# The Economics of Smoke-free Policy

Ellen J. Hahn, PhD, RN
Director, Tobacco Policy Research Program
and Kentucky Center for Smoke-free Policy
University of Kentucky, College of Nursing and
College of Public Health, Lexington, KY
January 18, 2011

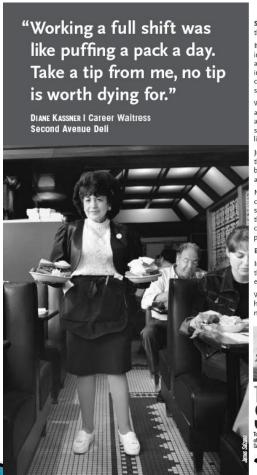




### Changing the Culture of Expectations with Smoke-free Policy Change



## Should Workers Have to Choose between their Health and a Paycheck?



Secondhand smoke kills thousands of Americans a year.

It can bring on asthma attacks in children. Make a bad heart attack fatal. And could be increasing the risk of breast cancer among female restaurant staff by 40%.

Workers in restaurants, bars and casinos that allow smoking are exposed to 300-600% more secondhand smoke than if they live with a smoker at home.

Just 30 minutes' exposure has the same effects on blood and blood vessels as being a pack a day smoker.

No feasible ventilation system can protect your patrons or staff. Even tobacco companies that push such systems never claim they solve the health problem.

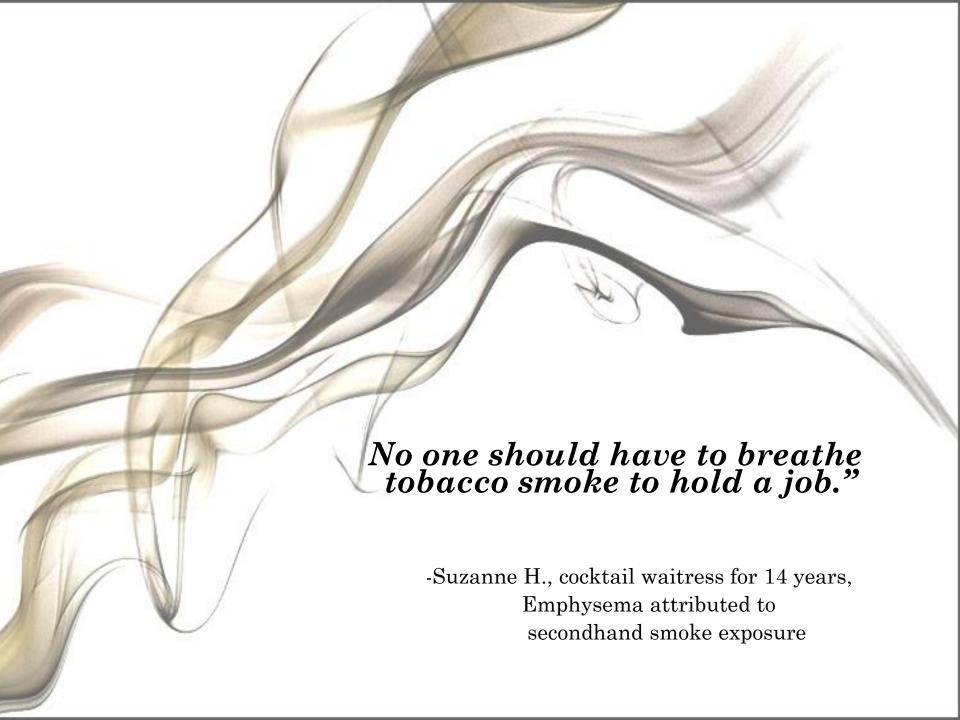
But going smokefree does.

In fact, medical studies find that hospitality workers breathe easier in just a few weeks.

Want to keep your business healthy? Get all the facts online, now, at TobaccoScam.ucsf.edu



Servers and bartenders are more likely to suffer and die from heart disease and lung cancer than other types of workers.



#### How Tobacco Smoke Causes Disease: 2010



- 1. Even brief exposure to tobacco smoke causes immediate harm to the body, damaging cells and blood vessels, and inflaming tissue in ways that can lead to serious illness and death.
- 2. Tobacco smoke damages DNA, leading to cancer.
- 3. The chemicals in tobacco smoke inflame the delicate lining of the lungs and can cause permanent damage, reducing the ability of the lungs to exchange air efficiently and leads to chronic obstructive pulmonary disease (COPD).
- Secondhand smoke triggers heart attacks.

#### Secondhand Smoke Costs Billions

#### \$\$\$\$\$ sick care \$\$\$\$\$

Annual health care expenditures and lost productivity solely from secondhand smoke exposure:\$10
 billion

Society of Actuaries, 2005

#### \$10 billion would:

- More than double Kentucky's 2010 Pre-K through 12 education budget
- Put 231,000 Americans back to work for a year



All legitimate economic impact studies show that business improves or remains the same after smoke-free laws.

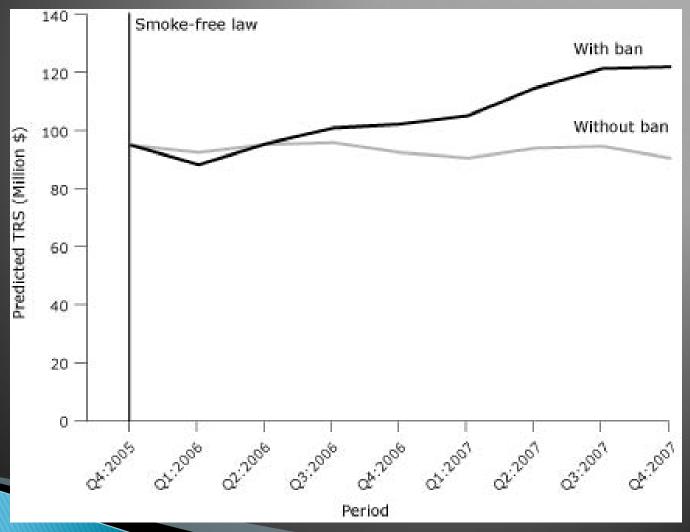




## Published Reviews of Economic Studies

- Eriksen M, Chaloupka F. The economic impact of clean indoor air laws. Cancer J Clinicians 2007;57:367-78.
- Scollo M, Lal A, Hyland A, Glantz S. Review of the quality of studies on the economic effects of smoke-free policies on the hospitality industry. *Tob Control* 2003;12(1):13-20.

# \$105.5 Million Additional Taxable Retail Sales for Bars after Washington's Smoke-free Law



## A Few Highlights from Recent SF Economic Studies

- 18% increase in per capita employment after New York City's law (Hyland & Tuk, 2001)
- MN cities with smoke-free laws had higher total and liquor sales revenues than those without laws (Collins et al., 2010).
- No significant changes in bar or restaurant employment in rural and urban regions after Minnesota's statewide smoke-free law (Klein et al., 2010)
- No significant effect on the probability of employee separation (Thompson et al., 2008)

# Smoke-free did not Harm Business in Lexington, Kentucky

- An average of 400 additional restaurant employees per month (3% of total restaurant employment)
- Bar employment stable
- No change in business openings or closings





Pyles, M, Mullineaux, DJ, Okoli, CTC, Hahn, EJ. (2007). Economic impact of a smoke-free law in a tobacco-growing community. *Tobacco Control*, 16(1).

### Smoke-free Laws Do Not Affect Employee Turnover

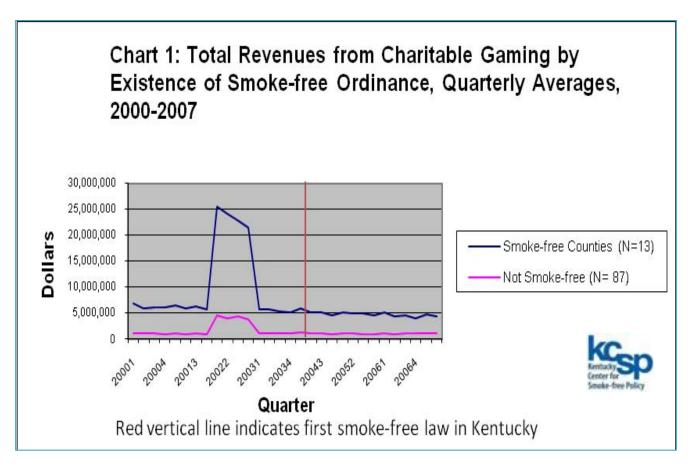
- No overall relationship between smokefree laws and employee turnover.
- Small annual increase in training costs, if any.





Thompson, E., Hahn, E.J., Blomquist, G., Garen, J., Mullineaux, D., Ogunro, N., Rayens, M.K. (2008). Smoke-free laws and employee turnover. <u>Contemporary Economic Policy</u>, 26(3):351-359.

# Smoke-free Laws Have No Effect on Bingo Revenues, Kentucky 2000-2007

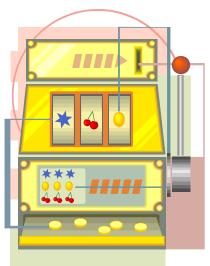


Pyles, M.K. & Hahn, E.J. (2009). Smoke-free legislation and charitable gaming in Kentucky. *Tobacco Control.* 18, 60-62.

### Smoke-free Laws and Gaming

- In Victoria, Australia, slowing of previous gambling losses after smoke-free legislation (Lal & Siahpush, 2008)
- Gaming revenues did not decline in Delaware after their state smoke-free law (Mandel et al., 2005; Glantz et al., 2005)





### Smoke-free Laws Do Not Have a 'Spillover' Effect

- When controlling for economic variables, countyspecific effects, and time trends, there is no evidence of a disproportionate change in economic activity in Ohio or Kentucky border counties relative to their non-bordering counterparts.
- There was no evidence of a relationship between Ohio's smoke-free law and economic activity in Kentucky border counties.

Pyles, M. &, Hahn, E.J. (2011). Economic effects of Ohio's smoke-free law on Kentucky and Ohio border counties. *Tobacco Control*, 20(1):73-6.



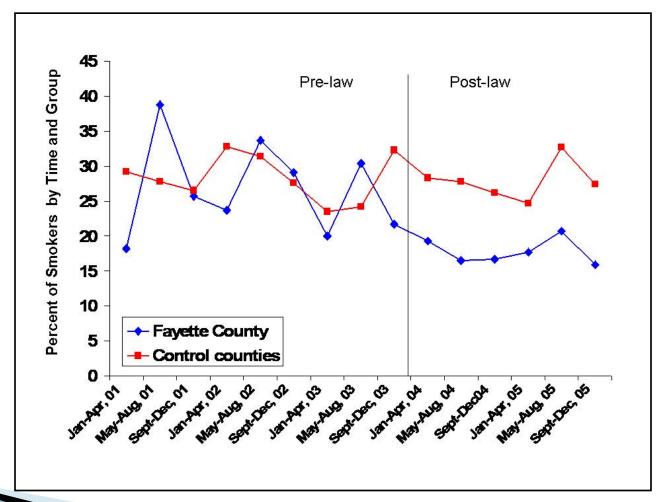
#### Smoke-free Laws in Rural Communities Do Not Harm Business

- No economic harm from smoke-free laws regardless of rurality.
- There were no negative economic effects of smoke-free laws in rural communities regardless of level of law (state vs. local).



Pyles, M & Hahn, EJ. (pending review). Economic effects of smoke-free laws on Kentucky and Ohio rural and urban counties.

#### A 32% Reduction in Adult Smoking Saved Lexington an estimated \$21 million per year in Healthcare Costs



Hahn, E.J., Rayens, M.K., Butler, K.M., Zhang, M., Durbin, E., and Steinke, D. (2008). Smoke-free laws and adult smoking prevalence. *Preventive Medicine*, 47: 206–209.

#### What Makes a Good Economic Study?

#### Objective data on business activity

- Revenues (sales tax revenues, total revenues)
- Employment
- Number of licensed establishments
- Not subjective reports of expected revenues or owner assessments of how much business is down after policy adoption
- Use of representative samples
  - Analysis of existing data on ALL businesses
  - Not convenience samples of current patrons or business owners who show up at hearings

#### What Makes a Good Economic Study?

- Use of appropriate control group
  - Comparable communities where similar policy changes have not occurred
- Sufficiently long period before and after the policy change
  - Allows assessment of underlying trends
  - Does not focus on transitory effects as smokers and non-smokers adapt to policy change
- Accounts for other factors that affect outcomes of interest
  - e.g. underlying economic and labor market conditions such as unemployment & population changes

#### What Makes a Good Economic Study?

- Use of appropriate statistical methods
- Most likely to be published in peerreviewed journals
- Not funded by the tobacco industry or other anti-health groups







### Even the Tobacco Industry Agrees

"Financial impact of smoking bans will be tremendous – 3 to 5 fewer cigarettes per day per smoker will reduce annual manufacturer profits a billion dollars plus per year."

-Philip Morris, 1994

# Anti-health Groups Promote <u>Myths</u> to Derail SmokeFree efforts.

"Smoke-free laws hurt business."





### Negative Economic Study Findings Typically Funded by Tobacco Industry

In an analysis of 97 economic studies of smoke-free laws published and unpublished before August 2002, all of those reporting a negative impact were supported by the tobacco industry (Scollo et al., 2003)





#### Bluegrass Beacon –

#### **Smoking out socialist**

Kentucky's smoking nannies have made it clear: They want a state-government imposed and enforced smoking ban in every

( S. )

JIM WATERS

public place in the commonwealth — even in local communities that have decided otherwise.

We must stop them.

They brush aside as insignificant or worse, ignore altogether — the right of local governments policies that best fit the pecially if those decisio ban rather than a total of

For example, the sta Nanny, Ellen Hahn, which wersity of Kentucky Cen Policy, recently issue statewide ban while in speak to the Rotary Clu

"I think it would be the state would pass i Modlin, news director tucky University's pul





### Anticipate the Opposition

#### Smoke and Mirrors: Exposing the Thalheimer Report

On June 7, 2005, the Lexington Food and Beverage Association (LFBA) released a report, "An Analysis of the Economic Lucky Smoking Ban of Lexington, Kentucky. The purpose of the report was t alcohol. Thalhaimar analyzed been a 9.8% to ordinance.

Report Not Peer-reviewed or Independently Evaluated Ce-free

Responses to Thalheimer's Criticisms of the University of Kentucky Economic Impact Study

Dr. Donald J. Mullineaux Director, School of Management Gatton College of Business & Economics University of Kentucky

#### Lessons Learned

- Anticipate bogus 'reports' of economic loss before and after the law is implemented.
- Partner with a well-respected, 'neighborhood' economist!
- Prepare rebuttal documents and talking points for anticipated opposition.
  - Get out in front of the train ('timing is everything')
- Sound economic impact analysis essential to a successful smoke-free campaign
  - Wards off attempts to exempt certain venues (i.e., bingo halls) and weaken the law post-implementation

Tobacco is now the world's leading killer. We have the proven means to reduce tobacco use, but policymakers are not yet applying these interventions.

Mayor Michael Bloomberg, NYC



#### For More Information

Kentucky Center for Smoke-free Policy

Harris an Truittar and

Follow us on Twitter and Facebook! kysmokefree

www.mc.uky.edu/tobaccopolicy ejhahn00@email.uky.edu





