

Smoke-free Implementation Toolkit

The Economic Impact of Smoke-free Laws¹

The results of all credible peer-reviewed studies show that smoke-free policies and regulations do not have a negative impact on business revenues. Establishing smoke-free workplaces is the simplest and most cost effective way to improve worker and business health.

- *The Health Consequences of Involuntary Exposure to Tobacco Smoke*, Report of the Surgeon General, 2006

While the purpose of smoke-free laws² is to protect health, some have expressed concern that an unintended side effect might be economic losses, especially within the hospitality industry. However, the experience of actual communities, beginning with the earliest smoke-free policies covering elevators, hospitals and theaters up through the implementation of the most recent state Clean Indoor Air laws, has provided strong evidence that smoke-free laws have no negative economic impact.

In 2003, a comprehensive review of economic impact research found that all of the best designed studies report no impact or a positive impact of smoke-free restaurant and bar laws on sales or employment.³ Although there is less research specifically focused on smoke-free bar laws, well-done studies have found no economic impact. It is also evident that smoke-free workplace policies can reduce business costs and reap other economic benefits.⁴

Outside of the tobacco industry and occasional allies in the hospitality industry, there is no longer a serious debate regarding the economic impact of smoke-free laws on businesses, including restaurants and bars. Policy makers and the public health community can rely on the findings of a large and growing body of domestic and international research to make the case that similar results can be expected under any new smoke-free laws.

From Smoking to Smoke-free

The current trend toward state and local smoke-free laws is rooted in a successful public health movement with a track record of more than 30 years. In the late 1970s, cities and counties began adopting ordinances requiring separate smoking and nonsmoking sections in some public places. By the mid-1980s, the trickle of modest smoking ordinances grew into a flood of stronger laws protecting nonsmokers in private workplaces, restaurants and other public places. Under the restaurant provisions of smoking ordinances, nonsmoking sections grew from less than 30 percent of seating in the early 1980s to 70 percent or more by the end of the decade.

By the late 1980s, a series of events shifted the debate from nonsmoking *sections* to *smoke-free* environments. In 1989, Congress passed the airline smoking ban eliminating smoking completely on commercial airline flights in the continental United States (and

overseas domestic flights of six hours or less). At the same time, a handful of communities, including Rancho Mirage, California, and Aspen, Colorado, adopted the first “smoke-free” restaurant ordinances.⁵ Ordinances covering private workplaces also evolved, as smoking in private offices or smoking rooms was eliminated.

Restaurants

The first comprehensive study of the effect of smoke-free restaurant ordinances on revenues, in 1994, found that smoke-free ordinances do not affect restaurant sales.⁶ This study was followed by a similar study which examined fifteen cities with smoke-free restaurant laws and fifteen control communities without smoke-free laws (Glantz/Smith studies).⁷ The Glantz/Smith studies found that the neutral impact of smoke-free laws was similar for all types of restaurants, based on the types of alcoholic beverages (if any) served.⁸ Both studies were based on (very reliable) sales tax data reported to the California Board of Equalization and the Colorado State Department of Revenue.⁹

A comprehensive evaluation of New York City’s smoke-free restaurant ordinance in 1999, using data on both sales and employment, found no adverse economic impact.¹⁰ Many other economic impact studies conducted by independent researchers have supported the findings of the California and New York City studies. These include research on the economic impact of a wide variety of smoking ordinances and smoke-free laws in Chapel Hill, North Carolina¹¹; Dane County, Wisconsin¹²; Flagstaff, Arizona¹³; Fort Wayne, Indiana¹⁴; and various counties in New York State.¹⁵ Preliminary evaluations of three recent ordinances in Minnesota (Minneapolis, Bloomington, and Hennepin County) have also found no economic impact on hospitality industry sales revenue.¹⁶

The neutral economic impact of smoke-free laws seems consistent regardless of the size, type, or location of community. The communities included in the Glantz/Smith studies ranged from Beverly Hills to agricultural and rural communities, college towns, and suburban bedroom communities. Other studies which found no economic impact examined cities in Massachusetts¹⁷ and Texas.¹⁸ A substantial body of international research supports the same conclusions.¹⁹

A 2004 study on the impact of smoke-free ordinances on the value and profitability of restaurants found that smoke-free ordinances add value to restaurants.²⁰ All else being equal, among the restaurants studied there was a median increase of 16 percent in the sale price of a restaurant covered by a smoke-free law compared to those in jurisdictions without such laws. The authors concluded that, “contrary to claims made by opponents of smoke-free laws, these laws are associated with an increase in restaurant profitability.”²¹

Bars

As in the case of restaurants, well-done research on the economic impact of smoke-free laws on bars has found no economic impact. The 1997 Smith/Glantz study examined

smoke-free bar provisions in five cities and two counties with smoke-free bar laws and control cities and counties without such laws.²² The study found that, like smoke-free restaurant ordinances, smoke-free *bar* laws do not affect revenues.

The authors of the 2004 study on the impact of smoke-free ordinances on the value and profitability of restaurants²³ have recently completed a similar study on bars. They found that smoke-free bar laws showed no impact on bar profitability.²⁴

Tourism and Conventions

A comprehensive study of the impact of New York's smoke-free state Clean Indoor Air law in five communities, including New York City, found that smoke-free regulations were associated with increases in taxable sales for eating and drinking establishments and hotels (controlling for other economic factors). Employment rose in hotels, while no change was observed for employment in restaurants. The New York State study relied on both sales and employment data and compared those statistics for the year before implementation with the same statistics for the first year following implementation.²⁵

A study in California, including San Francisco and Los Angeles, found that restaurants, bars, hotels, and tourism were not impacted economically following implementation of the state's smoke-free workplace and restaurant law.²⁶ Another study comparing hotel revenues and tourism rates before and after passage of 100 percent smoke-free restaurant laws in three states (California, Utah, and Vermont) and six cities (Boulder, Flagstaff, Los Angeles, Mesa, New York, and San Francisco) found that such laws do not adversely affect, and may increase, tourism.²⁷

The three Colorado towns of Aspen, Snowmass Village, and Telluride rely heavily on tourism and passed early smoke-free ordinances. None of these cities experienced a drop in sales following adoption of their ordinances.²⁸ In 1993, a study found that 48 percent of visitors to San Luis Obispo (a popular tourist destination) knew, prior to their current visit, about a city law making all restaurants and bars smoke-free, and that smokers and nonsmokers were equally aware of the law. None of the smoking visitors, almost half of whom were aware of the law before visiting, reported avoiding San Luis Obispo because of the law.²⁹

A 1992 study surveyed 40 convention groups, representing 174,840 attendees, who met in San Diego in 1991 and 1992, were asked if they would return to San Diego if a smoke-free restaurant ordinance were in effect. Only one group, an organization that represented members of the candy and tobacco industries, said that they would not book their convention in San Diego.³⁰

Finally, a growing number of hotels and other businesses catering to conventions and tourists have implemented voluntary smoke-free policies, including Marriott, Weston and Windham hotels. A growing number of private and public organizations, including the American Public Health Association and National Cancer Institute, have adopted policies that restrict their conferences and meetings to smoke-free facilities or venues.

The Economic Benefits of Smoke-free Workplaces

The costs of smoking in the workplace include expenses associated with the effects of smoking on the smoker, such as higher health and life insurance costs, absenteeism, lost productivity, workers' compensation payments, disability and premature death.³¹ Secondhand smoke also exacts a toll on nonsmokers in the workplace. The Environmental Protection Agency (EPA) has estimated that eliminating exposure to secondhand smoke in most indoor environments would save \$35 billion to \$66 billion per year.³²

Additional costs associated with smoking in the workplace include increased maintenance costs, which an employer can generally expect will drop after adopting a smoke-free policy. A survey of 2,000 workplaces with smoking restrictions found that 23.3 percent reported a reduction in maintenance costs.³³ Similarly, an analysis by the EPA concluded that implementing smoking restrictions in U.S. workplaces would reduce operating and maintenance costs by between \$4 billion to \$8 billion each year.³⁴

Assessing the Validity of Economic Impact Studies

Lower quality studies are much more likely to conclude that smoke-free laws are economically harmful, and they are also more likely to be funded by the tobacco industry. In a comprehensive review of the quality of economic studies, the authors concluded that “[a]lmost all (94 percent) of industry supported studies, compared to none of the studies funded by [non-tobacco industry sources], claimed a negative economic impact.”³⁵

In order to assess the actual economic impact of smoke-free laws it is essential to distinguish between valid research and poorly conducted or biased research. Because the tobacco industry's studies showing a negative economic impact (often claiming that smoke-free laws lead to a 20 percent to 30 percent decrease in business) are uniformly poorly designed, it is important to be aware of the differences between those studies and the objective and competent methods used in independent studies.³⁶ A quick assessment of the quality of a specific study can be made by asking the following four questions:

- Did the study measure what actually happened, or was it based on predictions or subjective assessments?
- Did the study include data from an adequate period *after* the law went into effect (at least one year) as well as an adequate period *before* the law went into effect to establish the underlying time trends and seasonal and random fluctuations?
- Was the study funded by a source independent of the tobacco industry?
- Was the study published in a peer-reviewed journal?³⁷

Collecting and Analyzing Local Economic Data

Obtaining new economic data in a state or community that has recently passed a smoke-free law takes time – in order to obtain scientifically reliable results it is important to wait

until data is available for more than a year following the law's effective date. By the time that local economic data can be collected and analyzed (typically two years or more after the effective date) any debate is usually long over. If new research is undertaken, it must be conducted with great care by experienced researchers to avoid the risks associated with poorly conducted research. Therefore, in most cases resources are better spent on other studies, such as those examining public opinion or indoor air quality.

If those responsible for implementing a smoke-free law nonetheless opt to study state or local economic data, a threshold question is whether adequate resources are available to hire a statistical consultant to collect and analyze data. Under the best circumstances, accurate local research showing no economic impact on business can be used for two purposes. It can provide an opportunity for media advocacy in support of smoke-free air and policy. Economic studies can also be shared with policy makers to assure them and to inform future efforts to close loopholes or strengthen a smoke-free law.

New Frontiers

As smoke-free enclosed workplaces and public places rapidly become the norm, several new frontiers have emerged in the effort to protect children, employees, and the public from secondhand smoke. Among these are laws or other policies protecting nonsmokers in casinos, apartment buildings and condominiums. While some resources are available for developing policy that addresses smoking in these environments,³⁸ future research may be required to assess the economic impact of smoke-free policies covering these areas.

Conclusion

There is strong evidence from more than a decade of research that, contrary to claims of the tobacco industry, smoke-free laws do not have adverse economic consequences for the hospitality industry. Indeed, there is additional evidence that smoke-free laws can have a positive economic impact on profits and business values. Outside of the tobacco industry, its front groups, and occasional allies in the hospitality industry, there is no longer a serious debate regarding the economic impact of smoke-free laws on businesses, including restaurants and bars. It is also evident that smoke-free workplace policies can reduce business costs and reap other economic benefits. The only documented negative economic impact of smoke-free laws is on the tobacco industry itself.³⁹

¹ Adapted from "Economic Impact of Smokefree Ordinances: Overview," Americans for Nonsmokers' Rights (ANR), August 2006. <http://no-smoke.org/document.php?id=219>.

² Smoke-free laws are defined by ANR as those that do not allow smoking in separately ventilated rooms, do not have size exemptions, and include all public and private workplaces. Smoke-free restaurant laws are those that do not allow separately ventilated smoking rooms, do not contain size exemptions, and *include* any attached bar. Smoke-free *bar* laws include only those that do not allow separately ventilated smoking rooms and do not include size exemptions. <http://www.no-smoke.org/pdf/100ordlist.pdf>

³ Scollo, M., Lal, A., Hyland, A., Glantz, S.A. Review of the quality of studies on the economic effects of smoke-free policies on the hospitality industry. *Tobacco Control*, 12: 13-20, 2003.

⁴ Centers for Disease Control and Prevention. *Making Your Workplace Smoke-free: A Decision Maker's Guide*, 1996.

⁵ The first smoke-free restaurant ordinances were weaker than those adopted today in that they exempted smaller restaurants or allowed for separately ventilated smoking rooms.

⁶ Glantz, S.A., Smith, L.R.A. The effect of ordinances requiring smoke-free restaurants on restaurant sales in the United States. *American Journal of Public Health* 84:1081-85, 1994.

⁷ Glantz, S.A., Smith, L.R.A. The effect of ordinances requiring smoke-free restaurants and bars on revenues: A follow-up. *American Journal of Public Health* 87:1687-1693, 1997.

⁸ Glantz & Smith, 1994; Taylor Consulting Group. *The San Luis Obispo Smoking Ordinance: A Study of the Economic Impacts on San Luis Obispo Restaurants and Bars*, 1993.

⁹ To account for population growth, inflation and changes in underlying conditions, the researchers analyzed five ratios:

1. Restaurant sales as a fraction of total retail sales.
2. Restaurant sales in cities with smoke-free restaurant ordinances versus sales in a comparison city with no such ordinance.
3. Bar sales as a fraction of total retail sales (1997 study only).
4. Bar sales in cities/counties with smoke-free bar ordinances versus sales in a comparison city/county with no such ordinance (1997 study only).
5. Bar sales as a fraction of all sales by eating and drinking establishments (1997 study only).

¹⁰ Hyland, A., Cummings, K.M., Nauenberg, E. Analysis of Taxable Sales Receipts: Was New York City's Smoke-Free Air Act Bad for Restaurant Business? *Journal of Public Health Management and Practice*, 5(1):14-21, 1999.

¹¹ Goldstein, A., Sobel, R. Environmental tobacco smoke regulations have not hurt restaurant sales in North Carolina. *North Carolina Medical Journal* 59(5): 284-288, September/October 1998.

¹² Dresser, L. Clearing the air: the effect of smoke-free ordinances on restaurant revenues in Dane County. *Madison: Tobacco-Free Wisconsin Coalition*, 1999.

¹³ Sciacca, J.P., Ratliff, M.I. Prohibiting smoking in restaurants: Effects on restaurant sales. *American Journal of Health Promotion*. 12(3): 176-184, January/February 1998.

¹⁴ Styring, W. *A study of the Fort Wayne (IN) restaurant smoking ban: has it impacted the restaurant business?* 2001.

¹⁵ Hyland, A. *Taxable Sales from Eating and Drinking Places Before and After Smoke-free Regulations in New York State*. Roswell Park Cancer Institute, Buffalo, NY, 2002.

¹⁶ Klein, E.G., *Research Brief: The Economic Impact of Clean Indoor Air Policies on Restaurants and Bars*. ClearWay Minnesota, February 2007.

¹⁷ Bartosch, W.J., Pope, G.C. The economic effect of smoke-free restaurant policies on restaurant business in Massachusetts. *Journal of Public Health Management and Practice* 5(1): 53-62, 1999.

¹⁸ Hayslett, J.A.; Huang, P.P., *Impact of clean indoor air ordinances on restaurant revenues in four Texas cities: Arlington, Austin, Plano and Wichita Falls 1987-1999*. Texas Department of Health, Bureau of Disease, Injury and Tobacco Prevention, 2000.

¹⁹ http://www.tobaccoscam.ucsf.edu/resource/resource_eco.cfm

²⁰ Alamar, A.C., and Glantz, S.A., Smoke-Free Ordinances Increase Restaurant Profit and Value. *Contemporary Economic Policy*, Vol. 22, NO. 4, October 2004.

²¹ Alamar & Glantz, 2004.

²² Glantz, S.A., Smith, L.R.A. The effect of ordinances requiring smoke-free restaurants and bars on revenues: A follow-up. *American Journal of Public Health* 87:1687-1693, 1997.

²³ Alamar & Glantz, 2004.

²⁴ Alamar & Glantz. Effect of Smoke-Free Laws on Bar Value and Profit. *American Journal of Public Health* (in press).

²⁵ Hyland, A., Puli, V., Cummings, M., Sciandra R., New York's smoke-free regulations: Effects on employment and sales in the hospitality industry. *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 44, No. 3, June 2003.

²⁶ *California's law for a smoke-free workplace: Assembly Bill 13 quick facts at a glance*. California Department of Health Services, Tobacco Control Section, Sacramento, California, July, 1996.

²⁷ Glantz, S.A., Charlesworth, A., Tourism and hotel revenues before and after passage of smoke-free restaurant ordinances. *Journal of the American Medical Association* 281(20): 1911-1918, 1999.

²⁸ Glantz, S.A., Smith, L.R.A. *The Effect of Ordinances Requiring Smoke Free Restaurants on Restaurant Sales in California*. University of California, San Francisco, Institute for Health Policy Studies, 1992.

²⁹ Taylor Consulting Group, 1993.

³⁰ *The Economic Implications of a Smoke-free San Diego*. Task Force for a Smoke-free San Diego, San Diego, California, 1992.

³¹ Kristein, M.M. How much can business expect to profit from smoking cessation? *Preventive Medicine* 12:358-381, 1983; Marion Merrell Dow, Inc. *The economic impact of smoking: in the workplace; on cardiovascular health; on wound healing and recovery from surgery; on infants and children; on pulmonary health; on dental and oral health*. Medical Information Services, Inc., 1991.

³² U.S. Environmental Protection Agency, *The Costs and Benefits of Smoking Restrictions: An Assessment of the Smoke-Free Environmental Act of 1993 (H.R. 3434)*. Office of Air and Radiation. Washington, DC, April 1994.

³³ Swart, An Overlooked Cost of Employee Smoking. *Personnel*, August 1990.

³⁴ EPA, 1994.

³⁵ Scollo, et al., 2003.

³⁶ *Economic Impact Studies Circulated by the Tobacco Industry*. Americans for Nonsmokers' Rights, Berkeley, California, 2003. <http://no-smoke.org/document.php?id=208>

³⁷ Scollo, et al., 2003. The following guidelines can also help in assessing the validity and reliability of a study:

- *Sales tax and employment data are the most reliable measures.*
- *Anecdotal information and non-random surveys can be unreliable.*
- *Studies should include data for several years prior to enactment, and for at least four quarters after implementation.*
- *A competent analysis must take into account general economic trends in a jurisdiction, as well as trends in the restaurant and bar economies.*
- *Was the study conducted by a tobacco industry front group?*

³⁸ Schoenmarklin, S. *Legal Options for Condominium Owners Exposed to Secondhand Smoke*; New Jersey GASP/New Jersey Smoke-Free Act, http://www.njgasp.org/h_newact_intro.htm; Utah Health Department: <http://www.tobaccofreeutah.org/aptcondoguide.html>; http://tobaccolawcenter.org/documents/lawsynopsis_schoenmarklin.pdf; Tobacco Control Legal Consortium, December 2006.

³⁹ “Financial impact of smoking bans will be tremendous.... Three to five fewer cigarettes per day per smoker will reduce annual manufacturers profits a billion dollars plus per year,” Philip Morris, internal document, 1995, Legacy Tobacco Documents Library, University of California, San Francisco, <http://legacy.library.ucsf.edu/tid/pfo14e00>; “If smokers can't smoke on the way to work, at work, in stores, banks, restaurants, malls and other public places, they are going to smoke less. Overall cigarette purchases will be reduced and volume decline will accelerate.” Ellen Merlo, Philip Morris executive, January 1994, Legacy Tobacco Documents Library, University of California, San Francisco, <http://legacy.library.ucsf.edu/tid/doq55e0>.