The State of Tobacco Control in Nebraska:
One Economist’s Perspective

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Change – Challenge - Progress
Tobacco Free Nebraska State Conference
Lincoln, NE, April 20, 2011
Overview

- **MPOWER Framework**
  - “Monitor” the tobacco epidemic
  - “Protect” non-smokers
  - “Offer” help to quit
  - “Warn” about the harms
  - “Enforce” marketing bans
  - “Raise” taxes

- **Focus on:**
  - Where we’ve been
  - Where we are now
  - Where we can go
Monitor
Cigarette Sales, Nebraska and US, 1965-2010

Source: TBOT
Cigarette Sales, NE, CO, IA, KS, SD and WY, 1965-2010

Source: TBOT
Adult Smoking Prevalence, Nebraska and US, 1995-2009

Source: BRFSS
Adult Smoking Prevalence, NE and Neighbors, 1995-2009

Source: BRFSS
Youth Smoking Prevalence, Nebraska and US, 1991-2009

Source: YRBS, YTS; some data points interpolated
Youth Smoking Prevalence, Nebraska and Neighbors, 1991-2009

Source: YRBS, YTS; some data points interpolated
Disparities - Adult Prevalence in Key Subpopulations, Nebraska, 2009

Source: BRFSS
Disparities - Adult Prevalence in Key Subpopulations, Nebraska, 2009

Source: BRFSS

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Most Recent Scientific Evidence:

Cancer
- Leukemia, 2002
- Nasal & oral pharynx, 1982
- Larynx, 1980
- Esophagus, 1982
- Lung, 1964
- Liver, 2002
- Stomach, 2002
- Pancreas, 1990
- Kidney, 1982
- Cervix (women), 2002
- Ureter, 1990
- Bladder, 1990

Other diseases
- Stroke, 1983
- Cataract, 2004
- Diminished health, 2004
- Coronary heart disease, 1979
- Atherosclerotic peripheral vascular disease, 1983
- Aortic aneurysm, 1983
- Chronic obstructive pulmonary disease (COPD), 1964

Source: adapted by CTLT from the U.S. Surgeon General’s Report. (2004); from JHBSPH/IGTC on-line course
Tobacco Use in Nebraska

Where have we been?

- Slow but steady progress in reducing tobacco use in NE
  - Adult & youth smoking prevalence, cigarette consumption falling over time
  - Declines comparable to US and neighbors
    - Sharper declines in sales in some neighboring states in recent years
Tobacco Use in Nebraska

Where are we?

Much remains to be done:

- Over 220,000 adults currently smoke
  - Persistent racial/ethnic, socio-economic, and gender disparities
- Over 20,000 high school kids are likely currently smoking
- Many non-smokers exposed to tobacco smoke at home, in workplaces
- ~2,300 premature deaths each year caused by smoking
Tobacco Use in Nebraska

Where are we?

- Considerable economic costs
  - Over $750 million spent annually to treat diseases caused by smoking
    - Significant fraction paid by public health insurance programs
  - Another $625 million in lost productivity from premature deaths caused by smoking
Tobacco Use in Nebraska

Where can we go?

- Much remains to be done:
  - Estimate that ~105,000 current youth will eventually take up smoking
  - As many as 160,000 current Nebraskans will die prematurely from smoking
  - Health and economic burden greatest among poor, less educated

- Effective interventions exist
Protect
Diseases and Adverse Health Effects Caused by SHS

Adults
- Lung cancer
- Heart disease

Children
- SIDS
- Exacerbation of asthma
- Chronic respiratory illness
- Reduced lung function growth
- Middle ear disease
- Acute respiratory illness

Image source: adapted by CTLT from U.S. Surgeon General’s Report. (2006); from JHBSPH/IGTC on-line course.
Local Smoke-Free Air Policies

Source: Americans for NonSmokers’ Rights Foundation
Smoke-Free Air Policies

- Where have we been?
  - Until recently
    - Relatively weak state policies limiting smoking in public places, workplaces
Smoke-Free Air Policies

Where are we now?

- NE Smoke-Free Air Act adopted February 2008
  - Effective June, 2009
  - 100% smoke free workplaces, bars, restaurants, gambling establishments, and other public places
  - Among most comprehensive state policies
  - CO (1/08), IA (7/08), KS (7/10) adopt similar policies, but not as comprehensive
Impact of Smoke-Free Air Policies

\[ y = -0.052x + 13.851 \]

\[ R^2 = 0.0885 \]

Source: Chaloupka 2010
Impact of Smoke-Free Air Policies

\[
y = -0.0791x + 26.516
\]

\[R^2 = 0.1169\]

Source: Chaloupka 2010
Smoke-Free Air Policies

Where are we now?

- Compliance improving over time
  - SFA policies generally self-enforcing

- No negative economic impact
  - Any losses due to reduced patronage offset (or more) by increased patronage from non-smokers
  - Reduces other business costs
    - Cleaning costs, lost productivity
Economic Impact of IL SFA Policy
Restaurant Revenues

Source: Tauras & Chaloupka, in progress
Economic Impact of IL SFA Policy
Bar Revenues

Source: Tauras & Chaloupka, in progress
Economic Impact of IL SFA Policy
Casino Patrons per Month

Source: Tauras & Chaloupka, in progress
Smoke-Free Air Policies

Where can we go?

• Extend protections to new venues
  - Parks, beaches, outdoor dining, other outdoor venues
  - Multi-unit housing
  - Cars with children

• Various localities have adopted policies covering outdoor settings
Offer & Warn
Comprehensive Programs

- **General aims:**
  - Prevent initiation of tobacco use among young
    - Increased prices, reduced access
    - Increased antitobacco messages, reduced protobacco
  - Promote cessation among young adults, adults
    - Better access to cessation services
    - Increased prices and strong smoke-free policies
    - Increased antitobacco messages, reduced protobacco
  - Eliminate exposure to secondhand smoke
    - Strong smoke-free policies
    - Strengthened anti-smoking norms
  - Identify and eliminate disparities
    - Intertwined with others; need for targeted approaches

Source: USDHHS, 2000; CDC 2007
Comprehensive Programs

Components of a comprehensive program:

- **State and community interventions**
  - Support for policy development and implementation
  - Efforts to strengthen norms against tobacco
  - Targeted efforts to reduce youth tobacco use, disparities

- **Health communication interventions**
  - Mass-media countermarketing campaigns
  - Efforts to replace tobacco industry sponsorship/promotion
  - Targeted messaging/delivery

- **Cessation interventions**
  - Array of policy, health system, and population-based measures

- **Surveillance and Evaluation**

- **Administration and Management**

Source: USDHHS, 2000; CDC 2007
State Tobacco Control Program

- **Where have we been?**
  - Funding since 1994 for state tobacco control program
    - CDC program funding
    - Private funds (RWJF, ALF)
    - State Master Settlement Agreement revenues since 2000
  - In early 2000s, among better funded state programs
Comprehensive Programs

Impact of state program funding

- Increased funding associated with:
  - Reductions in overall cigarette sales
  - Lower youth smoking prevalence
  - Lower adult smoking prevalence
  - Increased interest in quitting, successful quitting

- Much of impact results from large scale mass-media anti-smoking campaigns
Program Funding

Source: Tobacco Free Kids, 2010
State Tobacco Control Program

Where are we now?

• Significant reductions in state funding in recent years
  - From $7 million in FY03 to $2.9 million in current fiscal year
  - Continued funding from CDC for state program ($1.8 million in current fiscal year)
  - Additional funding from Communities Putting Prevention to Work, American Recovery and Reinvestment Act, and Prevention and Public Health Fund grants (~$1.8 million in FY10-11)
Program Funding

Nebraska, Tobacco Revenues vs Program Funding, FY 2011

- Tobacco Revenue: $107
- CDC Recommended Level: $22.9
- Actual State Funding: $2.90

Source: Tobacco Free Kids, 2010
Program Funding

Nebraska Tobacco Control Program
Program Spending, by Category, FY 2009

Source: ImpacTeen project, 2010
State Tobacco Control Program

- **Where are we now?**
  - Significant demand for cessation
    - ~50% of smokers indicate making quit attempt in past year
    - Nearly 2/3 indicate interest in quitting
  - State support minimal
    - 11% of CDC recommended funding for cessation in FY09, likely less now
    - Medicaid coverage for NRT, Chantix, Zyban (with co-pay)
    - No coverage for individual/group counseling
State Tobacco Control Program

Where are we now?

- Few smokers using the state’s Quitline

Percentage of Smokers Calling Quitline

National Average: 2.8%

In Nebraska, 0.4% of current smokers who made a quit attempt in the past year called a quitline. Nebraska ranks 49th among the states. The range across states was from less than 1% to 10.9%.

Source: TUS-CPS, 2006–2007
State Tobacco Control Program

- **Where are we now?**
  - Relatively good exposure to anti-smoking media campaign ads
  - Some anti-smoking messages coming from national campaigns
State Tobacco Control Program

- **Where can we go?**

  - Fund program activities at levels recommended by CDC
    - $9.9m for state/community interventions
    - $6.2m for cessation interventions
    - $3.8m for health communication interventions
    - $2.0m for surveillance/evaluation
    - $1.0m for management/administration
    - $22.9m total
Enforce
Tobacco Marketing

- Marketing Strategies – the 4 P’s:
  - Product – design, packaging
  - Price – including price promotions
  - Place – availability, accessibility
  - Promotion – advertising, sponsorship, etc.

- Most effective campaigns are well-integrated across different dimensions of marketing

Source: NCI Monograph 19
Where have we been?

- Tobacco company marketing pervasive
  - Grew rapidly over time
  - Companies adapt quickly to constraints (e.g. TV/radio ad ban, MSA limits)
  - Change in focus over time
  - State/local restrictions pre-empted by federal legislation
Cigarette Company Marketing Expenditures, by Category, 1975-2006

Source: author’s calculations from data reported in FTC (2009)
2006 Cigarette Marketing Expenditures by Category, United States

Source: author’s calculations from data reported in FTC (2009)
Price-Related Marketing: Price Discounts
Price-Related Marketing: Retail Value Added - product
Price-Related Marketing: Coupons
Price-Related Marketing: Other Value Added
Tobacco Industry Marketing vs. Tobacco Control Spending (in millions of dollars) – United States, 1986-2005

Source: FTC 2005 and Project ImpactTEEN; data are in July 2007 dollars.
Tobacco Company Marketing

- **Where are we now?**
  - Federal TV/radio ad ban
  - MSA restrictions
    - Outdoor, transit, sponsorships, branded merchandise, etc.
Tobacco Company Marketing

- **Where are we now?**

  - Significant changes in tobacco industry
    - Consolidation of tobacco companies
    - Emergence of variety of new tobacco products
    - Brand extensions
    - Concentration of marketing effort on fewer and fewer brands
Tobacco Company Marketing

- Where are we now?

- Family Smoking Prevention and Tobacco Control Act, 2009
  - Gives FDA authority to regulate tobacco products
  - Candy and fruit flavored cigarettes banned 9/22/09
    - Excludes menthol flavored cigarettes
    - Doesn’t covered other flavored products (small cigarettes, cigarillos, smokeless,...)
Tobacco Company Marketing

- Where are we now?

- FDA regulation
  - Brand specific disclosure of product constituents required January 2010
  - Restrictions on sale and marketing to youth, April 2010
  - Ban on misleading descriptors, July 2010
Product Labeling: “Replacement” Descriptors
Tobacco Company Marketing

- Where are we now?

- FDA regulation
  - New warning labels:
    - On smokeless products, July 2010
    - On cigarettes, October 2012
WHAT HAS FDA REGULATION OF TOBACCO DONE FOR YOU LATELY?

WARNING: This product can cause gum disease and tooth loss.

WARNING: This product may cause mouth cancer.

WARNING: This product is not a safe alternative to cigarettes.

BEFORE, DURING AND AFTER

BREAK FREE

BEFORE, DURING AND AFTER

BOLDLY GO EVERYWHERE

WARNING: Smokeless tobacco is addictive.
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Tobacco Company Marketing

- **Where can we go?**

- **FDA regulation**
  - Eliminates federal pre-emption of stronger state, local restrictions on tobacco company marketing
    - Comprehensive marketing bans possible?
    - Evidence that comprehensive bans lead to significant reductions in tobacco use
Comprehensive advertising bans reduce cigarette consumption

Consumption trends in countries with such bans vs. those with no bans

Source: Saffer, 2000
Minimum Pricing Policies

As of 12/31/09:

- 25 states with minimum pricing policies
- Typically mix of minimum markups to wholesale and retail prices
  - Median wholesale markup 4% (4.75% in NE)
  - Median retail markup 8% (8% in NE)
- 7 states (including Nebraska) prohibit use of price promotions in minimum price calculation
- Little impact on actual retail prices
  - Greater impact where promotions excluded

Sources: CDC, 2010; Feighery, et al., 2005
Raise
Cigarette Taxation in NE

- Nebraska first adopted cigarette tax in 1947
  - 3 cents per pack
- Last increase to 64 cents per pack in 2002
  - About 10% above US average, 17th highest at the time
Where have we been?

- Federal cigarette tax
  - Specific (per unit) excise tax, initially adopted in 1864
  - Raised during war time/lowered during peace time
  - Set at 8 cents per pack in 1951; doubled 1983
  - Eventually raised to 39 cents per pack in 2002
    - Less than 60% of inflation adjusted value of 1951 tax
  - Significant increase – 61.66 cents – April 1, 2009
    - Earmarked for S-CHIP expansion
- Other tobacco products taxes at similar rates
Tobacco Taxation

Where have we been?

- Other state cigarette taxes
  - First adopted by IA in 1921;
  - NC last to adopt in 1969
  - Specific excise tax in all states

- All but PA tax other tobacco products
  - Mostly ad valorem (percentage of price) taxes
Taxes, Prices and Tobacco Use

- Increases in tobacco product taxes and prices:
  - Induce current users to try to quit
    - Many will be successful in long term
  - Keep former users from restarting
  - Prevent potential users from starting
    - Particularly effective in preventing transition from experimentation to regular use
  - Reduce consumption among those who continue to use
  - Lead to other changes in tobacco use behavior, including substitution to cheaper products or brands, changes in buying behavior, and compensation
Cigarette Prices and Cigarette Sales, United States, 1970-2009

Sales (million packs)

Year

Price (Oct. 2009 dollars)

Source: Tax Burden on Tobacco, 2009, and author’s calculations
Price (Inflation Adjusted) and Cigarette Sales, Nebraska, 1966-2010

Source: *Tax Burden on Tobacco*, 2011, and author’s calculations
Cigarette Prices and Adult Smoking Prevalence, United States, 1970-2008

Source: NHIS, *Tax Burden on Tobacco*, 2009, and author’s calculations

Note: green data points for prevalence are interpolated assuming linear trend
Price (Inflation Adjusted) and Adult Smoking Prevalence, NE, 1995-2009

Source: BRFSS, *Tax Burden on Tobacco*, 2011, and author’s calculations
Cigarette Price and Youth Smoking Prevalence, United States, 1991-2008

Source: MTF, *Tax Burden on Tobacco*, 2009, and author’s calculations
Price (Inflation Adjusted) and Youth Smoking Prevalence, NE, 1991-2006

Source: NE YTS and YRBS, *Tax Burden on Tobacco*, 2011, and author’s calculations
Tobacco Taxation

Where are we now?

• When tax last raised in 2002:
  • 64 cent per pack was 17th highest
  • About 10% above the average state tax rate

• Currently:
  • 38th among state taxes
  • Majority of states have increased cigarette taxes since 2002, some multiple times
  • NE less that ½ of the average state tax
  • Have similarly fallen behind on other tobacco product taxes
State Cigarette Excise Tax Rates – 2002

CDC, Office on Smoking and Health. State Tobacco Activities Tracking and Evaluation (STATE) System.
State Cigarette Excise Tax Rates – 2010

CDC, Office on Smoking and Health. State Tobacco Activities Tracking and Evaluation (STATE) System.
Tobacco Taxation

**Where can we go?**

- Raise the state cigarette excise tax
  - Getting back to 17th place would require $1.70 per pack tax
- If raised to $1.99 (15th highest):
  - Over $90 million in additional tax revenues in first full year; $10 million more from OTP increase
  - Almost 10,000 adult smokers would quit
  - Almost 19,500 fewer kids would start
  - Prevent about 8,8000 premature deaths from smoking among current population
Tobacco Taxation

- Where can we go?
  - Impose floor tax when adopting tax increases

Monthly Cigarette Shipments, Nebraska, 2002-2003
Tobacco Taxation

Where can we go?

- Raise the state’s other tobacco product excise taxes
  - Currently 20% of wholesale prices
  - By comparison, WI is 100% of wholesale price

- Tighten tobacco product definitions
Tobacco Taxation

• Little cigars
  - Taxed at lower rate
    • Exempt from various product regulations related to flavorings, packaging, marketing
  - Can redefine cigarettes to include:
    • “any roll of tobacco that weighs no more than four and a half pounds per thousand (unless wrapped in whole tobacco leaf and does not have a cellulose acetate or other cigarette-like filter

• Redefine cigars as “any roll of tobacco that is not a cigarette”

Source: Eric Lindblom, Campaign for Tobacco-Free Kids
Tobacco Taxation

- **Other product definitions**
  
  - Non-combustible tobacco products – redefine smokeless tobacco products (or ‘other tobacco products’, ‘tobacco products’ to include:
    
    - “any other product containing tobacco that is intended or expected to be consumed without being combusted”

Source: Eric Lindblom, Campaign for Tobacco-Free Kids
Where can we go?

- Allow for annual administrative tax increases to keep pace with inflation
Tobacco Taxation

**Where can we go?**

- Use portion of new revenues to fund state tobacco control program

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### Program Funding

*Nebraska, Tobacco Revenues vs Program Funding, FY 2011*

- **Tobacco Revenue:** $107
- **CDC Recommended Level:** $22.9
- **Actual State Funding:** $2.90
Where can we go?

- Adopt high tech tax stamp and license all involved in tobacco distribution
- Expand enforcement efforts
- California – only state so far; generated additional $124 million in revenues in first 20 months
State of Tobacco Control in Nebraska
Summary

- Harry Truman:

  Give me a one-handed economist!
  All my economists say
  On the one hand......
  And on the other....
Summary

On the one hand, some positives

• Continuing declines in tobacco use among adults and youth
  • Comparable to US and neighbors

• One of the most comprehensive state smoke-free air policies in the world
  • Additional local policies thanks to absence of pre-emption
Summary

On the other hand, several negatives

- Persistent disparities in tobacco use
- Woefully underfunded state tobacco control program
- Have fallen well behind most states on tobacco taxes
Summary

- And on the other hand, some opportunities
  - Increased taxes on all tobacco products
    - Inflation adjustments, high-tech tax stamps, and increased enforcement
    - Funding for state tobacco control efforts
  - Comprehensive restrictions on tobacco company marketing
For more information:

www.bridgingthegapresearch.org

www.impacteen.org

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