ordinances, complicated direct comparisons across counties.

The study's focus on county-level smokefree laws excluded city-level policies that may offer fewer or additional protection, potentially overestimating or underestimating the true extent of smokefree environments in some areas.

Furthermore, the purposive sampling strategy and cross-sectional design limit the generalizability and causal inference of the findings. Specifically, the study's core finding, the association between ordinance strength and smoking rate decline, is vulnerable to endogeneity.

Addditionally, the features and weights of the scoring protocol represent a pilot approach to assigning numeric value to local smoke free laws. These weights, though tested with sensitivity analysis, may not accurately reflect the true strength of the laws or the additional smoke free benefits contained in the law. Further research will seek to identify literature which supports weight assignments and to test the validity of the scores assigned.

Finally, the risk of ecological fallacy must be noted, as associations observed at the

county level may not accurately reflect individual-level behaviors or exposures.

Despite these limitations, this study demonstrates the feasibility and utility of legal epidemiology as a framework for evaluating public health law and provides a foundation for future efforts to strengthen tobacco control through local legal action.

Recommendations for Future Research

Building on the findings of this study, several areas for future research are recommended to deepen understanding and enhance the impact of smokefree policies.

- First, including city-level smokefree laws in future analyses would offer a more comprehensive view of smokefree protections, especially in counties where municipalities have enacted stronger local laws. It would also be critical to include other substances, such as marijuana, hookah, and other emerging products.
- Longitudinal studies are needed to examine how changes in ordinance strength over time influence smoking rates, secondhand smoke exposure, and related health outcomes, including the effects of thirdhand smoke, allowing for more robust causal inferences, which is beyond the scope of this analysis.
- Qualitative research should be conducted to understand better the political, cultural, and social factors that drive or hinder ordinance adoption and enforcement.
- Additionally, implementation studies focusing on how laws are enforced on the ground would provide valuable insights into the real-world effectiveness of legal provisions.
- The application and refinement of the coding protocol in other states, or in other types of public health legislation, would test its adaptability and usefulness in different policy contexts.

- Lastly, a focused health equity analysis is essential to assess how disparities in ordinance strength contribute to unequal health risks across racial, ethnic, linguistic, and socioeconomic groups.

Conclusion

Developing a systematic legal analysis protocol and its application to Georgia's county-level smokefree laws has provided valuable insights into the current state of public health protection from tobacco smoke. While progress has been made, significant opportunities exist to strengthen these vital public health laws. Ensuring that all Georgians, regardless of their county of residence, are protected by a comprehensive, well-enforced smokefree law is a crucial step towards reducing the burden of tobacco-related disease and advancing health equity. The continued application of legal epidemiology methods will be instrumental in achieving these goals, transforming law from text on a page to a powerful force for population health improvement.

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APPENDICES

Appendix A1.1

Georgia Smokefree Air Act
O.C.G.A. §§ 31 12A 1 through 31 12A 13

Title 31. Health
Chapter 12A.
Smokefree Air
O.C.G.A. § 31-12A-1. Short title

This chapter shall be known and may be cited as the "Georgia Smokefree Air Act of 2005."

Title 31. Health
Chapter 12A.
Smokefree Air
O.C.G.A. § 31-12A-2. Definitions

As used in this chapter, the term:

(1) "Bar" means an establishment that is devoted to the serving of alcoholic beverages for consumption by guests on the premises and in which the serving of food is only incidental to the consumption of those beverages, including, but not limited to, taverns, nightclubs, cocktail lounges, and cabarets.

(2) "Business" means any corporation, sole proprietorship, partnership, limited partnership, limited liability corporation, limited liability partnership, professional corporation, enterprise, franchise, association, trust, joint venture, or other entity, whether for profit or nonprofit.

(3) "Employee" means an individual who is employed by a business in consideration for direct or indirect monetary wages or profit.

(4) "Employer" means an individual or a business that employs one or more individuals.

(5) "Enclosed area" means all space between a floor and ceiling that is enclosed on all sides by solid walls or windows, exclusive of doorways, which extend from the floor to the ceiling.

(6) "Health care facility" means an office or institution providing care or treatment of diseases, whether physical, mental, or emotional, or other

medical, physiological, or psychological conditions, including, but not limited to, hospitals, rehabilitation hospitals or other clinics, including weight control clinics, homes for the chronically ill, laboratories, and offices of surgeons, chiropractors, physical therapists, physicians, dentists, and all specialists within these professions. This definition shall include all waiting rooms, hallways, private rooms, semiprivate rooms, and wards within health care facilities. This definition shall not include long-term care facilities as defined in paragraph (3) of Code Section 31-8-81.

(7) "Infiltrate" means to permeate an enclosed area by passing through its walls, ceilings, floors, windows, or ventilation systems to the extent that an individual can smell secondhand smoke.

(8) "Local governing authority" means a county or municipal corporation of the state.

(9) "Place of employment" means an enclosed area under the control of a public or private employer that employees utilize during the course of employment, including, but not limited to, work areas, employee lounges, restrooms, conference rooms, meeting rooms, classrooms, employee cafeterias, and hallways. A private residence is not a place of employment unless it is used as a licensed child care, adult day-care, or health care facility. This term shall not include vehicles used in the course of employment.

(10) "Public place" means an enclosed area to which the public is invited or in which the public is permitted, including, but not limited to, banks, bars, educational facilities, health care facilities, laundromats, public transportation facilities, reception areas, restaurants, retail food production and marketing establishments, retail service establishments, retail stores, shopping malls, sports arenas, theaters, and waiting rooms. A private residence is not a public place unless it is used as a licensed child care, adult day-care, or health care facility.

(11) "Restaurant" means an eating establishment, including, but not limited to, coffee shops, cafeterias, sandwich stands, and private and public school cafeterias, which gives or offers for sale food to the public, guests, or employees, as well as kitchens and catering facilities in which food is prepared on the premises for serving elsewhere. The term shall include a bar area within any restaurant.

(12) "Retail tobacco store" means a retail store utilized primarily for the sale of tobacco products and accessories and in which the sale of other products is merely incidental.

(13) "Secondhand smoke" means smoke emitted from lighted, smoldering, or burning tobacco when the person smoking is not inhaling, smoke emitted at the mouthpiece during puff drawing, and smoke exhaled by the person smoking.

(14) "Service line" means an indoor line in which one or more persons are waiting for or receiving service of any kind, whether or not the service involves the exchange of money.

(15) "Shopping mall" means an enclosed public walkway or hall area that serves to connect retail or professional establishments.

(16) "Smoking" means inhaling, exhaling, burning, or carrying any lighted tobacco product including cigarettes, cigars, and pipe tobacco.

(17) "Smoking area" means a separately designated enclosed room which need not be entered by an employee in order to conduct business that is designated as a smoking area and, when so designated as a smoking area, shall not be construed as to deprive employees of a nonsmoking lounge, waiting area, or break room.

(18) "Sports arena" means enclosed stadiums and enclosed sports pavilions, gymnasiums, health spas, boxing arenas, swimming pools, roller and ice rinks, bowling alleys, and other similar places where members of the general public assemble to engage in physical exercise, participate in athletic competition, or witness sports or other events.

Title 31. Health
Chapter 12A.
Smokefree Air
O.C.G.A. § 31-12A-3. Smoking prohibited in state buildings

Smoking shall be prohibited in all enclosed facilities of, including buildings owned, leased, or operated by, the State of Georgia, its agencies and authorities, and any political subdivision of the state, municipal corporation, or local board or authority created by general, local, or special Act of the General Assembly or by ordinance or resolution of the governing body of a county or municipal corporation individually or jointly with other political subdivisions or municipalities of the state.

Title 31. Health
Chapter 12A.
Smokefree Air

O.C.G.A. § 31-12A-4. Smoking prohibited in enclosed public places

Except as otherwise specifically authorized in Code Section 31-12A-6, smoking shall be prohibited in all enclosed public places in this state.

Title 31. Health
Chapter 12A.
Smokefree Air

O.C.G.A. § 31-12A-5. Smoking prohibited in enclosed area within places of employment

(a) Except as otherwise specifically provided in Code Section 31-12A-6, smoking shall be prohibited in all enclosed areas within places of employment, including, but not limited to, common work areas, auditoriums, classrooms, conference and meeting rooms, private offices, elevators, hallways, medical facilities, cafeterias, employee lounges, stairs, restrooms, and all other enclosed facilities.

(b) Such prohibition on smoking shall be communicated to all current employees by July 1, 2005, and to each prospective employee upon their application for employment.

Title 31. Health
Chapter 12A.
Smokefree Air

O.C.G.A. § 31-12A-6. Areas exempt from smoking prohibitions

(a) Notwithstanding any other provision of this chapter, the following areas shall be exempt from the provisions of Code Sections 31-12A-4 and 31-12A-5:

(1) Private residences, except when used as a licensed child care, adult day-care, or health care facility;

(2) Hotel and motel rooms that are rented to guests and are designated as smoking rooms; provided, however, that not more than 20 percent of rooms rented to guests in a hotel or motel may be so designated;

(3) Retail tobacco stores, provided that secondhand smoke from such stores does not infiltrate into areas where smoking is prohibited under the provisions of this chapter;

(4) Long-term care facilities as defined in paragraph (3) of Code Section 31-8-81;

(5) Outdoor areas of places of employment;

(6) Smoking areas in international airports, as designated by the airport operator;

(7) All workplaces of any manufacturer, importer, or wholesaler of tobacco products, of any tobacco leaf dealer or processor, all tobacco storage facilities, and any other entity set forth in Code Section 10-13A-2;

(8) Private and semiprivate rooms in health care facilities licensed under this title that are occupied by one or more persons, all of whom have written authorization by their treating physician to smoke;

(9) Bars and restaurants, as follows:

(A) All bars and restaurants to which access is denied to any person under the age of 18 and that do not employ any individual under the age of 18; or

(B) Private rooms in restaurants and bars if such rooms are enclosed and have an air handling system independent from the main air handling system that serves all other areas of the building and all air within the private room is exhausted directly to the outside by an exhaust fan of sufficient size;

(10) Convention facility meeting rooms and public and private assembly rooms contained within a convention facility not wholly or partially owned, leased, or operated by the State of Georgia, its agencies and authorities, or any political subdivision of the state, municipal corporation, or local board or authority created by general, local, or special Act of the General Assembly while these places are being used for private functions and where individuals under the age of 18 are prohibited from attending or working as an employee during the function;

(11) Smoking areas designated by an employer which shall meet the following requirements:

(A) The smoking area shall be located in a nonwork area where no employee, as part of his or her work responsibilities, shall be required to enter, except such work responsibilities shall not include custodial or maintenance work carried out in the smoking area when it is unoccupied;

(B) Air handling systems from the smoking area shall be independent from the main air handling system that serves all other areas of the building and all air within the

smoking area shall be exhausted directly to the outside by an exhaust fan of sufficient size and capacity for the smoking area and no air from the smoking area shall be recirculated through or infiltrate other parts of the building; and

(C) The smoking area shall be for the use of employees only.

The exemption provided for in this paragraph shall not apply to restaurants and bars;

(12) Common work areas, conference and meeting rooms, and private offices in private places of employment, other than medical facilities, that are open to the general public by appointment only; except that smoking shall be prohibited in any public reception area of such place of employment; and

(13) Private clubs, military officer clubs, and noncommissioned officer clubs.

(b) In order to qualify for exempt status under subsection (a) of this Code section, any area described in subsection (a) of this Code section, except for areas described in paragraph (1) of subsection (a) of this Code section, shall post conspicuously at every entrance a sign indicating that smoking is permitted.

Title 31. Health
Chapter 12A.
Smokefree Air
O.C.G.A. § 31-12A-7. Declaration of area as nonsmoking place

Notwithstanding any other provision of this chapter, an owner, operator, manager, or other person in control of an establishment, facility, or outdoor area may declare that entire establishment, facility, or outdoor area as a nonsmoking place. Smoking shall be prohibited in any place in which a sign conforming to the requirements of subsection (a) of Code Section 31-12A-8 is posted.

Title 31. Health
Chapter 12A.
Smokefree Air
O.C.G.A. § 31-12A-8. "No Smoking" signs; removal of ashtrays

(a) "No Smoking" signs or the international "No Smoking" symbol consisting of a pictorial representation of a burning cigarette enclosed in a red circle with a red bar across it may be clearly and conspicuously posted by the owner, operator, manager, or other person in control in every public place and place of employment where smoking is prohibited by this chapter.

(b) All ashtrays shall be removed from any area where smoking is prohibited by this chapter by the owner, operator, manager, or other person in control of the area, unless such ashtray is permanently affixed to an existing structure.

Title 31. Health
Chapter 12A.
Smokefree Air
O.C.G.A § 31-12A-9. Continuing programs to explain and clarify chapter

The Department of Public Health and the agency designated by each local governing authority in this state may engage in a continuing program to explain and clarify the purposes and requirements of this chapter to citizens affected by it and to guide owners, operators, and managers in their compliance with it. The program may include print or electronic publication of a brochure for affected businesses and individuals explaining the provisions of this chapter.

Title 31. Health
Chapter 12A.
Smokefree Air
O.C.G.A. § 31-12A-10. Authority to enforce compliance

The Department of Public Health and the county boards of health and their duly authorized agents are authorized and empowered to enforce compliance with this chapter and the rules and regulations adopted and promulgated under this chapter and, in connection therewith, to enter upon and inspect the premises of any establishment or business at any reasonable time and in a reasonable manner, as provided in Article 2 of Chapter 5 of this title.

Title 31. Health
Chapter 12A.
Smokefree Air
O.C.G.A. § 31-12A-11. Annual report for local operating procedures

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.

Title 31. Health
Chapter 12A.
Smokefree Air

O.C.G.A. § 31-12A-12. Cumulative nature of chapter

This chapter shall be cumulative to and shall not prohibit the enactment of any other general or local laws, rules, and regulations of state or local governing authorities or local ordinances prohibiting smoking which are more restrictive than this chapter or are not in direct conflict with this chapter.

Title 31. Health
Chapter 12A.
Smokefree Air
O.C.G.A. § 31-12A-13. Construction and application of chapter

(a) This chapter shall not be construed to permit smoking where it is otherwise restricted by other applicable laws.

(b) Nothing in this chapter shall be construed as to repeal the provisions of Code Section 16-12-2.

(c) This chapter shall be liberally construed so as to further its purposes.

Current through the 2017 Regular Session

Title 16 - CRIMES AND OFFENSES (§§ 16-1-1 — 16-17-10)
Chapter 12 - OFFENSES AGAINST PUBLIC HEALTH AND MORALS (§§ 16-12-1 — 16-12-243)
Article 1 - GENERAL PROVISIONS (§§ 16-12-1 — 16-12-5)
Section 16-12-2 - Smoking in public places

Universal Citation:

GA Code § 16-12-2 (2023)

- ***(a)*** *A person smoking tobacco in violation of Chapter 12A of Title 31 shall be guilty of a misdemeanor and, if convicted, shall be punished by a fine of not less than $100.00 nor more than $500.00.*
- ***(b)*** *This Code section shall be cumulative to and shall not prohibit the enactment of any other general and local laws, rules and regulations of state or local agencies, and local ordinances prohibiting smoking which are more restrictive than this Code section.*

Amended by 2005 Ga. Laws 19, § 16, eff. 4/7/2005.

Amended by 2005 Ga. Laws 368, § 1, eff. 5/9/2005.

Appendix A1.2: Model Ordinance Prohibiting Smoking in All Workplaces and Public Places (100% Smokefree)

Sec. 1000. Title

This Article shall be known as the Type text here [*name of City or County*] Smokefree Air Ordinance of _____[*year*].

Sec. 1001. Findings and Intent

The _____[*City or County Governing Body*] does hereby find that:

The 2006 U.S. Surgeon General's Report, *The Health Consequences of Involuntary Exposure to Tobacco Smoke*, has concluded that (1) secondhand smoke exposure causes disease and premature death in children and adults who do not smoke; (2) children exposed to secondhand smoke are at an increased risk for sudden infant death syndrome (SIDS), acute respiratory problems, ear infections, and asthma attacks, and that smoking by parents causes respiratory symptoms and slows lung growth in their children; (3) exposure of adults to secondhand smoke has immediate adverse effects on the cardiovascular system and causes coronary heart disease and lung cancer; (4) there is no risk-free level of exposure to secondhand smoke; (5) establishing smokefree workplaces is the only effective way to ensure that secondhand smoke exposure does not occur in the workplace, because ventilation and other air cleaning technologies cannot completely control for exposure of nonsmokers to secondhand smoke; and (6) evidence from peer-reviewed studies shows that smokefree policies and laws do not have an adverse economic impact on the hospitality industry.[1] According to the 2010 U.S. Surgeon General's Report, *How Tobacco Smoke Causes Disease*, even occasional exposure to secondhand smoke is harmful and low levels of exposure to secondhand tobacco smoke lead to a rapid and sharp increase in dysfunction and inflammation of the lining of the blood vessels, which are implicated in heart attacks and stroke.[2] According to the 2014 U.S. Surgeon General's ~~R~~eport, *The Health Consequences of Smoking 50 Years of Progress*, secondhand smoke exposure causes stroke in nonsmokers. The report also found that since the 1964 Surgeon General's Report on Smoking and Health, 2.5 million nonsmokers have died from diseases caused by tobacco smoke.[3]

Numerous studies have found that tobacco smoke is a major contributor to indoor air pollution, and that breathing secondhand smoke (also known as environmental tobacco smoke) is a cause of disease in healthy nonsmokers, including heart disease, stroke, respiratory disease, and lung cancer. The National Cancer Institute determined in 1999 that secondhand smoke is responsible for the early deaths of approximately 53,000 Americans annually.[4]

The Public Health Service's National Toxicology Program (NTP) has listed secondhand smoke as a known carcinogen.[5]

Based on a finding by the California Environmental Protection Agency in 2005, the California Air Resources Board has determined that secondhand smoke is a toxic air contaminant, finding that exposure to secondhand smoke has serious health effects, including low birth-weight babies;

sudden infant death syndrome (SIDS); increased respiratory infections in children; asthma in children and adults; lung cancer, sinus cancer, and breast cancer in younger, premenopausal women; heart disease; and death.[6]

There is indisputable evidence that implementing 100% smoke-free environments is the only effective way to protect the population from the harmful effects of exposure to secondhand smoke.[7]

In reviewing 11 studies concluding that communities see an immediate reduction in heart attack admissions after the implementation of comprehensive smokefree laws, the Institute of Medicine of the National Academies concluded that data consistently demonstrate that secondhand smoke exposure increases the risk of coronary heart disease and heart attacks and that smokefree laws reduce heart attacks.[8]

A significant amount of secondhand smoke exposure occurs in the workplace. Employees who work in smoke-filled businesses suffer a 25-50% higher risk of heart attack and higher rates of death from cardiovascular disease and cancer, as well as increased acute respiratory disease and measurable decrease in lung function.[9]

Studies measuring cotinine (metabolized nicotine) and NNAL (metabolized nitrosamine NNK, a tobacco-specific carcinogen linked to lung cancer) in hospitality workers find dramatic reductions in the levels of these biomarkers after a smokefree law takes effect. Average cotinine levels of New York City restaurant and bar workers decreased by 85% after the city's smokefree law went into effect.[10] After the implementation of Ontario, Canada's Smokefree Indoor Air Law, levels of NNAL were reduced by 52% in nonsmoking casino employees and cotinine levels fell by 98%.[11]

Smokefree indoor air laws result in a significant reduction in fine particulate matter and improved air quality. A Grand Rapids, Michigan study that monitored six restaurants before and after implementation of the state's smokefree air law found that PM2.5 fine particulate matter was reduced by 92 percent after the law went into effect, indicating that the vast majority of indoor air pollution in all six venues was due to secondhand smoke. The results in Grand Rapids were consistent with results in Wilmington, Delaware; Boston, Massachusetts; and Western New York.[12]

Following a Health Hazard Evaluation of Las Vegas casino employees' secondhand smoke exposure in the workplace, which included indoor air quality tests and biomarker assessments, the National Institute of Occupational Safety & Health (NIOSH) concluded that the casino employees are exposed to dangerous levels of secondhand smoke at work and that their bodies absorb high levels of tobacco-specific chemicals NNK and cotinine during work shifts. NIOSH also concluded that the "best means of eliminating workplace exposure to [secondhand smoke] is to ban all smoking in the casinos."[13] A subsequent study in Nevada, whose Clean Indoor Air Act permits smoking in designated areas of casinos, bars, and taverns, indicates that strong 100% smokefree laws are the only effective way to protect indoor air quality. The study sampled the air quality in 15 casino gaming areas and corresponding nonsmoking areas, and the results indicated that the Clean Indoor Air Act failed to protect air quality in the nonsmoking areas, including children-friendly areas.[14]

Secondhand smoke is particularly hazardous to elderly people, individuals with cardiovascular disease, and individuals with impaired respiratory function, including asthmatics and those with obstructive airway disease.[15] The Americans With Disabilities Act, which requires that disabled persons have access to public places and workplaces, deems impaired respiratory function to be a disability.[16]

The U.S. Centers for Disease Control and Prevention has determined that the risk of acute myocardial infarction and coronary heart disease associated with exposure to tobacco smoke is non-linear at low doses, increasing rapidly with relatively small doses such as those received from secondhand smoke or actively smoking one or two cigarettes a day, and has warned that all patients at increased risk of coronary heart disease or with known coronary artery disease should avoid all indoor environments that permit smoking.[17]

Given the fact that there is no safe level of exposure to secondhand smoke, the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) bases its ventilation standards on totally smokefree environments. ASHRAE has determined that there is currently no air filtration or other ventilation technology that can completely eliminate all the carcinogenic components in secondhand smoke and the health risks caused by secondhand smoke exposure, and recommends that indoor environments be smokefree in their entirety. In 2015, ASHRAE amended its ventilation Standard for Acceptable Indoor Air Quality (62.1) to include an environment that is completely free from marijuana/cannabis smoke and emissions from electronic smoking devices.[18]

During periods of active smoking, peak and average outdoor tobacco smoke (OTS) levels measured in outdoor cafes and restaurant and bar patios near smokers rival indoor tobacco smoke concentrations.[19] Nonsmokers who spend six-hour periods in outdoor smoking sections of bars and restaurants experience a significant increase in levels of cotinine when compared to the cotinine levels in a smokefree outdoor area.[20]

Residual tobacco contamination, or "thirdhand smoke," from cigarettes, cigars, and other tobacco products is left behind after smoking occurs and builds up on surfaces and furnishings. This residue can linger in spaces long after smoking has ceased, continuing to expose people to tobacco toxins, which represent an unappreciated health hazard through dermal exposure, dust inhalation, and ingestion.[21]. Sticky, highly toxic particulate matter, including nicotine, can cling to walls and ceilings, and gases can be absorbed into carpets, draperies, and other upholsteries, which can then be reemitted (off-gassed) back into the air and form harmful compounds.[22] Tobacco residue is noticeably present in dust throughout places where smoking has occurred.[23] The dangers of residual tobacco contamination are present in spaces that are not 100% smokefree, such as in nonsmoking rooms of hotels that allow smoking in some guest rooms. Partial smoking restrictions in hotels do not protect non-smoking guests from exposure to tobacco smoke and tobacco-specific carcinogens.[24]

Electronic smoking devices, commonly referred to as electronic cigarettes, or "~~e-~~cigarettes," closely resemble and purposefully mimic the act of smoking by having users inhale vaporized liquid that typically contains nicotine, heated through an electronic ignition system. ESD emissions are made up of a high concentration of ultrafine particles, and the particle concentration is higher than in conventional tobacco cigarette smoke.[25] The January 2018 National Academies of Sciences, Engineering, and Medicine publication states that there is conclusive evidence that in addition to nicotine, most ESDs contain and emit numerous potentially toxic substances and increase airborne concentrations of particulate matter and nicotine in indoor environments. Studies show that people exposed to ESD aerosol absorb nicotine (measured as cotinine) at levels comparable to passive smokers. Many of the elements identified in the aerosol are known to cause respiratory distress and disease. ESD exposure damages lung tissues. Human lung cells that are exposed to ESD aerosol and flavorings esp~~e~~cially cinnamon show ~~in~~creased oxidative stress and inflammatory responses.[26] Their use in workplaces and public places where smoking of traditional tobacco products is prohibited creates concern and confusion and leads to difficulties in enforcing the smoking prohibitions. The World Health Organization (WHO), the National Institute for Occupational Safety and Health (NIOSH), and the American Industrial

Hygiene Association (AIHA) recommend that ESDs not be used in smokefree environments, in order to minimize the risk to bystanders of breathing in the aerosol emitted by the devices and to avoid undermining the enforcement of smokefree laws.[27]

Secondhand smoke from combusted marijuana contains fine particulate matter that can be breathed deeply into the lungs, which can cause lung irritation and asthma attacks, thus making respiratory infections more likely. Exposure to fine particulate matter can exacerbate health problems especially for people with respiratory conditions like asthma, bronchitis, or COPD.[28, 29] Secondhand smoke from marijuana also has many of the same chemicals as smoke from tobacco, including those linked to lung cancer.[30, 31] More research is needed, but the current body of science shows that both tobacco and marijuana smoke may have similar harmful cardiovascular effects.[32, 33] Thus, In the interest of public health, the use of combustible or aerosolized marijuana should be prohibited wherever tobacco smoking is prohibited.

The Society of Actuaries has determined that secondhand smoke costs the U.S. economy roughly $10 billion a year: $5 billion in estimated medical costs associated with secondhand smoke exposure and $4.6 billion in lost productivity.[34]

Numerous economic analyses examining restaurant and hotel receipts and controlling for economic variables have shown either no difference or a positive economic impact after enactment of laws requiring workplaces to be smokefree. Creation of smokefree workplaces is sound economic policy and provides the maximum level of employee health and safety.[35]

There is no legal or constitutional "right to smoke."[36] Business owners have no legal or constitutional right to expose their employees and customers to the toxic chemicals in secondhand smoke. On the contrary, employers have a common law duty to provide their workers with a workplace that is not unreasonably dangerous.[37]

Smoking is a potential cause of fires; cigarette and cigar burns and ash stains on merchandise and fixtures causes economic damage to businesses.[38]

The smoking of tobacco, hookahs, or marijuana/cannabis and the use of ESDs are forms of air pollution and constitute both a danger to health and a material public nuisance.

Accordingly, the _____[*City or County Governing Body*] finds and declares that the purposes of this ordinance are (1) to protect the public health and welfare by prohibiting smoking in public places and places of employment; and (2) to guarantee the right of nonsmokers to breathe smokefree air, and to recognize that the need to breathe smokefree air shall have priority over the desire to smoke.

Sec. 1002. Definitions

The following words and phrases, whenever used in this Article, shall be construed as defined in this Section:

A. "Bar" means an establishment that is devoted to the serving of alcoholic beverages for consumption by guests on the premises and in which the serving of food is only incidental to the consumption of those beverages, including but not limited to, taverns, nightclubs, cocktail lounges, and cabarets.

B. "Business" means a sole proprietorship, partnership, joint venture, corporation, or other business entity, either for-profit or not-for-profit, including retail establishments where goods or services are sold; professional corporations and other entities where legal, medical, dental, engineering, architectural, or other professional services are delivered; and private clubs.

C. "Electronic Smoking Device" means any product containing or delivering nicotine or any other substance intended for human consumption that can be used by a person in any manner for the purpose of inhaling vapor or aerosol from the product. The term includes any such device, whether manufactured, distributed, marketed, or sold as an e-cigarette, e-cigar, e-pipe, e-hookah, dab rig or vape pen, or under any other product name or descriptor.

D. "Employee" means a person who is employed by an employer in consideration for direct or indirect monetary wages or profit, or a person who volunteers his or her services for a non-profit entity.

E. "Employer" means a person, business, partnership, association, corporation, including a municipal corporation, trust, or non-profit entity that employs the services of one or more individual persons.

F. "Enclosed Area" means all space between a floor and a ceiling that is bounded on at least two sides by walls, doorways, or windows, whether open or closed. A wall includes any retractable divider, garage door, or other physical barrier, whether temporary or permanent and whether or not containing openings of any kind.

G. "Health Care Facility" means an office or institution providing care or treatment of diseases, whether physical, mental, or emotional, or other medical, physiological, or psychological conditions, including but not limited to, hospitals, rehabilitation hospitals or other clinics, including weight control clinics, nursing homes, long-term care facilities, homes for the aging or chronically ill, laboratories, and offices of surgeons, chiropractors, physical therapists, physicians, psychiatrists, dentists, and all specialists within these professions. This definition shall include all waiting rooms, hallways, private rooms, semiprivate rooms, and wards within health care facilities.

H. "Hookah" means a water pipe and any associated products and devices which are used to produce fumes, smoke, and/or vapor from the burning of material including, but not limited to, tobacco, shisha, or other plant matter.

I. "Place of Employment" means an area under the control of a public or private employer, including, but not limited to, work areas, private offices, employee lounges, restrooms, conference rooms, meeting rooms, classrooms, employee cafeterias, hallways, construction sites, temporary offices, and vehicles. A private residence is not a "place of employment" unless it is used as a child care, adult day care, or health care facility.

J. "Playground" means any park or recreational area designed in part to be used by children that has play or sports equipment installed or that has been designated or landscaped for play or sports activities, or any similar facility located on public or private school grounds or on [City *or* County] grounds.

K. "Private Club" means an organization, whether incorporated or not, which is the owner, lessee, or occupant of a building or portion thereof used exclusively for club purposes at

all times, which is operated solely for a recreational, fraternal, social, patriotic, political, benevolent, or athletic purpose, but not for pecuniary gain, and which only sells alcoholic beverages incidental to its operation. The affairs and management of the organization are conducted by a board of directors, executive committee, or similar body chosen by the members at an annual meeting. The organization has established bylaws and/or a constitution to govern its activities. The organization has been granted an exemption from the payment of federal income tax as a club under 26 U.S.C. Section 501.

L. "Public Event" means an event which is open to and may be attended by the general public, including but not limited to, such events as concerts, fairs, farmers' markets, festivals, parades, performances, and other exhibitions, regardless of any fee or age requirement.

M. "Public Place" means an area to which the public is invited or in which the public is permitted, including but not limited to, banks, bars, educational facilities, gambling facilities, health care facilities, hotels and motels, laundromats, parking structures, public transportation vehicles and facilities, reception areas, restaurants, retail food production and marketing establishments, retail service establishments, retail stores, shopping malls, sports arenas, theaters, and waiting rooms. A private residence is not a "public place" unless it is used as a child care, adult day care, or health care facility.

N. "Recreational Area" means any public or private area open to the public for recreational purposes, regardless of any fee or age requirement, including but not limited to, amusement parks, playgrounds, athletic fields, beaches, fairgrounds, bike paths, walking paths, gardens, golf courses, parks, plazas, skate parks, swimming pools, trails, and zoos.

O. "Restaurant" means an eating establishment, including but not limited to, coffee shops, cafeterias, sandwich stands, and private and public school cafeterias, which gives or offers for sale food to the public, guests, or employees, as well as kitchens and catering facilities in which food is prepared on the premises for serving elsewhere. The term "restaurant" includes the bar area within a restaurant.

P. "Service Line" means an indoor or outdoor line in which one (1) or more persons are waiting for or receiving service of any kind, whether or not the service involves the exchange of money, including but not limited to, ATM lines, concert lines, food vendor lines, movie ticket lines, and sporting event lines.

Q. "Shopping Mall" means an enclosed or unenclosed public walkway or hall area that serves to connect retail or professional establishments.

R. "Smoking" means inhaling, exhaling, burning, or carrying any lighted or heated cigar, cigarette, pipe, hookah, or any other lighted or heated tobacco or plant product intended for inhalation, whether natural or synthetic, including marijuana/cannabis, in any manner or in any form. "Smoking" includes the use of an electronic smoking device which creates an aerosol or vapor, in any manner or in any form, or the use of any oral smoking device for the purpose of circumventing the prohibition of smoking in this Article.

S. "Sports Arena" means a place where people assemble to engage in physical exercise, participate in athletic competition, or witness sports or other events, including sports pavilions, stadiums, gymnasiums, health spas, boxing arenas, swimming pools, roller and ice rinks, and bowling alleys.

Sec. 1003. Application of Article to [City-Owned *or* County-Owned] Facilities and Property

All enclosed areas, including buildings and vehicles owned, leased, or operated by the _____ [City *or* County] of _____, as well as all outdoor property adjacent to such buildings and under the control of the _____[City *or* County], shall be subject to the provisions of this Article.

Sec. 1004. Prohibition of Smoking in Enclosed Public Places

Smoking shall be prohibited in all enclosed public places within the _____[City *or* County] of _____, including but not limited to, the following places:

A. Aquariums, galleries, libraries, and museums.

B. Areas available to the general public in businesses and non-profit entities patronized by the public, including but not limited to, banks, laundromats, professional offices, and retail service establishments.

C. Bars.

D. Bingo facilities.

E. Child care and adult day care facilities.

F. Convention facilities.

G. Educational facilities, both public and private.

H. Elevators.

I. Gambling facilities.

J. Health care facilities.

K. Hotels and motels.

L. Lobbies, hallways, and other common areas in apartment buildings, condominiums, trailer parks, retirement facilities, nursing homes, and other multiple-unit residential facilities.

M. Parking structures.

N. Polling places.

O. Public transportation vehicles, including buses and taxicabs, under the authority of the _____[City *or* County], and public transportation facilities, including bus, train, and airport facilities.

P. Restaurants.

Q. Restrooms, lobbies, reception areas, hallways, and other common-use areas.

R. Retail stores, including but not limited to tobacco retailers, marijuana establishments, and vape shops.

S. Rooms, chambers, places of meeting or public assembly, including school buildings, under the control of an agency, board, commission, committee or council of the _____ [City *or* County] or a political subdivision of the State, to the extent the place is subject to the jurisdiction of the _____[City *or* County].

T. Service lines.

U. Shopping malls.

V. Sports arenas, including enclosed places in outdoor arenas.

W. Theaters and other facilities primarily used for exhibiting motion pictures, stage dramas, lectures, musical recitals, or other similar performances.

Sec. 1005. Prohibition of Smoking in Enclosed Places of Employment

A. Smoking shall be prohibited in all enclosed areas of places of employment without exception. This includes, without limitation, common work areas, auditoriums, classrooms, conference and meeting rooms, private offices, elevators, hallways, medical facilities, cafeterias, employee lounges, stairs, restrooms, vehicles, and all other enclosed facilities.

B. This prohibition on smoking shall be communicated to all existing employees by the effective date of this Article and to all prospective employees upon their application for employment.

Sec. 1006. Prohibition of Smoking in Private Clubs

Smoking shall be prohibited in all private clubs.

Sec. 1007. Prohibition of Smoking in Enclosed Residential Facilities

Smoking shall be prohibited in the following enclosed residential facilities:

A. All private and semi-private rooms in nursing homes.

B. All hotel and motel guest rooms.

Sec. 1008. Prohibition of Smoking in Outdoor Public Places

Smoking shall be prohibited in the following outdoor places:

A. Within a reasonable distance of _____ [*recommended 15-25*] feet outside entrances, operable windows, and ventilation systems of enclosed areas where smoking is prohibited, so as to prevent tobacco smoke from entering those areas.

B. On all outdoor property that is adjacent to buildings owned, leased, or operated by the _____[City *or* County] of _____and that is under the control of the _____[City *or* County].

C. In, and within _____[*recommended 15-25*] feet of, outdoor seating or serving areas of restaurants, bars, and gambling facilities.

D. In outdoor shopping malls, including parking structures.

E. In all outdoor arenas, stadiums, and amphitheaters. Smoking shall also be prohibited in, and within _____[*recommended 15-25*] feet of, bleachers and grandstands for use by spectators at sporting and other public events.

F. In outdoor recreational areas, including parking lots.

G. In, and within _____[*recommended 15-25*] feet of, all outdoor playgrounds.

H. In, and within _____[*recommended 15-25*] feet of, all outdoor public events.

I. In, and within _____ [*recommended 15-25*] feet of, all outdoor public transportation stations, platforms, and shelters under the authority of the _____[City *or* County].

J. In all outdoor service lines, including lines in which service is obtained by persons in vehicles, such as service that is provided by bank tellers, parking lot attendants, and toll takers. In lines in which service is obtained by persons in vehicles, smoking is prohibited by both pedestrians and persons in vehicles, but only within _____[*recommended 15-25*] feet of the point of service.

K. In outdoor common areas of apartment buildings, condominiums, trailer parks, retirement facilities, nursing homes, and other multiple-unit residential facilities, except in designated smoking areas, not to exceed twenty-five percent (25%) of the total outdoor common area, which must be located at least _____ [*recommended 15-25*] feet outside entrances, operable windows, and ventilation systems of enclosed areas where smoking is prohibited.

Sec. 1009. Prohibition of Smoking in Outdoor Places of Employment

A. Smoking shall be prohibited in all outdoor places of employment where two or more employees are required to be in the course of their employment. This includes, without limitation, work areas, construction sites, and temporary offices such as trailers, restroom facilities, and vehicles.

B. This prohibition on smoking shall be communicated to all existing employees by the effective date of this Article and to all prospective employees upon their application for employment.

Sec. 1010. Where Smoking Not Regulated

Notwithstanding any other provision of this Article to the contrary, smoking shall not be prohibited in private residences, unless used as a childcare, adult day care, or health care facility.

Sec. 1011. Declaration of Establishment or Outdoor Area as Nonsmoking

Notwithstanding any other provision of this Article, an owner, operator, manager, or other person in control of an establishment, facility, or outdoor area may declare that an entire establishment, facility, or outdoor area is a nonsmoking place. Smoking shall be prohibited in any place in which a sign conforming to the requirements of Section 1012(A) is posted.

Sec. 1012. Posting of Signs and Removal of Ashtrays

The owner, operator, manager, or other person in control of a place of employment, public place, private club, or residential facility where smoking is prohibited by this Article shall:

A. Clearly and conspicuously post "No Smoking" signs or the international "No Smoking" symbol (consisting of a pictorial representation of a burning cigarette enclosed in a red circle with a red bar across it) in that place.

B. Clearly and conspicuously post at every entrance to that place a sign stating that smoking is prohibited or, in the case of outdoor places, clearly and conspicuously post "No Smoking" signs in appropriate locations as determined by the _____[Department of Health *or* City Manager *or* County Administrator] or an authorized designee.

C. Clearly and conspicuously post on every vehicle that constitutes a place of employment under this Article at least one sign, visible from the exterior of the vehicle, stating that smoking is prohibited.

D. Remove all ashtrays from any area where smoking is prohibited by this Article, except for ashtrays displayed for sale and not for use on the premises.

Sec. 1013. Nonretaliation; Nonwaiver of Rights

A. No person or employer shall discharge, refuse to hire, or in any manner retaliate against an employee, applicant for employment, customer, or resident of a multiple-unit residential facility because that employee, applicant, customer, or resident exercises any rights afforded by this Article or reports or attempts to prosecute a violation of this Article. Notwithstanding Section 1015, violation of this Subsection shall be a misdemeanor, punishable by a fine not to exceed $1000 for each violation.

B. An employee who works in a setting where an employer allows smoking does not waive or otherwise surrender any legal rights the employee may have against the employer or any other party.

Sec. 1014. Enforcement

A. This Article shall be enforced by the _____[Department of Health *or* City Manager *or* County Administrator] or an authorized designee.

B. Notice of the provisions of this Article shall be given to all applicants for a business license in the _____[City *or* County] of _____.

C. Any citizen who desires to register a complaint under this Article may initiate enforcement with the _____[Department of Health *or* City Manager *or* County Administrator].

D. The Health Department, Fire Department, or their designees shall, while an establishment is undergoing otherwise mandated inspections, inspect for compliance with this Article.

E. An owner, manager, operator, or employee of an area regulated by this Article shall direct a person who is smoking in violation of this Article to extinguish or turn off the product being smoked. If the person does not stop smoking, the owner, manager, operator, or employee shall refuse service and shall immediately ask the person to leave the premises. If the person in violation refuses to leave the premises, the owner, manager, operator, or employee shall contact the enforcing agency.

F. Notwithstanding any other provision of this Article, an employee or private citizen may bring legal action to enforce this Article.

G. In addition to the remedies provided by the provisions of this Section, the _____ [Department of Health *or* City Manager *or* County Administrator] or any person aggrieved by the failure of the owner, operator, manager, or other person in control of a public place or a place of employment to comply with the provisions of this Article may apply for injunctive relief to enforce those provisions in any court of competent jurisdiction.

Sec. 1015. Violations and Penalties

A. A person who refuses to comply with a request to stop smoking in an area where smoking is prohibited by the provisions of this Article shall be civilly liable, subject to an administrative citation not exceeding fifty dollars ($50). No person shall be liable under this section unless said person shall have been previously given a warning by a person authorized to enforce this ordinance or who exercises legal or actual control over the premises where smoking is prohibited.

B. Except as otherwise provided in Section 1013(A), a person who owns, manages, operates, or otherwise controls a public place or place of employment and who fails to comply with the provisions of this Article shall be guilty of an infraction, punishable by:

    1. A fine not exceeding one hundred dollars ($100) for a first violation.

    2. A fine not exceeding two hundred dollars ($200) for a second violation within one (1) year.

    3. A fine not exceeding five hundred dollars ($500) for each additional violation within one (1) year.

C. In addition to the fines established by this Section, violation of this Article by a person who owns, manages, operates, or otherwise controls a public place or place of employment may result in the suspension or revocation of any permit or license issued to the person for the premises on which the violation occurred.

D. Any violation of this article may be remedied by a civil action brought by the [city attorney/county counsel], including, but not limited to, administrative or judicial nuisance abatement proceedings, civil code enforcement proceedings, and suits for injunctive relief.

E. Violation of this Article is hereby declared to be a public nuisance, which may be abated by the _____ [Department of Health *or* City Manager *or* County Administrator] by restraining order, preliminary and permanent injunction, or other means provided for by law, and the _____ [City *or* County] may take action to recover the costs of the nuisance abatement.

F. Each day on which a violation of this Article occurs shall be considered a separate and distinct violation.

G. The remedies provided in this article are cumulative and in addition to any other remedies available at law or in equity.

Sec. 1016. Public Education

The _____[Department of Health *or* City Manager *or* County Administrator] shall engage in a continuing program to explain and clarify the purposes and requirements of this Article to citizens affected by it, and to guide owners, operators, and managers in their compliance with it. The program may include publication of a brochure for affected businesses and individuals explaining the provisions of this ordinance.

Sec. 1017. Governmental Agency Cooperation

The _____ [City Manager *or* County Administrator] shall annually request other governmental and educational agencies having facilities within the _____[City *or* County] to establish local operating procedures in cooperation and compliance with this Article. This includes urging all Federal, State, _____[County *or* City], and School District agencies to update their existing smoking control regulations to be consistent with the current health findings regarding secondhand smoke.

Sec. 1018. Other Applicable Laws

This Article shall not be interpreted or construed to permit smoking where it is otherwise restricted by other applicable laws.

Sec. 1019. Liberal Construction

This Article shall be liberally construed so as to further its purposes.

Sec. 1020. Severability

If any provision, clause, sentence, or paragraph of this Article or the application thereof to any person or circumstances shall be held invalid, that invalidity shall not affect the other provisions

of this Article which can be given effect without the invalid provision or application, and to this end the provisions of this Article are declared to be severable.

Sec. 1021. Effective Date

This Article shall be effective thirty (30) days from and after the date of its adoption.

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Appendix 2: Coding Protocol for Smoke-free Counties Ordinances in Georgia

We coded smokefree policies across select Georgia counties. We followed specific principles to ensure consistency and accuracy. First, the coding focused on policies as they were applicable as of December 31, 2023, considering the conditions and exemptions relevant as stipulated in the county codes. The coding process relied on explicit information in regulations and Municode Codes. Efforts to find supplementary documents from county websites did not return any additional information. Every question has an answer selected to guarantee the completeness of the dataset. When ordinance details were absent, "Not specified" or “Not mentioned” to clearly indicate that the construct is not found in the text. Such uncertainties were thoroughly documented in the comments. These comments are essential for addressing areas requiring further investigation. Adherence to these general principles ensures that the coding is systematic, transparent, and reliable.

The first step was to determine whether a smokefree ordinance code exists in the county legal documents and, if so, what is the scope of the codified ordinance. The protocol assesses whether it mandates 100% smokefree requirements, allows for partial restrictions and offers designated smoking areas, or imposes no restrictions at all. Then the protocol identifies the specific environments the codified ordinance or regulation covers. These environments include public places, workplaces, restaurants, and bars. The coverage of the ordinance is then evaluated based on whether it applies to indoor spaces, outdoor spaces, or both.

Additionally, the enforcement mechanisms specified by the county are examined, including a named enforcement agency, any collaboration with other agencies, and whether penalties, warnings, or legal actions are outlined for non-compliance. Exemptions to smokefree policies are also coded, noting whether certain facilities, such as private clubs or tobacco shops, are excluded from the regulations and how these exemptions are defined.

The protocol documents whether the ordinance is a stand alone coded local ordinance, part of a larger coded county regulation. If not coded at the county level the latest state smoke-free laws apply at the county level. Also not that, if a county codified a weaker than state law, the state law supercedes the county law. It is also important to note any rationale for the ordinance to aid public compliance.
Evidence suggests that it is necessary for people to understand the need for any regulation to comply with it.

The coded data will be compiled into a data set, with comments and annotations added to explain coding decisions and flag areas requiring further validation. Coding comes with challenges, and one of the key challenges in coding smoke-free ordinances for Georgia counties is managing ambiguities in ordinance documents. Certain provisions were unclear and open to multiple interpretations, necessitating the use of comments to flag these issues for future analysts. Additionally, inconsistent terminologies, such as variations

in defining terms like "public places," "enforcement," or "exemptions," pose a risk to data consistency. To address this disparity, standardized definitions are applied across all counties to ensure uniformity. Data gaps present another significant obstacle, particularly when ordinance information is unavailable for some counties. In such cases, the absence of information is documented, and recommendations are suggested for the county to document and codify policies.

The coding protocol for smoke-free ordinances in Georgia counties is expected to allow for meaningful comparative insights, highlighting ordinance strength, scope, and implementation disparities between counties. Such insights are critical for identifying gaps and inconsistencies that may undermine the effectiveness of interventions for smoke-free environments. The findings will provide a solid foundation for harmonizing and strengthening smoke-free regulations statewide, contributing to healthier environments and reducing tobacco-related harm.

A step-by-step guide to utilizing the protocol is provided as a supplement. We hope this supplement will guide future research in the legal mapping of smoke-free ordinances.

Coding Protocol for county smoke-free ordinances and regulations in Georgia

1. General Principles for Coding

I. **Timeframe Context**:
   a. Coded county ordinances as they apply on December 31, 2023.
   b. The ordinance application for the general public was considered for public places, workplaces, and other applicable public environments.
      i. Public places refer to all places where the public is allowed and have access to.

II. **Specificity of Coding**:
   a. Ordinances were coded based on explicit information found in Municode regulations and ordinances.

III. **Mandatory Answer Selection**:
   a. To ensure completeness, every question or field has at least one answer selected. If a construct is "not specified," it is clearly indicated.

IV. **Comments**:
   a. Comments section is used to flag ambiguities or uncertainties and to note areas requiring further review.

2. Ordinance Dimensions to be Coded and Coding questions

V. Ordinance documentation:
   a. What is the Name of the County?
      - Record the County's official Name as listed by the Census Bureau.
   b. Has the county coded an ordinance or specific regulations that

mandate smoke-free environments?

i. No
ii. Yes.

c. If Yes, Where is the ordinance language located? Enter details for the ordinance.
    i. Stand-alone. Enter Ordinance/Regulation title, code and qoute ordinance text
    ii. Part of Broader Policy. Enter Section/subsection code and qoute text
d. What is the latest date of the policy? Enter latest date of codification/amendment
e. Does the ordinance have a rationale? Quote the public health rationale as stated in the ordinance text specifying any health outcomes mentioned.

VI. **Ordinance Scope and coverage**:

a. Which environments are covered by the smokefree ordinance or regulation? Check all that apply
    i. Indoor spaces only
    ii. Both indoor and outdoor spaces
    iii. Outdoor spaces only

b. Where does the county indoor ordinance or specific regulations apply? Check all that apply
    i. Public Places (e.g., parks, libraries, shopping centers, event venues)
    ii. Workplaces (e.g., offices, factories)
    iii. Restaurants or dining areas
    iv. Bars
    v. Hotels
    vi. Public transportation
    vii. Government vehicles
    viii. Private clubs
    ix. Common areas in MultiUnit residences
    x. Parking facilities/garages
    xi. Polling places
    xii. Service lines
    xiii. Other, Specify

c. Where does the county outdoor ordinance or specific regulations apply? Check all that apply.
    i. Near entrances/windows
    ii. Employment Areas
    iii. Outdoor eating area
    iv. Parks and Recreation
    v. Outdoor Public transit stand/shelter
    vi. Outdoor sports arena/stadiums/event
    vii. Common areas in MultiUnit residences
    viii. Playground
    ix. Outdoor service lines
    x. Outdoor shopping mall

xi. Parking lots
xii. Other (Specify)

d. Are there exemptions to the smokefree ordinance? (e.g., private clubs, tobacco shops)
    i. Not mentioned
    ii. Yes, List specified exemptions
    iii. No exemptions
e. Does the policy designate smoking areas?
    i. Not mentioned
    ii. Yes, List specified designated smoking areas
    iii. No, completely smokefree

Comment: Public places means areas to which the public is invited or in which the general public is permitted.

VII. **Implementation and Enforcement Mechanisms**:

a. Does policy impose penalties for violations of smoke-free policies?
    i. Yes
    ii. No
b. If Yes, What penalties are imposed? Check All That Apply
    i. Specified fines, specify _____
    ii. Warning
    iii. Disciplinary Action
    iv. No specified penalties mentioned **

Comment: * If escalating fines, specify in notes the range and condition of level. If not specified indicate "Not specified". Do not indicate 0.
** if this is chosen, it should be exclusive answer.

c. Does the policy designate county-level departments or agencies responsible for enforcing smoke-free policy?
    i. No enforcement agency specified
    ii. Yes, but with an unclear role
    iii. Yes, Name of agency and role

d. Does the ordinance mention agency collaboration in enforcement efforts?
    i. No collaboration mentioned
    ii. Yes, Collaboration was mentioned but not specific
    iii. Yes, Collaboration explicitly mentioned with named partners.

e. What strategies are used to promote compliance and awareness of smoke-free regulations? Check All That Apply
    i. Signage
    ii. Handbooks
    iii. Education
    iv. Removal of ashtrays

3. Data Collection Workflow

I. **Document Review**:
   a. Focused on documents with a coded regulation at the county level and effective after 2005, ensuring alignment with the state policy. State policy is the floor, so the state law applies if a county does not have a regulation addressing tobacco use in county codes.

II. **Data Entry and Coding Tool Usage**:
   a. Utilized a standardized coding questionnaire to document answers for each county.
   b. Ensured each field was filled with either a direct response or "not available."
   c. Used comments and annotations to explain decisions and highlight areas needing further validation.

4. Addressing Challenges and Mitigation Strategies

I. **Data Gaps**:
   a. If policy information is unavailable for a county, document the absence and recommend follow-up data collection. But before concluding the lack of data, be sure to search and include information from non-regulatory documents (e.g., county websites) if they clarify or supplement the statutory or regulatory information

II. **Not Specified Responses**:
   a. Use "not specified" only if no specific information is available in the reviewed documents for a particular policy or exemption. For example, if an ordinance says "smoking is prohibited near entrances" but no specific distance, code "Not specified" but if the ordinance text does not mention any restrictions near entrances/windows, code "Not Available".

III. **Supplementary Documents**:
   a. Include information from non-regulatory documents (e.g., county websites) if they clarify or supplement the statutory or regulatory information.

IV. **Ambiguity in Documents**:
   a. Use comments to flag unclear provisions for later review or team discussions.
   b. Cross-reference multiple documents where possible to reduce uncertainties.

Using this protocol, the project has produced reliable and replicable tool that can inform smoke-free ordinance development in Georgia. The coding protocol facilitates:

I. **Comparative Insights**: Identification of disparities in policy strength, scope, and enforcement between counties.
II. **Policy Recommendations**: Evidence-based guidance for improving and harmonizing smokefree policies across the state.

Instruction for utilizing the Coding Protocol – A supplement.

A. Policy Identification

Identifying whether a smoke-free ordinance has been codified in each county.

- Review Municode Codes and local county ordinances to locate relevant policies.
    - Search county websites and official documents for supplementary policy details.
- Confirm whether the ordinance is stand-alone or part of broader regulations.
    - Record details of the ordinance/regulation including ordinance name, ordinance code, (or subsection, whatever is applicable), and latest date of codification/amendment.

If no smoke-free policy or regulation code is documented, mark the absence of information with recommendations for county codification. This is important for local policy implementation and enforcement.

B. Define the Scope and Coverage – Indoor and Outdoor applicability

Once a policy is identified, analyze the scope and where the ordinance applies.

- Determine whether the ordinance applies to indoor spaces, such as government buildings, workplaces, restaurants, bars, public transportation, hotels, and private clubs. Some ordinances exempt a percentage of hotels, note this is exemptions.
- Assess the outdoor applicability to areas like parks, recreational spaces, dining areas, shopping centers, and stadiums.
- Identify whether the policy addresses restrictions near entrances, windows, and ventilation systems. Include the specific distances listed.

The scope analysis will provide a clear understanding of the environments protected under the ordinance.

C. Evaluate Restrictions and Exemptions

Examine the nature of smoke-free restrictions and any exemptions allowed.

- Document any exemptions, such as for private clubs, tobacco shops, hotels, or other facilities.
    - Only code “No exemptions” if the ordinance explicitly says so and quote the stated ordinance text otherwise if ordinance has no language about exemptions code “Not mentioned”. Some ordinances exempt a percentage of hotels, note this is exemptions.
- Determine whether the ordinance mandates 100% smoke-free environments or permits designated smoking areas.
- Assess whether outdoor smoking areas are allowed and under what conditions.

This assessment will help determine the comprehensiveness and potential limitations of the policy.

D. Review Enforcement Mechanisms

Evaluate any enforcement provisions within the ordinance.

- Identify the enforcement agency or agencies responsible for implementing the policy.
- Assess whether the ordinance mentions collaboration with other agencies or partners to ensure compliance.
- Identify the penalties outlined for violations, including warnings, fines, or other disciplinary actions. This section may be located in other section, criticall read the law and check is penalties are located in a general section. This is more common is the regulation is part of a broader policy.

This evaluation will clarify the policy's capacity for effective enforcement.

E. Assess Implementation Strategies

Review strategies for implementing the smoke-free ordinance.

- Determine whether the ordinance includes measures like public signage, handbooks, public education campaigns, or removal of ashtrays. Removal of ahtrays is an environmental change that supports the policy change.

Identify potential gaps in public awareness and propose enhancements to ensure public compliance and awareness of the smoke-free regulations.

F. Compile and Analyze Data

After coding the ordinance, compiled into a centralized repository that will include:

- A summary of each county's smoke-free ordinance, including scope, enforcement, and implementation details.
- Comments and annotations explaining coding decisions and highlighting flagged issues.
- Comparative insights into disparities across counties.

The compiled data will form the basis for a comprehensive analysis of the regulations under study and the insights gained from the analysis will inform evidence-based recommendations for policy improvements.

Appendix 3: Codebook for County-Level Smoke-Free Ordinances in Georgia

General Information

- **Jurisdiction**
  - Variable Name: county_name
  - Question: What is the Name of the County?
  - Question Type: Text
  - Coding Instructions: Record the County's official Name as listed by the Census Bureau. If MUNICODE lists the county with a hyphenated city name (e.g., "Athens-Clarke"), code it as the Census Bureau name (e.g., "Clarke") but include a note indicating the difference.
  - Data Format: Text Entry

Ordinance Documentation

Question 1

- **Variable Name:** smoke_free
- **Question:** Has the county coded an ordinance or specific regulations that mandate smoke-free environments?
- **Question Type:** Binary - Mutually Exclusive
- **Variable Values:**
  - 0 = No (Text referencing tobacco use prohibition not found)
  - 1 = Yes (Text referencing tobacco use prohibition identified)

Child Question 1.1. If yes, indicate:

- **Variable Name:** ordinance_location
- **Question:** Where is the ordinance language located?
- **Question Type:** Categorical - Mutually Exclusive
- **Variable Values:**
  - 1 = Part of Broader Policy
  - 2 = Stand-alone Ordinance/Regulation code

Child Question 1.1.1

- **Variable Name:** ordinance_details
- **Question:** Enter details for the ordinance.
  - **a.** If part of broader policy, record:
    - Section/subsection code
    - Quote the text
  - **b.** If stand-alone ordinance, record:
    - Ordinance code
    - Ordinance title

Comments: _____

Question 2

- **Variable Name:** ordinance_date
- **Question:** What is the latest date of the policy?
- **Question Type:** Date
- **Coding Instructions:** Record the latest effective date or date of codification/amendment related to smoking restrictions.

Question 3

- **Variable Name:** ordinance_rationale
- **Question:** Does the ordinance have a rationale?
- **Question Type:** Binary - Mutually Exclusive
- **Variable Values:**
    - 0 = No (Rationale not presented)
    - 1 = Yes (Rationale presented)
- **Coding Instructions:** Quote the public health rationale as stated in the ordinance text.

Child Question 3.1

- **Variable Name:** Health_rationale
- **Question:** What health conditions are mentioned in the rationale?
- **Question Type:** Text
- **Coding Instructions:** List health issues mentioned

Ordinance Scope and Coverage

Question 4

- **Variable Name:** ordinance_Scope
- **Question:** Where does the county ordinance or specific regulations apply?
- **Question Type:** List-Check all that apply
- **Variable Values:**
    - 1 = Indoor
    - 2 = Outdoor

Question 5

- **Variable Name:** indoor_scope
- **Question:** Where does the policy apply indoors?
- **Question Type:** Categorical - Check All That Apply
- **Variable Values:**
    - 0 = Not Specified
    - 1 = All enclosed public places
    - 2 = Government buildings
    - 3 = Workplaces
    - 4 = Restaurants

- 5 = Bars
- 6 = Hotels
- 7 = Public transportation
- 8 = Private clubs
- 9 = Other (Specify)

Question 6

- **Variable Name:** tobacco_restrictions_near
- **Question:** Does the policy restrict tobacco use near entrances, windows, and ventilation?
- **Question Type:** Categorical - Mutually Exclusive
- **Variable Values:**
  - 0 = No restrictions
  - 1 = Yes, restricted (limited, no distance specified)
  - 2 = Yes, restricted (15 feet or less)
  - 3 = Yes, restricted (over 15 feet)

Question 7

- **Variable Name:** outdoor_scope
- **Question:** Where does the policy apply outdoors?
- **Question Type:** Categorical - Check All That Apply
- **Variable Values:**
  - 0 = Not specified
  - 1 = Employment areas
  - 2 = Parks and recreational areas
  - 3 = Public transit areas
  - 4 = Outdoor dining areas
  - 5 = Shopping centers
  - 6 = Outdoor stadiums
  - 7 = Arenas
  - 8 = Event venues
  - 9 = Other (Specify)

Exemptions and Designated Smoking Areas

Question 8

- **Variable Name:** exemptions
- **Question:** Are there any exemptions specified in the policy?
- **Question Type:** Categorical - Mutually Exclusive
- **Variable Values:**
  - 0 = No exemptions. Qoute ordinance text _____
  - 1 = Yes, limited, List _____
  - 2 = Yes, broad, Qoute ordinance text _____
  - 3 = Not mentioned

- **Coding Instructions:** Only code "No exemptions" if the ordinance explicitly says so and quote the stated ordinance text otherwise if ordinance has no language about exemptions code "Not mentioned".

Question 9

- **Variable Name:** designated_smoking_areas
- **Question:** Does the policy designate smoking areas?
- **Question Type:** Categorical - Mutually Exclusive
- **Variable Values:**
    - 0 = Not Mentioned
    - 1 = Yes, restricted
    - 2 = Yes, broadly
    - 3 = No designated smoking areas
- **Coding Instructions:** Only code "No designated smoking areas" if the ordinance explictly says so and quote the stated ordinance text otherwise if ordinance has no language about designated smoking areas code "Not mentioned".

Implementation and Enforcement

Question 10

- **Variable Name:** penalties
- **Question:** What penalties are imposed for violations of smoke-free policies?
- **Question Type:** Categorical - Check All That Apply
- **Variable Values:**
    - 1 = Specified fines
    - 2 = Warning
    - 3 = Disciplinary Action
    - 4 = No fines specified
    - 5 = No penalties mentioned
- **Coding Instructions:** Only code "No penalties" if text about penalties can not be found but if ordinance mentions about violators will be fined but does not mention amount of fine, code "No fines specified". Quote the stated ordinance text

Question 11

- **Variable Name:** enforcement_agency
- **Question:** Does the policy designate county-level departments or agencies responsible for enforcing smoke-free policy?
- **Question Type:** Binary - Mutually Exclusive
- **Variable Values:**
    - 0 = No
    - 1 = Yes, but with an unclear role
    - 2 = Yes, Name of agency and role

Question 12

- **Variable Name:** collaboration
- **Question:** Does the ordinance mention agency collaboration in enforcement efforts?
- **Question Type:** Categorical - Mutually Exclusive
- **Variable Values:**
    - 0 = No collaboration mentioned
    - 1 = Yes, limited - Collaboration was mentioned but not specific
    - 2 = Yes, comprehensive - Collaboration explicitly mentioned with named partners.

Question 13

- **Variable Name:** implementation_strategies
- **Question:** What strategies are used to promote compliance and awareness of smoke-free regulations?
- **Question Type:** Categorical - Check All That Apply
- **Variable Values:**
    - 0 = None mentioned
    - 1 =Signage
    - 2 = Handbooks
    - 3 = Education
    - 4 = Removal of ashtrays

Appendix 4: Coded County Level Mokefree Ordinance Dataset_ Select Georgia Counties, 2023

County	Ordinanc	Location	Latest Da	Rationale	Environm	Indoor: P	Indoor: G	Indoor:	Indoor: R	Indoor: B	Indoor: H	Indoor: P	Indoor: P	Indoor:	Indoor: P	Indoor: P	Indoor: S	Entrance	Outdoor:	Outdoor:	Exemptio	Designate	Penalties	Enforcem	Collabora	Impl. Strategies?
Appling C	None	None	2023	No	Indoor On	Y	Y	Y	Y	Y (w/ Exe	Y (w/ Exe	Y (Fac)	N (Exemp	N	Y	Y	Y	None	N	None	Yes, Broa	Yes, Broa	Not Ment	Not Ment	Not Ment	Not Mentioned
Athens-Cl	Yes	Stand Alo	2023	No	Both	Y	Y	Y	Y	Y	Y (w/ Exe	Y (Fac)	N (Exemp	N	Y	Y	Y	None	Y	None	Yes, Mod	Yes, Rest	Fines	Yes (Uncl	Not Ment	Signage, Ashtra	ys
Atkinson	None	None	2023	No	Indoor On	Y	Y	Y	Y	Y (w/ Exe	Y (w/ Exe	Y (Fac)	N (Exemp	N	Y	Y	Y	None	N	None	Yes, Broa	Yes, Broa	Not Ment	Not Ment	Not Ment	Not Mentioned
Bacon Co	None	None	2023	No	Indoor On	Y	Y	Y	Y	Y (w/ Exe	Y (w/ Exe	Y (Fac)	N (Exemp	N	Y	Y	Y	None	N	None	Yes, Broa	Yes, Broa	Not Ment	Not Ment	Not Ment	Not Mentioned
Baker Co	None	None	2023	No	Indoor On	Y	Y	Y	Y	Y (w/ Exe	Y (w/ Exe	Y (Fac)	N (Exemp	N	Y	Y	Y	None	N	None	Yes, Broa	Yes, Broa	Not Ment	Not Ment	Not Ment	Not Mentioned
Calhoun (	Yes	Stand Alo	2003	Yes	Indoor On	Y	Y (City)	Y (City)	Y	N	N	N	N	N	N	N	N	None	N	None	Not Ment	Not Ment	Fine, War	Yes (Dept	Not Ment	Signage, Edu
Charlton	Yes	Part of Br	2023	No	Indoor On	Y	Y	Y	Y	Y (w/ Exe	Y (w/ Exe	Y (Fac)	N (Exemp	N	Y	Y	Y	None	N	None	Yes, Broa	Yes, Broa	Fines	Yes (Cou	Not Ment	Signage, Ashtrays, Edu
Chatooga	None	None	2023	No	Indoor On	Y	Y	Y	Y	Y (w/ Exe	Y (w/ Exe	Y (Fac)	N (Exemp	N	Y	Y	Y	None	N	None	Yes, Broa	Yes, Broa	Not Ment	Not Ment	Not Ment	Not Mentioned
Cherokee	Yes	Part of Br	2023	Yes (Reta	Both	Y	Y (Count	Y (Count	Y	N	N	N	N	N	N	N	N	>=15 ft (P	Y	Outdoor	Not Ment	Yes, Rest	Implied Fi	No	Not Ment	None
Clinch	None	None	2023	No	Indoor On	Y	Y	Y	Y	Y (w/ Exe	Y (w/ Exe	Y (Fac)	N (Exemp	N	Y	Y	Y	None	N	None	Yes, Broa	Yes, Broa	Not Ment	Yes (DPH	Yes (Spec	Signage, Ashtrays, Edu
Cobb Cou	Yes	Part of Br	2022	Yes	Both	Y	Y (Count	Y (Count	Y	N	N	N	N	N	N	N	N	None	Y	None	Not Ment	Yes, Broa	Not Ment	Not Ment	Not Ment	Signage
Columbia	Yes	Stand Alo	2011	No	Both	Y	Y	Y	Y	Y	Y (w/ Ex)	Y (Count	N (Exemp	Y	Y (Count	Y	Y	10 ft	Y (Count	County Pr	Yes, Ltd (	Yes, Rest	Fines	Yes (Mult	Yes (Spec	Signage, Ashtrays, Edu
DeKalb C	Yes	Stand Alo	2012	Yes	Both	Y	Y	Y	Y	Y (FS Ex	Y (w/ Exe	Y (Public	Y	Y	Y	Y	Y	>=15 ft (2	Y	MUH Co	Yes, Limi	Yes, Rest	Fines	Yes (Polic	Not Ment	Signage, Ashtrays
Douglas C	Yes	Stand Alo	2007	Yes	Both	Y	Y	Y	Y	Y (Exc. D	Y (Public	N	Y	Y	N	Y	Y	None	Y	None	Yes, Mod	Yes, Rest	Implied Fi	Yes (Mult	Yes (Spec	Signage
Elbert	None	None	2023	No	Indoor On	Y	Y	Y	Y	Y (w/ Exe	Y (w/ Exe	Y (Fac)	N (Exemp	N	Y	Y	Y	None	N	None	Yes, Broa	Yes, Broa	Not Ment	Not Ment	Not Ment	Not Mentioned
Fayette C	Yes	Part of Br	2014	No	Both	Y	Y (Park F	Y (Ltd Sc	Y	N	N	N	N	N	N	N	N	None	Y	None	Not Ment	Yes, Rest	Implied Fi	Yes (Uncl	Not Ment	Signage
Forsyth C	Yes	Part of Br	2020	No	Both	Y	Y (Count	Y (Count	Y	N	N	N	N	N	N	N	N	None	Y	County Pa	Not Ment	Not Ment	Fines	No	Not Ment	None
Fulton Co	Yes	Part of Br	2016	No	Both	Y	Y (Park F	Y (Ltd Sc	Y	N	N	N	N	N	N	N	N	None	Y	Park Grou	Not Ment	Not Ment	Fines	Yes (Uncl	Not Ment	Signage
Gwinnett	Yes	Stand Alo	2022	Yes	Both	Y	Y	Y	Y	Y	Y	Y (Veh/F	Y	Y	Y	Y	Y	>=15 ft	Y	MUH Co	Yes, Limi	Yes, Rest	Fines	Yes (Polic	Not Ment	Signage, Ashtrays, Edu
Houston	None	None	2023	No	Indoor On	Y	Y	Y	Y	Y (w/ Exe	Y (w/ Exe	Y (Fac)	N (Exemp	N	Y	Y	Y	None	N	None	Yes, Broa	Yes, Broa	Not Ment	Yes (DPH	Yes (Spec	Signage, Ashtrays, Edu
Glynn/Joh	Yes	Stand Alo	2000	No	Indoor On	Y	Y (Courth	Y (Courth	Y	N	N	N	N	N	N	N	N	None	N	None	Not Ment	Not Ment	Fines	Not Ment	Not Ment	Signage
Oconee	None	None	2023	No	Indoor On	Y	Y	Y	Y	Y (w/ Exe	Y (w/ Exe	Y (Fac)	N (Exemp	N	Y	Y	Y	None	N	None	Yes, Broa	Yes, Broa	Not Ment	Not Ment	Not Ment	Not Mentioned
Quitman	None	None	2023	No	Indoor On	Y	Y	Y	Y	Y (w/ Exe	Y (w/ Exe	Y (Fac)	N (Exemp	N	Y	Y	Y	None	N	None	Yes, Broa	Yes, Broa	Not Ment	Not Ment	Not Ment	Not Mentioned
Randolph	None	None	2023	No	Indoor On	Y	Y	Y	Y	Y (w/ Exe	Y (w/ Exe	Y (Fac)	N (Exemp	N	Y	Y	Y	None	N	None	Yes, Broa	Yes, Broa	Not Ment	Not Ment	Not Ment	Not Mentioned
Seminole	None	None	2023	No	Indoor On	Y	Y	Y	Y	Y (w/ Exe	Y (w/ Exe	Y (Fac)	N (Exemp	N	Y	Y	Y	None	N	None	Yes, Broa	Yes, Broa	Not Ment	Not Ment	Not Ment	Not Mentioned
Stewart	None	None	2023	No	Indoor On	Y	Y	Y	Y	Y (w/ Exe	Y (w/ Exe	Y (Fac)	N (Exemp	N	Y	Y	Y	None	N	None	Yes, Broa	Yes, Broa	Not Ment	Not Ment	Not Ment	Not Mentioned
Sumter	None	None	2023	No	Indoor On	Y	Y	Y	Y	Y (w/ Exe	Y (w/ Exe	Y (Fac)	N (Exemp	N	Y	Y	Y	None	N	None	Yes, Broa	Yes, Broa	Not Ment	Not Ment	Not Ment	Not Mentioned
Treutlen	None	None	2023	No	Indoor On	Y	Y	Y	Y	Y (w/ Exe	Y (w/ Exe	Y (Fac)	N (Exemp	N	Y	Y	Y	None	N	None	Yes, Broa	Yes, Broa	Not Ment	Not Ment	Not Ment	Not Mentioned
Turner	None	None	2023	No	Indoor On	Y	Y	Y	Y	Y (w/ Exe	Y (w/ Exe	Y (Fac)	N (Exemp	N	Y	Y	Y	None	N	None	Yes, Broa	Yes, Broa	Not Ment	Not Ment	Not Ment	Not Mentioned
Warren	None	None	2023	No	Indoor On	Y	Y	Y	Y	Y (w/ Exe	Y (w/ Exe	Y (Fac)	N (Exemp	N	Y	Y	Y	None	N	None	Yes, Broa	Yes, Broa	Not Ment	Not Ment	Not Ment	Not Mentioned
State Law	Yes	Stand-alo	2023	No	Indoor On	Y	Y	Y	Y	Y (w/ Exe	Y (w/ Exe	Y (Fac)	N (Exemp	N	Y	Y	Y	None	N	None	Yes, Broa	Yes, Broa	Not Ment	Not Ment	Not Ment	Not Mentioned

Table 3.2 Study Variables Used for Association Analysis (Sourced from 2023 CHR)

Variable	Definition	Original CHR Source
Smoking Rate	Percentage of adults that reported currently smoking	Behavioral Risk Factor Survey. System
High School Completion Rate	Percentage of adults age 25+ with high school diploma or equivalent	American Community Survey, 5-yr est.
Unemployment Rate	Percentage of population ages 16+ unemployed and looking for work	Bureau of Labor Statistics
Social Association Rate	Number of membership associations per 10,000 population	County Business Patterns
Median Household Income	Income where half of households earn more, half earn less	Small Area Income & Poverty Estimates
Degree of Rurality	Percentage of population living in a rural area	Census Population Estimates
Not Proficient in English	Percentage of population age 5+ who speak English "less than very well"	American Community Survey, 5-yr est.
Non-Hispanic White	Percentage of population self-identifying as Non-Hispanic White	Census Population Estimates
African American	Percentage of population self-identifying as African American or Black	Census Population Estimates
Hispanic	Percentage of population self-identifying as Hispanic/Latino ethnicity	Census Population Estimates
Asian	Percentage of population self-identifying as Asian	Census Population Estimates
American Indian/Alaskan Native	Percentage of population self-identifying as AI/AN	Census Population Estimates
Native Hawaiian/Other Pacific Islander	Percentage of population self-identifying as NH/PI	Census Population Estimates

Table 4.2: Summary of Coding Results, Georgia Counties (n=30), 2023

County	Ordinance Exists? (Scope)	Location Type	Latest Date?	Rationale Present?	Environments Covered	Key Places Covered (Summary)	Exemptions Present?	Designated Areas Allowed?	Penalties Specified?	Enforcement Agency Specified?	Key Compliance Strategies (Signage/Ashtray/Edu)
State Law (GA)	N/A	Stand-alone	(2005)	No	Indoor Only	Public Places, Workplaces, Restaurants, Bars, Hotels	Yes	Yes (Multiple Types)	No	Yes (DPH/County BOH)	Yes / Yes / Yes
Appling	No	N/A	State Applies	No	Indoor Only – per state law	(As per State Law)	Yes (per state law)	Yes (Multiple Types – per state law)	No	No	No / No / No
Athens-Clarke	Yes (Comprehensive)	Stand Alone	Yes (2023)	No	Both	Public Places, Workplaces, Restaurants, Bars, Hotels	Yes	Yes (20 Hotel Rms, Emp Areas)	Yes (Fines)	Yes (Unclear Role)	Yes / Yes / No
Atkinson	No	N/A	State Applies	No	Indoor Only – per state law	(As per State Law)	Yes (per state law	Yes (Multiple Types – per state law)	No	No	No / No / No
Bacon	No	N/A	State Applies	No	Indoor Only – per state law	(As per State Law)	Yes (per state law	Yes (Multiple Types – per state law)	No	No	No / No / No
Baker	No	N/A	State Applies	No	Indoor Only – per state law	(As per State Law)	Yes (per state law	Yes (Multiple Types – per state law)	No	No	No / No / No

Calhoun	Yes (Limited)	Stand Alone	No (2003)	Yes	Indoor Only	Public Places, Workplaces, Restaurants, County Buildings/Vehicles/Workplaces	No	No	Yes (Fine/Warn /Disp)	Yes (Dept Heads etc.)	Yes / No / Yes
Charlton	Yes (Adopts State Law)	Part of Broader	Yes (2023)	No	Indoor Only	(As per State Law)	Yes (per state law	Yes (Multiple Types)	Yes (Fines)	Yes (County BOH)	Yes / Yes / Yes
Chattooga	No	N/A	State Applies	No	Indoor Only – per state law	(As per State Law)	Yes (per state law	Yes (Multiple Types – per state law)	No	No	No / No / No
Cherokee	Yes (Limited)	Part of Broader	Yes (2023)	Yes (Retailer only)	Both	Public Places, Workplaces, Restaurants, County Property/Parks, Outdoor Work Areas	No	Yes (County Prop/Parks)	Yes (Implied Fine)	No	No / No / No
Clinch	No	N/A	State Applies	No	Indoor Only – per state law	(As per State Law)	Yes (per state law	Yes (Multiple Types – per state law)	No	No	No / No / No
Cobb	Yes (Limited)	Part of Broader	Yes (2022)	Yes	Both	Public Places, Workplaces, Restaurants, County Facilities/Parks	No	Yes (County Prop/Parks)	No	No	Yes / No / No

Columbia	Yes (Comprehe nsive)	Stand Alone	Yes (2011)	No	Both	Public Places, Workplaces, Restaurants, Hotels, Bars, Hotels, Pubic Transportati on/Parking, Entrance – 10feet, MUH	Yes	Yes (Yes (20 Hotel Rms, Outdoor Emp & dining Areas)	Yes (Fines, Disp	Yes (County Dept of Health)	Yes / No / Yes
DeKalb	Yes (Comprehe nsive)	Stand Alone	Yes (2012)	Yes	Both	Public Places, Workplaces, Restaurants, Hotels, Pvt Clubs	Yes)	Yes (20 Hotel Rms)	Yes (Fines)	Yes (Police)	Yes / Yes / No
Douglas	Yes (Comprehe nsive)	Stand Alone	Yes (2007)	Yes	Both	Public Places, Workplaces, Restaurants, Bars, Hotels, Pvt Clubs	Yes (Yes)	Yes (Rest. Bar, Parks)	Yes (Implied Fine)	Yes (Multiple Depts)	Yes / No / No
Elbert	No	N/A	State Applies	No	Indoor Only – per state law	(As per State Law)	Yes (per state law	Yes (Multiple Types – per state law)	No	No	No / No / No
Fayette	Yes (Limited)	Part of Broad er	Yes (2014)	No	Both	Public Places, Workplaces, Restaurants, Body Art Studios, Parks	No	Yes (Parks)	Yes (Implied Fine)	Yes (Unclear Role)	Yes / No / No

Forsyth	Yes (Limited)	Part of Broader	Yes (2020)	No	Both	Public Places, Workplaces, Restaurants, County Buildings/Parks, Vape Retailers (Restrictions)	No	No (Vaping in lots)	Yes (Fines)	No	No / No / No
Fulton	Yes	Part of Broader	Yes (2016)	No	Both	Public Places, Workplaces, Restaurants, Parks.	Yes (per state law	Yes (Multiple Types – per state law)	Yes (Fines)	Yes (Unclear Role)	Yes / No / No
Johnson	Yes (Limited)	Stand Alone	No (2000)	No	Indoor Only	Public Places, Workplaces, Restaurants, County Courthouse	No	No	Yes (Fines)	No	Yes / No / No
Gwinnett	Yes (Comprehensive)	Stand Alone	Yes (2022)	Yes	Both	Public Places, Workplaces, Restaurants, Bars, Hotels, Pvt Clubs	Yes	Yes (Limited Outdoor MUH)	Yes (Fines)	Yes (Police)	Yes / Yes / Yes
Houston	No	N/A	State Applies	No	Indoor Only – per state law	(As per State Law)	Yes (per state law	Yes (Multiple Types – per state law)	No	No	No / No / No
Oconee	No	N/A	State Applies	No	Indoor Only – per state law	(As per State Law)	Yes (per state law	Yes (Multiple Types – per state law)	No	No	No / No / No

Quitman	No	N/A	State Applies	No	Indoor Only – per state law	(As per State Law)	Yes (per state law	Yes (Multiple Types – per state law)	No	No	No / No / No
Randolph	No	N/A	State Applies	No	Indoor Only – per state law	(As per State Law)	Yes (per state law	Yes (Multiple Types – per state law)	No	No	No / No / No
Seminole	No	N/A	State Applies	No	Indoor Only – per state law	(As per State Law)	Yes (per state law	Yes (Multiple Types – per state law)	No	No	No / No / No
Stewart	No	N/A	State Applies	No	Indoor Only – per state law	(As per State Law)	Yes (per state law	Yes (Multiple Types – per state law)	No	No	No / No / No
Sumter	No	N/A	State Applies	No	Indoor Only – per state law	(As per State Law)	Yes (per state law	Yes (Multiple Types – per state law)	No	No	No / No / No
Treutlen	No	N/A	State Applies	No	Indoor Only – per state law	(As per State Law)	Yes (per state law	Yes (Multiple Types – per state law)	No	No	No / No / No
Turner	No	N/A	State Applies	No	Indoor Only – per state law	(As per State Law)	Yes (per state law	Yes (Multiple Types – per state law)	No	No	No / No / No
Warren	No	N/A	State Applies	No	Indoor Only – per state law	(As per State Law)	Yes (per state law	Yes (Multiple Types – per state law)	No	No	No / No / No

Table 4.4 Select social, economic, and demographic characteristics of the counties, Georgia, 2023

County	Ordinance Score	Adult Smoking Rate	High School Completion Rate	Median Household Income	Unemployment Rate	Social Association Ratio (per 10,000 residents)	Rurality Rate	Percent Not Proficient in English	Percent White	Percent Black	Percent Hispanic	Percent Asian	Percent AI/AN	Percent NH/PI
Counties with codified regulation														
Gwinnett	**84**	13.70	87.90	$75,021	3.50	7.3	0.50	7.90	33.20	28.90	22.20	13.20	0.90	0.10
DeKalb	**77**	13.80	90.70	$70,756	4.60	7.1	0.30	4.30	29.50	53.40	8.60	6.50	0.50	0.10
Columbia	**59**	14.10	92.90	$87,281	2.70	6.9	16.20	1.50	65.40	19.00	7.60	4.50	0.50	0.20
Clarke	**48**	18.50	89.70	$49,145	3.80	10.3	5.90	2.20	55.30	27.50	11.20	3.90	0.40	0.10
Calhoun	**47**	26.00	76.60	$38,232	4.00	11.2	100.00	1.70	31.70	60.70	5.20	1.10	0.50	0.30
Douglas	**46**	17.10	88.30	$66,162	4.40	5.0	15.80	1.60	34.20	50.20	11.10	1.70	0.50	0.20
Fulton	**51**	13.00	93.20	$82,820	4.70	9.5	1.10	1.80	39.00	43.80	7.30	7.80	0.30	0.00
Charlton	**42**	24.90	80.80	$47,229	3.20	3.0	51.00	3.60	60.60	28.60	6.00	0.80	1.70	0.10
Forsyth	**41**	11.20	93.60	$120,919	2.50	6.0	9.90	2.30	65.90	4.50	9.80	17.90	0.50	0.10
Cherokee	**40**	14.60	91.90	$96,997	2.60	7.0	17.10	2.80	76.90	7.40	11.30	2.40	0.60	0.10
Cobb	**37**	13.00	92.90	$87,532	3.30	7.8	0.20	3.70	50.20	28.00	13.70	5.70	0.50	0.10
Johnson	**30**	26.80	75.20	$37,703	3.50	13.4	65.40	0.20	60.90	34.00	3.00	0.50	0.40	0.00
Fayette	**28**	13.10	94.90	$92,319	2.90	13.3	18.20	1.20	58.60	26.00	7.90	5.20	0.50	0.10
Counties with no local smoking regulation														
Appling	19	24.80	77.80	$46,530	3.60	12.6	71.40	2.40	68.30	18.70	10.30	0.90	0.60	0.20
Atkinson	19	25.50	66.80	$40,303	2.90	6.0	100.00	12.30	54.20	15.50	27.50	1.10	1.90	1.20
Bacon	19	25.30	83.30	$43,154	3.20	8.2	69.30	1.60	72.70	15.90	8.80	0.80	0.50	0.10
Baker	19	22.80	83.60	$44,106	4.90	0.0	100.00	0.10	48.50	41.00	6.80	1.60	0.80	0.10
Chattooga	19	26.50	72.00	$42,974	4.80	9.7	57.60	1.80	82.10	9.60	5.70	0.60	0.50	0.40
Clinch	19	28.60	74.20	$44,799	2.90	18.2	60.40	0.10	64.40	26.80	5.70	0.50	1.10	0.10
Elbert	19	24.20	79.20	$42,866	4.90	11.9	70.60	2.40	62.80	28.20	6.30	1.20	0.40	0.10

Houston	19	16.90	93.00	$71,609	3.60	6.7	10.00	1.20	53.70	33.10	6.90	3.20	0.40	0.20
Oconee	19	12.40	96.00	$112,581	2.20	11.7	50.30	1.00	83.20	4.80	5.90	4.50	0.30	0.10
Quitman	19	22.50	68.90	$38,357	4.90	0.0	73.10	0.60	48.70	46.80	2.10	0.40	0.70	0.00
Randolph	19	27.30	79.00	$34,883	5.20	12.0	50.60	0.00	35.30	60.10	2.80	0.60	0.10	0.20
Seminole	19	23.00	85.90	$41,917	3.70	12.4	68.60	0.50	61.60	32.40	3.80	0.80	0.20	0.00
Stewart	19	22.60	71.00	$37,318	3.80	4.5	100.00	15.10	22.40	38.00	34.90	3.80	0.70	0.00
Sumter	19	21.20	83.30	$39,008	5.70	10.6	41.80	1.60	38.90	52.40	6.10	1.30	0.50	0.20
Treutlen	19	25.90	75.20	$40,947	4.30	10.3	58.90	2.50	63.20	30.70	3.70	0.50	0.40	0.00
Turner	19	24.80	79.70	$37,477	6.40	19.0	49.70	0.70	53.30	39.60	4.90	0.90	0.60	0.10
Warren	19	25.20	71.50	$40,361	4.70	13.4	100.00	0.20	38.90	56.60	2.00	0.70	0.20	0.00

Source: Couty Health Rankings. 2023