

# THE IMPACT OF SMOKING BANS ON BARS AND RESTAURANTS

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Over the past few years, a number of municipalities in Wisconsin have considered completely banning smoking in bars and restaurants. To date, only Appleton, Madison, and Shorewood Hills have passed comprehensive bans, but a recent proposal to ban smoking in bars and restaurants in the City of Milwaukee has placed the largest community in the state square in the middle of this issue. Controversy inevitably surrounds smoking bans, with advocates citing concerns for health of their consumers and employees as motivation for proposing bans, while bar or restaurant owners are concerned with the potential adverse impact on their business, and smokers are concerned about the infringement of their rights. Overall, the unknown impact on businesses tends to draw the most attention and is the focus of much of the debate. The health benefits created by this regulation are likely fair to assume, but what is the impact of a smoking ban on the average bar or restaurant? Are bars and restaurants impacted in the same way? Do different community characteristics have an impact on the outcomes of smoking bans? These are all questions that we will address in this discussion of the impact of



smoking bans on the bar and restaurant industries.

## Background

The relatively small number of Wisconsin communities that have banned smoking is consistent with current trends in the Midwest. As shown on the next page in Table 1, only a small number of local governments in the neighboring states of Minnesota and Illinois have also

been successful in banning smoking. But the relatively few ordinances in these states masks what appears to be a trend toward smoke-free eating and drinking establishments nationally. As of January 2006, thirteen states (California-1995, Utah-1995, Delaware-2002, Florida-2003, New York-2003, Connecticut-2003, Maine-2004, Idaho-2004, Massachusetts-2004, Rhode Island-2005, Vermont-2005, Montana-2005, and Washington-2005) had passed bans. Most of these bans were passed in recent years, which is in line with the upsurge in municipal ordinances since 2000 (See Figure 1). Further, the geographic distribution of the laws is striking as well, with every state but Tennessee home to

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**TABLE 1 A SAMPLE OF CITIES AND COUNTIES IN WISCONSIN, ILLINOIS, AND MINNESOTA WITH SMOKING BANS ON BARS AND RESTAURANTS**

Municipality	State	Effective Date of Ban
Wilmette	IL	7/1/2004
Highland Park	IL	6/1/2005
Minneapolis	MN	3/31/2005
Hennepin County	MN	3/31/2005
Golden Valley	MN	3/31/2005
Appleton	WI	7/1/2005
Madison	WI	7/1/2005
Shorewood Hills	WI	12/21/2004

For more information and a complete up-to-date list of cities, counties, and states that have enacted bans, see the Americans for Non-smokers Rights web page ( [www.no-smoke.org](http://www.no-smoke.org)).

at least one comprehensive smoke-free ordinance. This recent growth suggests that the number of bans in Wisconsin will only increase. Because of this, finding evidence on the impact of existing ordinances on businesses is critical if policymakers are to make informed decisions.

#### **Expected business impacts of smoking bans**

As mentioned above, health concerns are often the driving force behind bans, because second-hand smoke is a potential concern for bar and restaurant employees and patrons. But the most contentiously debated point, however, is the economic impact on the restaurants and bars that must comply with these regulations. If laws do not cause significant harm to businesses, as advocates argue, there remains no substantial cost to the legislation, as the net effect on health will at least be neutral and likely positive. If the laws do hurt businesses, however, as opponents argue, then policymakers must weigh the costs to businesses with the potential health benefits.

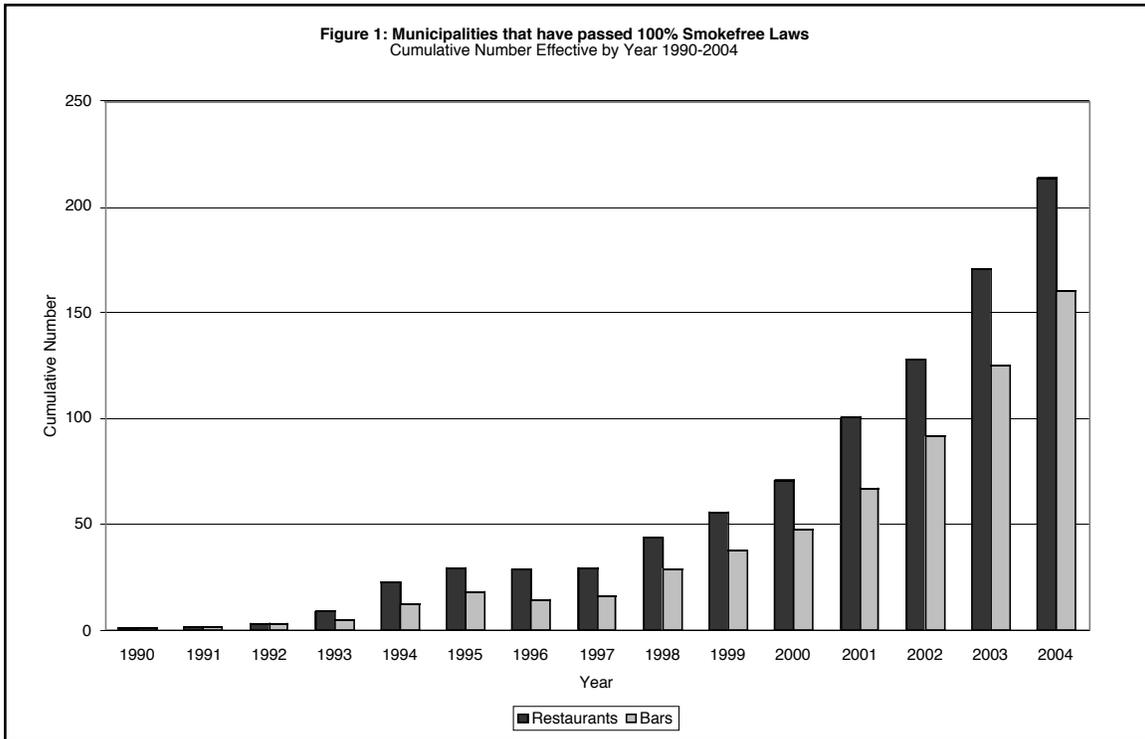
The controversy over the net effects on businesses is not resolved by appealing to economic theory, as both sides can claim support. The opposition claims that regulations will stifle the restaurant/bar businesses by reducing patronage of smokers, and hence limiting the

ability to maximize profits. Policy advocates, on the other hand, claim that smoking regulations do not hurt establishments and may even add to revenue as well as lower costs. If a smoke-free environment induces non-smokers to spend more at restaurants and bars than is lost from a reduction in smoker patronage, bans could increase profits.

At first glance, it appears as if the opposition group is on firmer theoretical ground. If there were the potential for increased revenues and reduced costs from going smoke-free, restaurants and

bars would do so without government regulations. This argument need not be true, however, in the presence of market failures brought about by imperfect market information. After all, consumers likely underestimate the cost of second-hand smoke and over-consume it. Moreover, firms may not have accurate information about the potential changes in revenue or costs that could occur from providing a smoke-free establishment. If it is true that information failures exist and firms' understanding of the effects of a smoking ban on consumer patronage is incomplete, then moving to a smoke-free environment could increase revenues. Smoking regulations could again also lower firm costs associated with smoking patrons, which include insurance premiums, ventilation, and relevant property damage.

Thus, theory leaves us with no firm guidance as to what to expect following smoking restrictions. Moreover, the results may differ for restaurants and bars. For example, smoking seems to be part of the "bar culture" and not necessarily part of the "restaurant culture," thus rendering negative effects for bars more likely. Further, smoking is much more likely to be a complement to drinking than it is for eating. On the other hand, the unavoidable nature of smoke in bars might make the potential



increase in patronage from non-smokers from a ban even greater than in restaurants. In short, this is a policy that requires empirical analysis. Since the size of a bar or restaurant’s labor force is strongly related to the number of patrons present at a given time, labor can be said to be the only key variable input in the short run. Therefore, tracking how employment changes following the passage of laws gives a good read on the economic effect of the legislation.

**New evidence of the effect of smoking bans on employment**

In addition to employment being a key barometer of bar and restaurant business, it is one measure for which consistent measures are gathered across localities for the entire United States. We used the Bureau of Labor Statistics’ (BLS) Quarterly Census of Employment and Wages (QCEW), which is appropriate for this policy analysis because it contains nationwide county-level panel data on employment levels in both the restaurant and employment industries. We extract quarterly data for every county from January 2001 to June 2004; the last

available quarter at the time the study was undertaken.

We identify effects from laws passed during this time span, which encompasses the period of greatest growth in smoking ordinances. We compare changes in employment in counties before and after they pass smoking bans to counties that do not pass bans over the same period. The latter controls for underlying trends and presents a counterfactual of what would have occurred in the counties with smoke-free ordinances had they not passed the bans. Information on the timing and location of laws was obtained from the Americans for Non-Smokers Rights ([www.no-smoke.org](http://www.no-smoke.org)). Although many laws are passed at the county level, some are passed at the city level and others are passed at the state level. The state laws certainly render the county bars or restaurants smoke-free, as do the county laws. City laws only render a portion of the county smoke-free, but we can estimate the proportion of a county’s population that is smoke-free using population figures obtained from the 2000 U.S. census. We use this information in our estimations.

**TABLE 2 RELATIVE EFFECTS OF SMOKING BANS ON COUNTY EMPLOYMENT IN BARS AND RESTAURANTS**

	<b>Bars</b>	<b>Restaurants</b>
All counties	-0.053** (0.022)	0.012 (0.011)
<b>By climate:</b>		
Warmer climates	-0.098 (0.081)	0.052** (0.019)
Colder climates	-0.034 (0.022)	-0.017 (0.010)
<b>By smoking prevalence:</b>		
High Prevalence	-0.139** (0.059)	-0.080** (0.032)
Low Prevalence	-0.053** (0.024)	0.034** (0.011)

Reported are relative effects of smoking bans in percentage terms compared with counties with no bans. Standard errors are in parentheses. Results significant at the .05 level are marked with a \*\*.

In Table 2, we summarize the relative effects of laws on restaurant and bar employment after bans are passed compared with a control group of counties without bans. Reported are percentage changes in employment with standard errors in parentheses. Estimates indicate there is a 5.3% reduction in bar employment when smoking is banned completely in all bars in a county.

The effect on restaurants is positive but does not meet the standard of statistical significance. In other words, estimates suggest that there may be an increase in restaurant employment following a smoking ban, but this estimate is not strong enough to eliminate no impact as an option, thus we cannot be certain that a positive impact on restaurants is present. That said, we can say there is no evidence to suggest that restaurants are hurt in any way. Overall, the results indicate that the average bar in a community is negatively impacted by smoking bans, while the average restaurant is not impacted.

Given that we have data from across the nation, we can also test whether results differ by region. In particular, in warmer climates, smokers would have an option to move out-

side to eat or drink. As detailed in Table 2, our research implies that there are no remarkable differences in bar effects by climate but there is a significant 5.2% increase in employment in restaurants. This suggests that the ability to have consistent outdoor seating is of some significance. Restaurants in warmer climates are more likely to have an outdoor option for smokers, therefore non-smokers may still be attracted to the smoke-free indoor seating, while smokers are not deterred as they can still smoke outdoors.

We also look at how effects of smoking bans differ in geographic areas with a higher prevalence of smokers and compare these to the effect of bans in areas with few smokers. Smoking prevalence varies quite a bit across the country. For example in Kentucky nearly 1 in 3 people are smokers, while in Utah it is only around 1 in 8. By addressing how the effects of smoking bans differ across locations with a different percentage of smokers we can identify how the impacts on businesses vary across different types of populations. As would be expected, the areas characterized by high smoking prevalence are more negatively impacted by smoking bans than areas with a lower percentage of smokers. Data on smoking prevalence, which is objectively collected by the Center for Disease Control, indicate that the effects are negative for bars regardless of smoking prevalence, although they are larger in magnitude in high prevalence areas. Further, the positive effects on restaurant employment are only observed in low smoking prevalence areas with negative effects in high prevalence areas. Both findings indicate that the impact of smoking bans can vary a great deal from one community to the next.

## Concluding remarks

The results trigger some additional questions. If it is true that the restaurant industry benefits from these regulations, or at least is not hurt, then why do restaurant associations fight the implementation of these laws so vigorously? The solution to this paradox may rest in the concept of information failure. If it were true that restaurant owners are not fully aware of the positive cooperative outcome of banning smoking in their establishments, then their perception about the impact of smoking regulation would be consistent with their contrarian actions.

One might also wonder why the effects on bars and restaurants differ so remarkably in similar industries. Perhaps the answer rests in the fact that a restaurant is primarily selling food, with drinks secondary, and environment or atmosphere of lesser concern. Clean air is more conducive to enjoying food, especially among non-smokers, who may be more likely to come to a restaurant following a ban. Bars, on the other hand, sell environment and atmosphere first, with perhaps drinks second and food third. Given that a smoking ban fundamentally changes the environment of an establishment, the observed negative impact on drinking establishments that we find is not surprising. Moreover, part of the bar environment is the fellow patrons, which in many cases attract customers to a particular drinking establishment. It is therefore possible that a smoking ban may alter the environment for non-smokers, leading them to shy away from bars following a ban as well. This perhaps explains why the smoking ban's negative impact on bars hits all types of counties, whether warm or cold or whether smoking prevalence is low or high, although the impact is strongest in the latter.

In summary, from a policy perspective, smoke-free ordinances for restaurants have some appeal because there does not seem to be a negative impact on employment. Coupled with what are likely to be at least minimal health benefits, smoking bans in restaurants likely have few drawbacks. On the other hand, bar employment falls following bans, indicating that there have been strains on their business. This is not to say that all bars are hurt, or for that matter that all restaurants are not, but it is to say that empirical analysis indicates that, on average, bars seem to do worse than before the ban, while restaurants do not. Further, and maybe of equal importance, are the results that suggest that the impacts of bans are not consistent across all communities. There is a great deal of variation in the characteristics of different communities. Some areas have a higher percentage of smokers or are in colder climates, both characteristics that seem to increase the likelihood that a smoking ban will hurt business. Overall, having a better understanding of how smoking bans impact business and how these effects may differ across communities must be considered if policymakers are to make informed choices on this issue. In considering this research in the context of the smoking ban currently under debate in Milwaukee, policymakers can anticipate little impact on restaurant business, while, on average, bars may see a decline in patronage.

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*This is a summary of ongoing research being conducted by Scott Adams, Department of Economics at UW-Milwaukee, and Chad Cotti, Department of Economics UW-Whitewater. Please contact the authors at [sjadams@uwm.edu](mailto:sjadams@uwm.edu) or [cdcotti@uwm.edu](mailto:cdcotti@uwm.edu) for a longer paper that contains more information about the data and methodology summarized in this article.*