

The Science Behind Tobacco Taxation

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**National Conference on Tobacco or Health
Fundamentals of Tobacco Tax Increases: Science,
Methods, and Messaging
Kansas City MO, August 16, 2012**

Overview

- Overview of tobacco taxation
- Impact of taxes/prices on tobacco use, consequences of use
- Industry price marketing
- Earmarking tobacco tax revenues for tobacco control programs
- Counterarguments – Myths & Facts

Overview of Tobacco Taxation

Why Tax?

■ Efficient revenue generation

- Primary motive historically and still true in many countries today
- Very efficient sources of revenue given:
 - Historically low share of tax in price in many countries
 - Few producers and few close substitutes
 - One of many goods/services that satisfies the “Ramsey Rule”
- “This vice brings in one hundred million francs in taxes every year. I will certainly forbid it at once – as soon as you can name a virtue that brings in as much revenue” – Napoleon III on tobacco tax

Federal Cigarette Tax and Tax Revenues Inflation Adjusted, 1955-2011



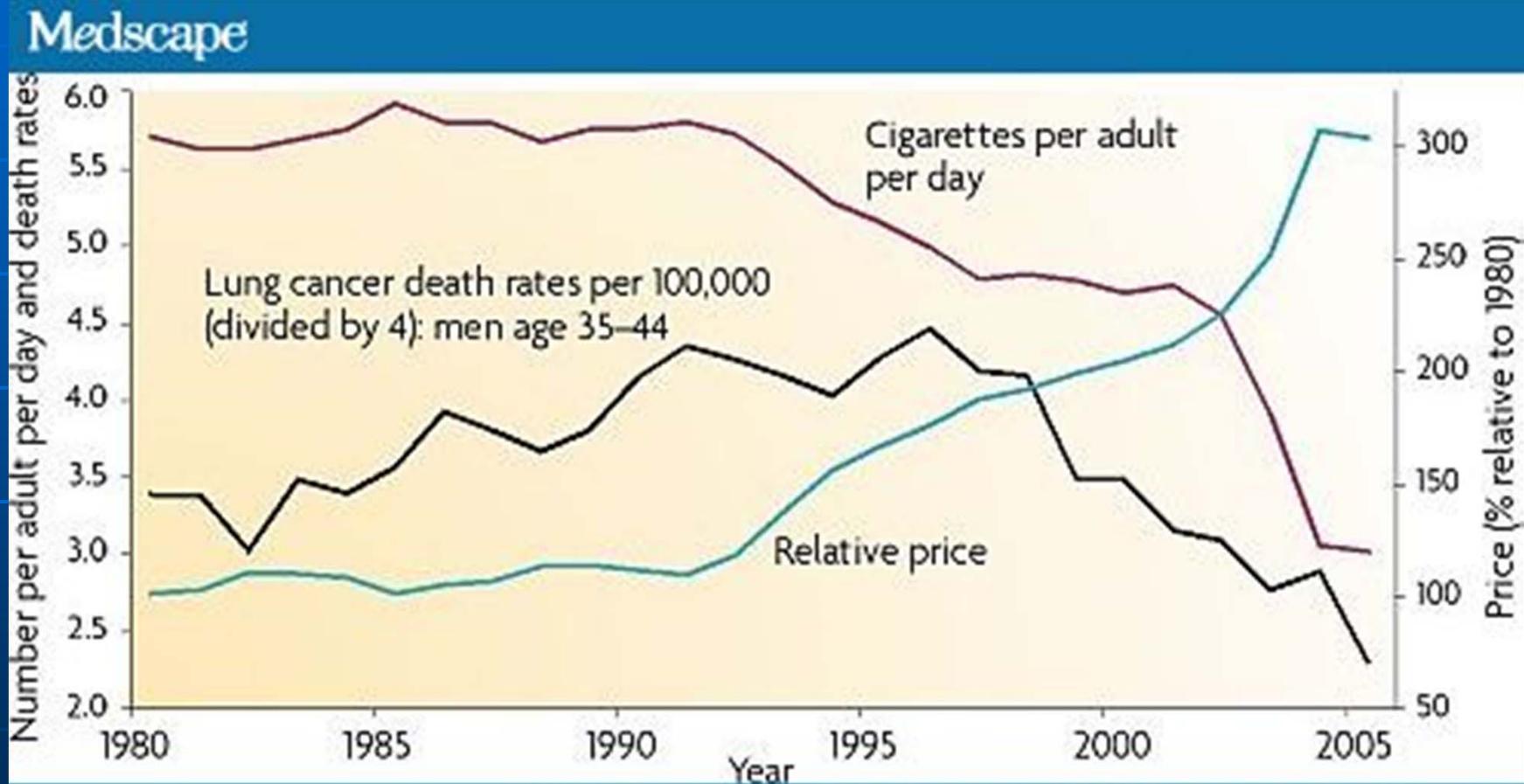
Source: *Tax Burden on Tobacco* and author's calculations

Why Tax?

■ Promote public health

- Increasingly important motive for higher tobacco taxes in many high income countries
- Based on substantial and growing evidence on the effects of tobacco taxes and prices on tobacco use
 - Particularly among young, less educated, and low income populations
- *“... We [] have a package of six policy measures, known as MPOWER, that can help countries implement the provisions in the Convention. All six measures have a proven ability to reduce tobacco use in any resource setting. **But tobacco taxes are by far the most effective.**”* Director General Dr. Margaret Chan, WHO, 2008

Taxes, Prices and Health: US, 1980-2005



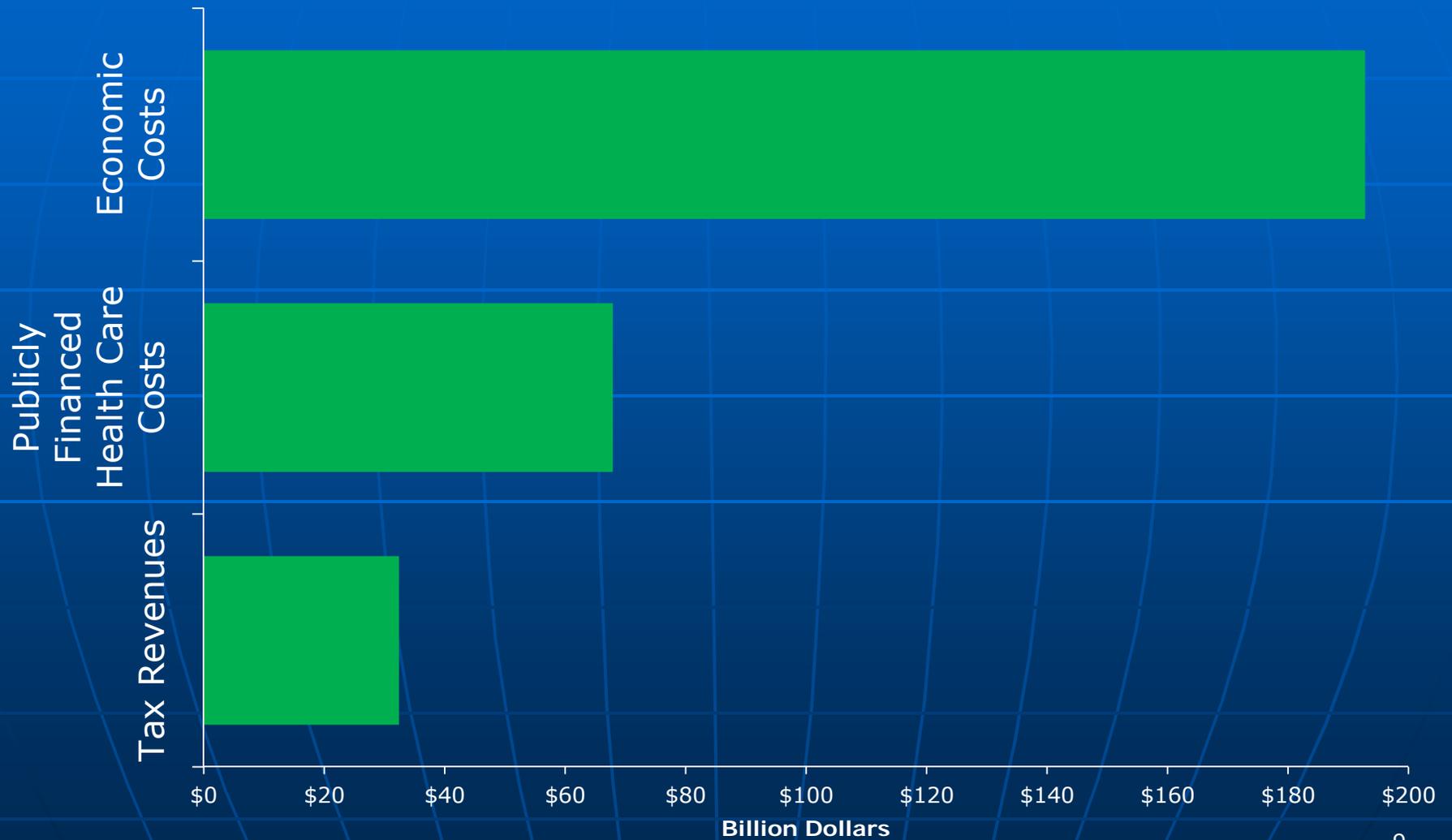
Source: Nat Rev Cancer © 2009 Nature Publishing Group

Why Tax?

- **Cover the external costs of tobacco use**
 - “Pigouvian” tax
 - Less frequently used motive
 - Account for costs resulting from tobacco use imposed on non-users
 - Increased health care costs, lost productivity, caused by exposure to tobacco smoke among non-smokers
 - Can also include “internalities” that result from addiction, imperfect information, and time inconsistent preferences

Economic Costs & Tax Revenues

United States



Sources: CDC/SAMMEC, CTFK, Tax Burden on Tobacco, and author's calculations

Federal Tobacco Taxes

- 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 to 16 cents per pack in 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

Federal Tobacco Taxes

- Specific federal excise taxes on most other tobacco products, including
 - cigars: \$1.0066 per pack on small cigars; 52.75% of price for low priced cigars; cap of 40.26 cents per cigar for high priced cigars
 - chewing tobacco: 3.1 cents per ounce
 - moist snuff: \$1.51 per pound
 - roll-your-own tobacco \$24.78 per pound
 - pipe tobacco: \$2.83 per pound
 - rolling papers: 1.26 cents per pack
- Until latest increases, most were lower than cigarette tax; more equivalent now
- Similarly infrequent increases in taxes

State Tobacco Taxation

- State cigarette taxes
 - First adopted by IA in 1921; NC last to adopt in 1969
 - Specific excise tax in all states
 - Currently: 17.0 cents/pack (MO) to \$4.35/pack (NY)
 - Average \$1.49 per pack (48.5 cents in tobacco growing states; \$1.63 in other states)
 - Several proposing additional increases

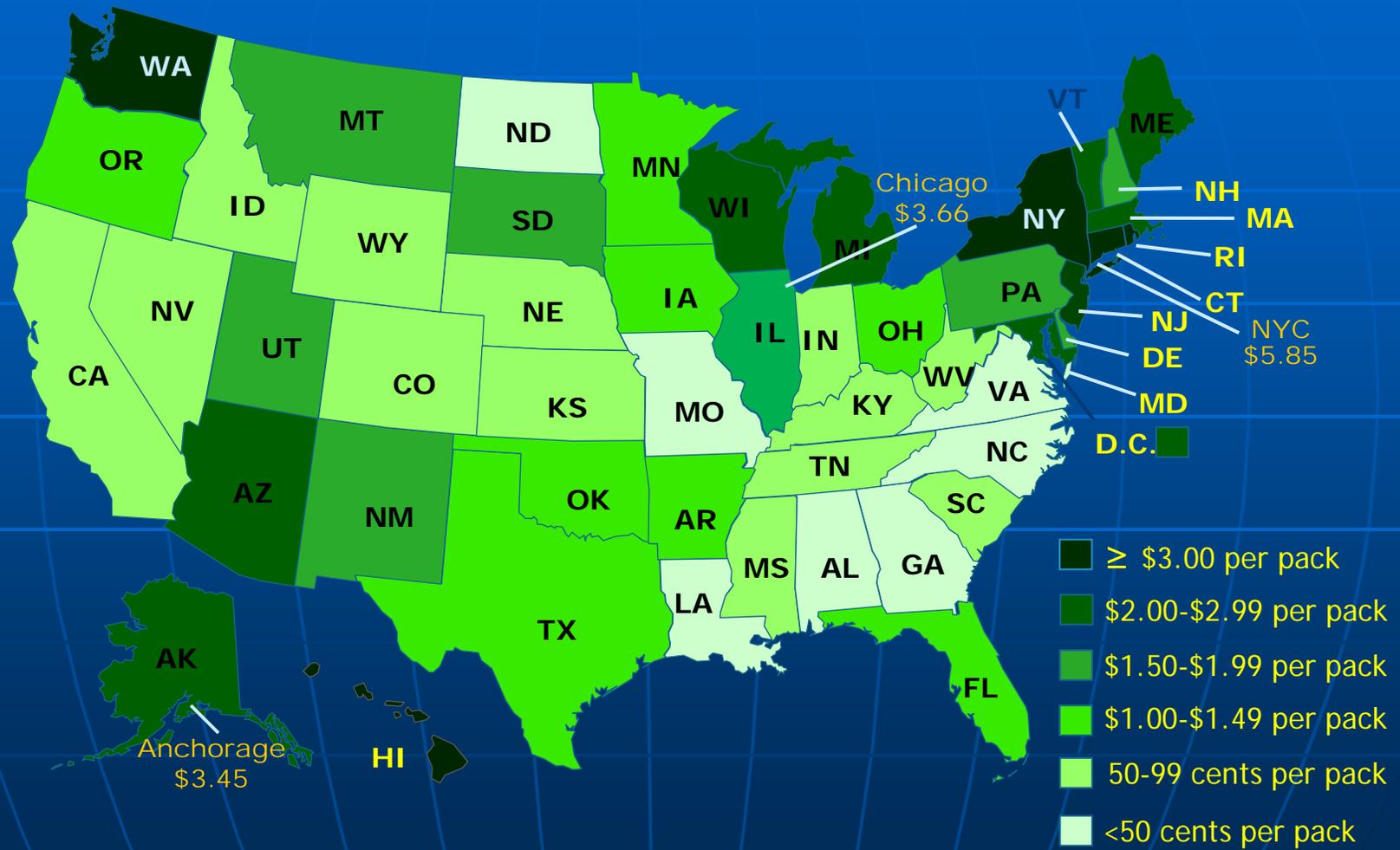
State Tobacco Taxation

- State taxes on other tobacco products
 - All but PA tax other tobacco products
 - Mostly *ad valorem* taxes, but increasing movement towards specific taxes
 - Typically applied to wholesaler/distributor price
 - Highest taxes include:
 - Wisconsin – 100%; Washington - 95%
 - Lowest taxes include:
 - South Carolina – 5%; Tennessee 6.6%
 - Average about 35%
 - Generally below equivalent rate on cigarettes

Local Taxation in the U.S.

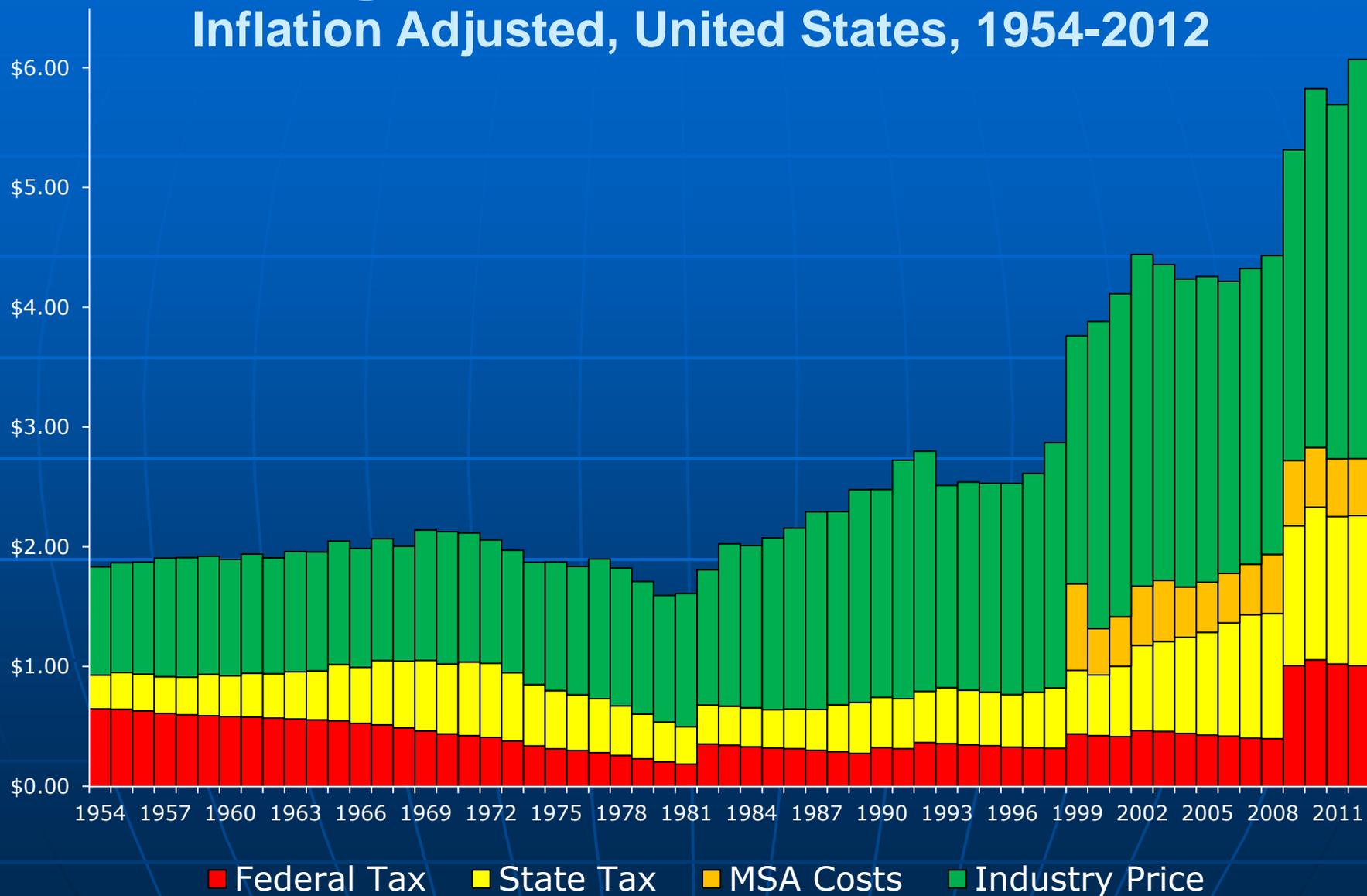
- Many localities add additional cigarette tax
 - Typically a few cents/pack; some exceptions:
 - » \$1.50 in New York City
 - » \$2.68 in Chicago/Cook county
 - Sales tax applied to tobacco products in most states
 - Usually, but not always, applies to price inclusive of excise taxes

State Cigarette Excise Tax Rates – 2012



Cigarette Taxes & Prices

Inflation Adjusted, United States, 1954-2012



Source: *Burden on Tobacco* and author's calculations

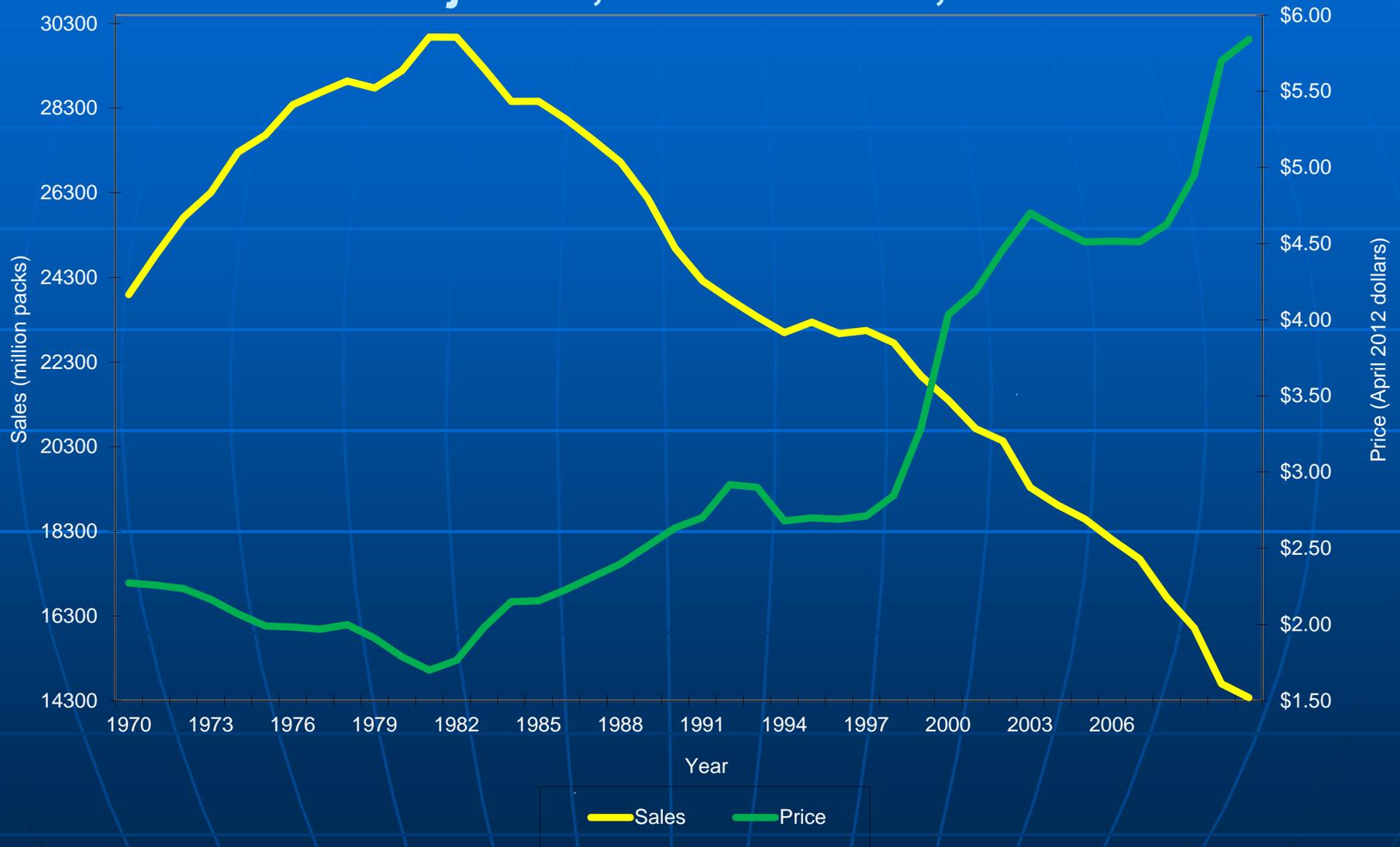
Impact of Tax and Price on Tobacco Use

Prices and Tobacco Use

- **Increases in tobacco product 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

Inflation Adjusted, United States, 1970-2011



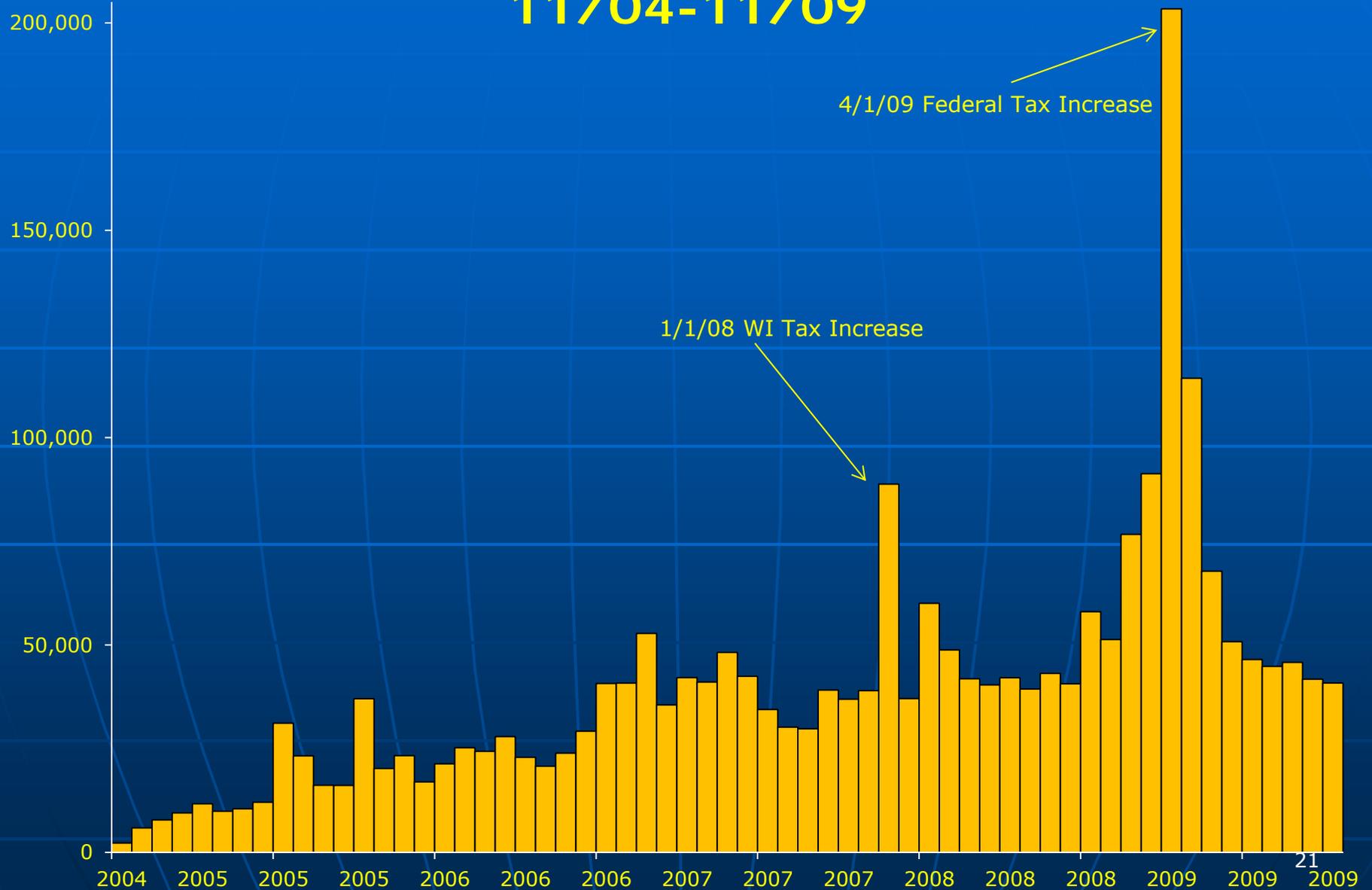
Source: *Tax Burden on Tobacco* and author's calculations

Cigarette Prices and Adult Smoking Prevalence, United States, 1970-2011, Inflation Adjusted

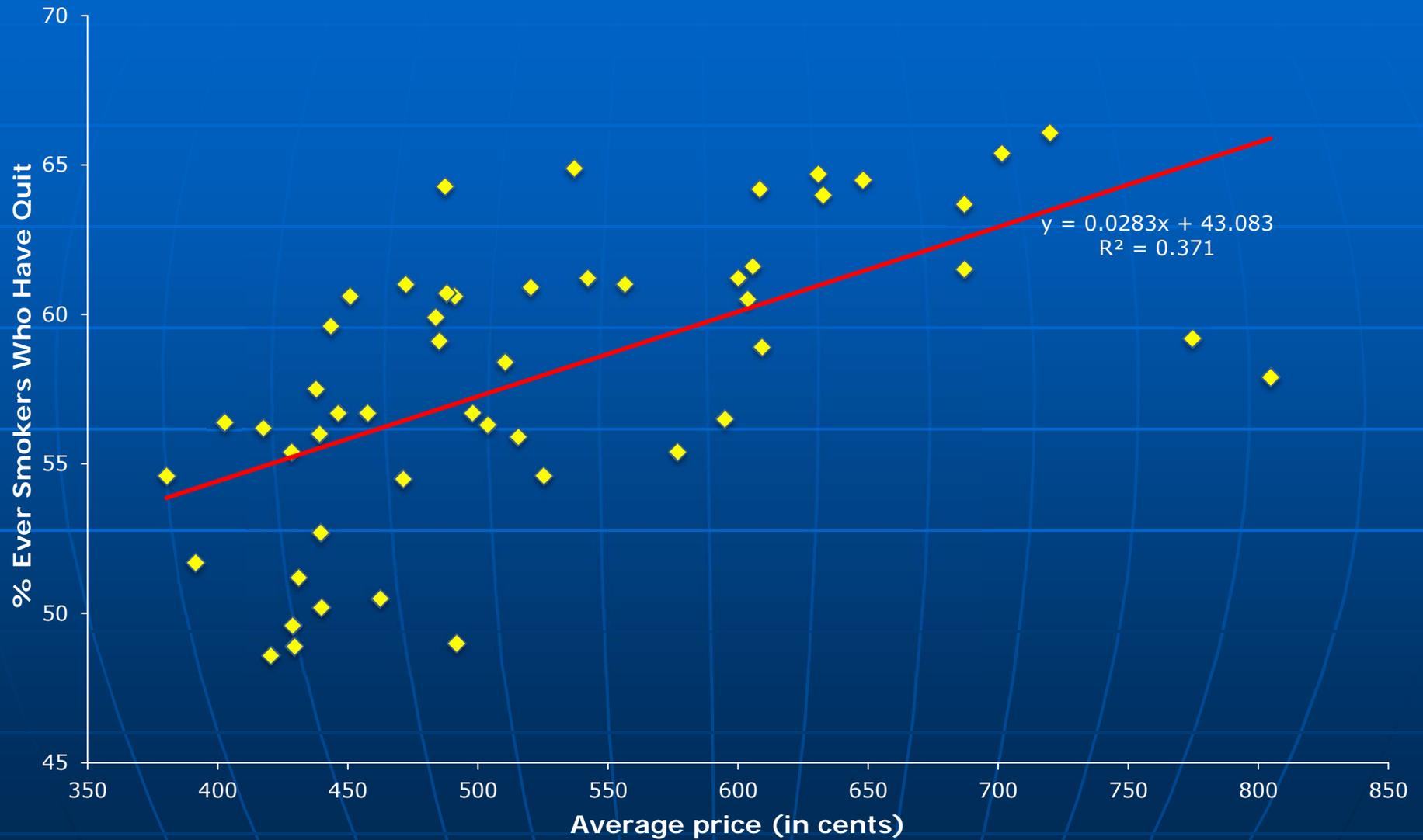


Source: NHIS, *Tax Burden on Tobacco*, 2009, and author's calculations
Note: green data points for prevalence are interpolated assuming linear trend

Monthly Quit Line Calls, United States 11/04-11/09

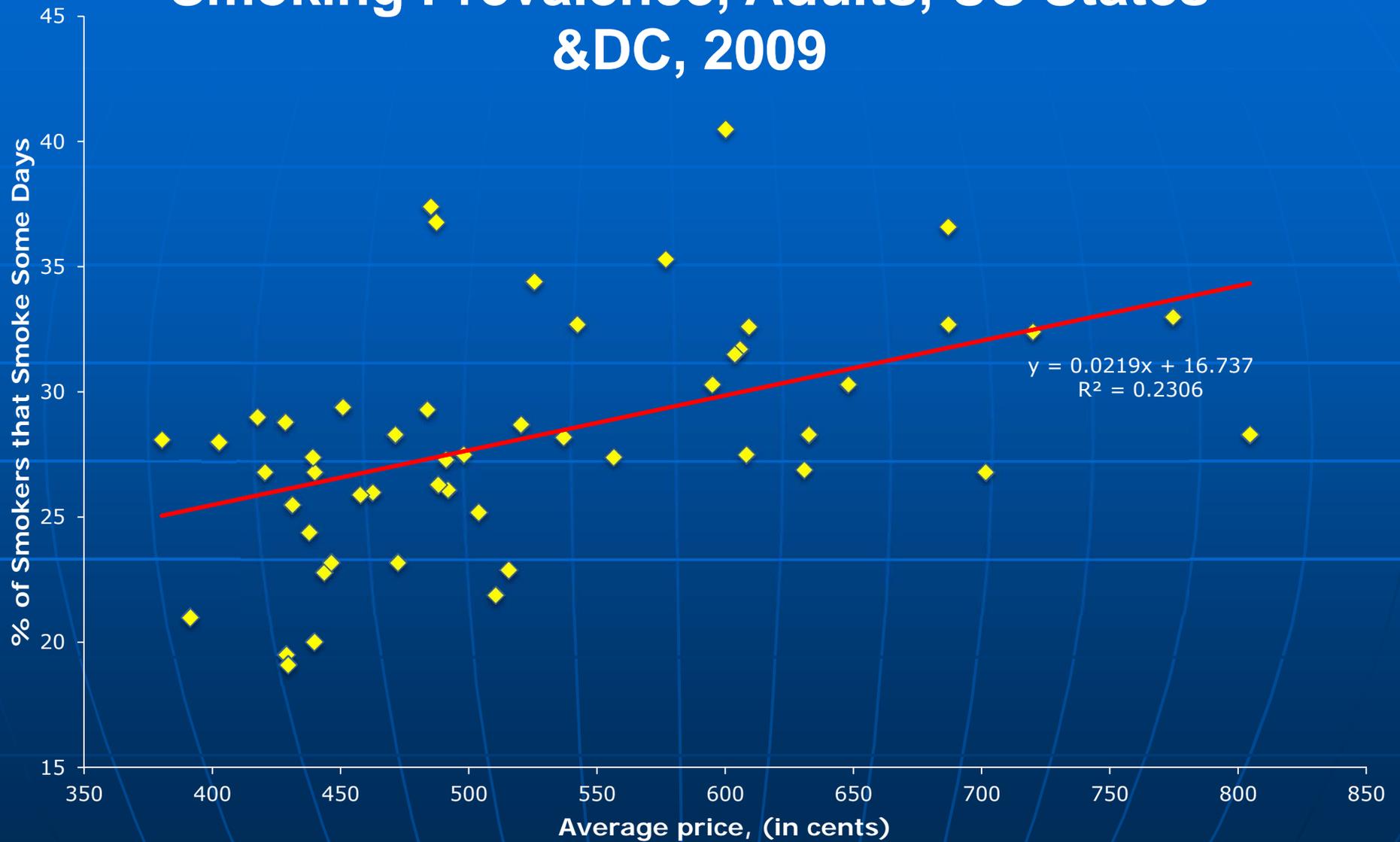


Cigarette Prices and Cessation US States & DC, 2009



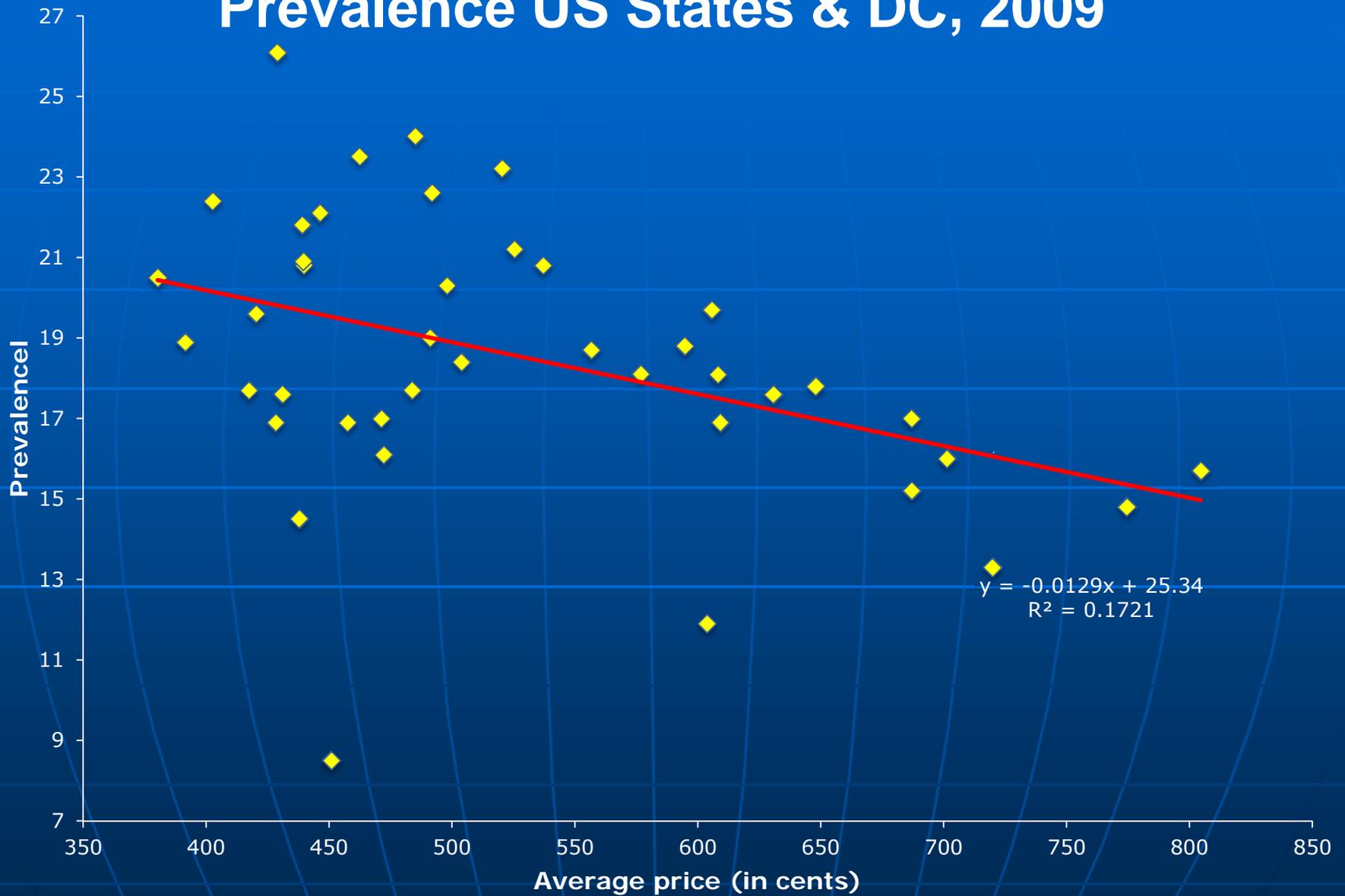
Source: BRFSS, *Tax Burden on Tobacco*, 2010, and author's calculations

Cigarette Price and Less than Daily Smoking Prevalence, Adults, US States & DC, 2009



Source: BRFSS, *Tax Burden on Tobacco*, 2010, and author's calculations

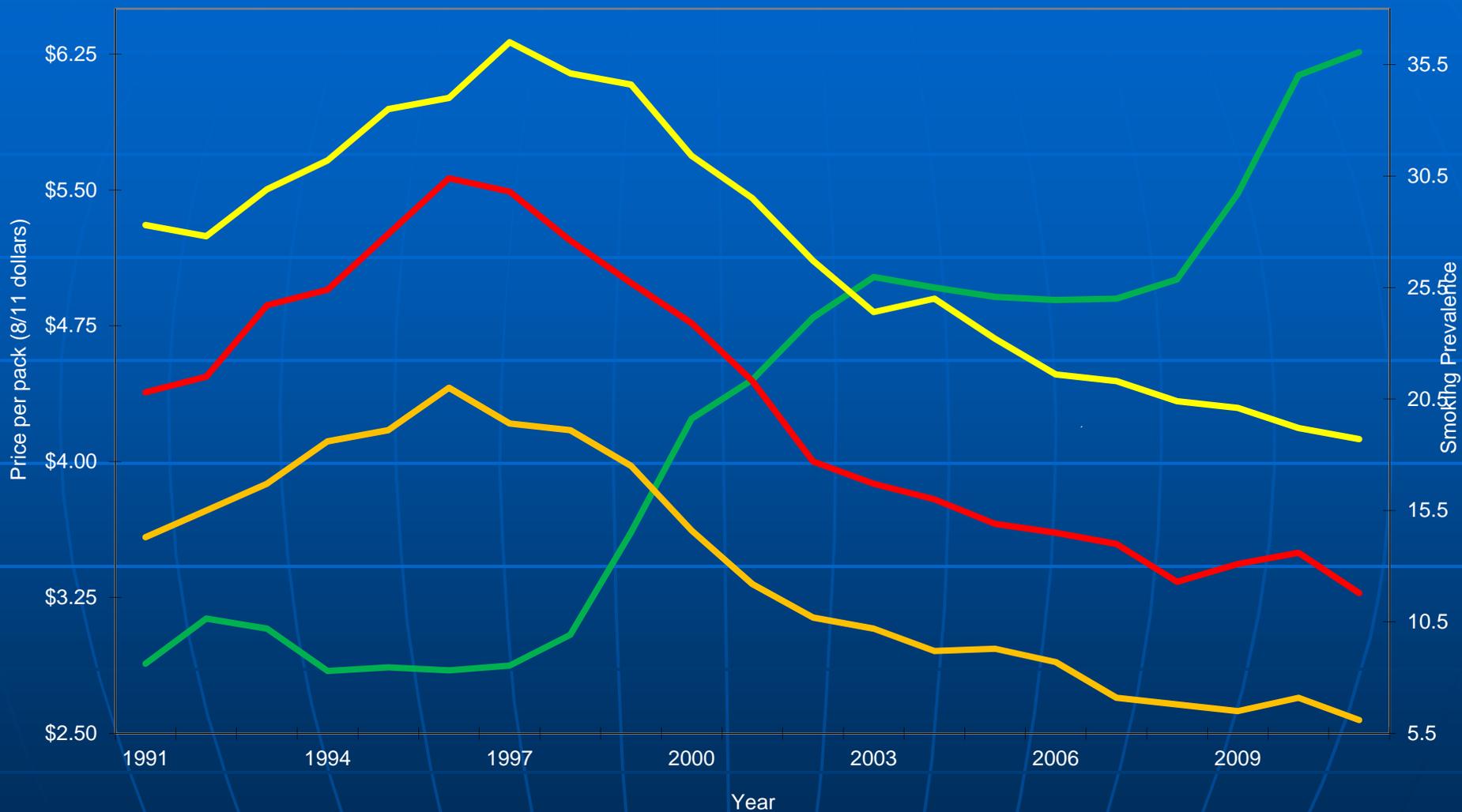
Cigarette Prices and Youth Smoking Prevalence US States & DC, 2009



Source: YRBS, *Tax Burden on Tobacco*, 2010, and author's calculations

Cigarette Price and Youth Smoking Prevalence

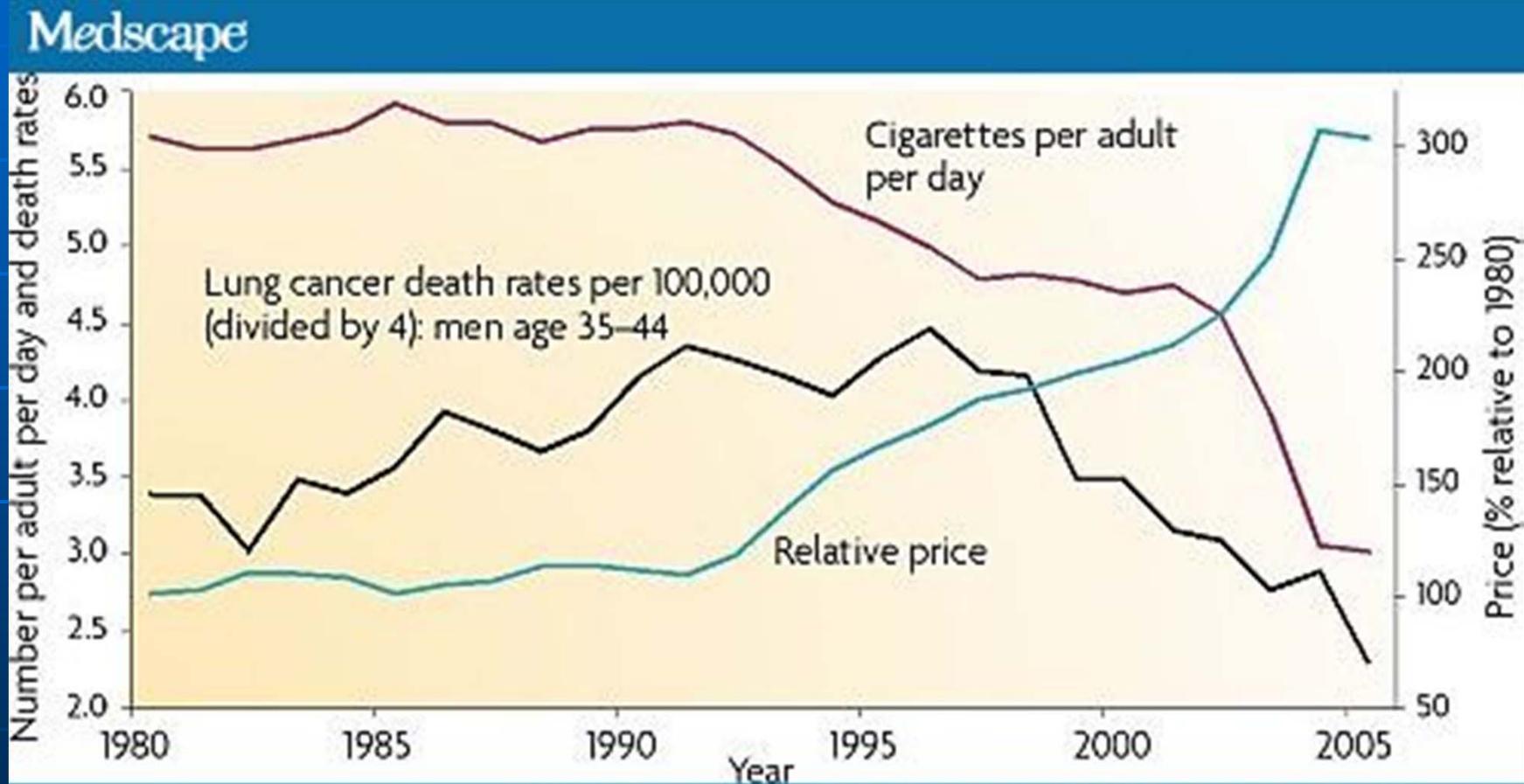
Inflation Adjusted, United States, 1991-2011



— Cigarette Price
 — 12th grade prevalence
 — 10th grade prevalence
 — 8th grade prevalence

Source: MTF, Tax Burden on Tobacco, and author's calculations

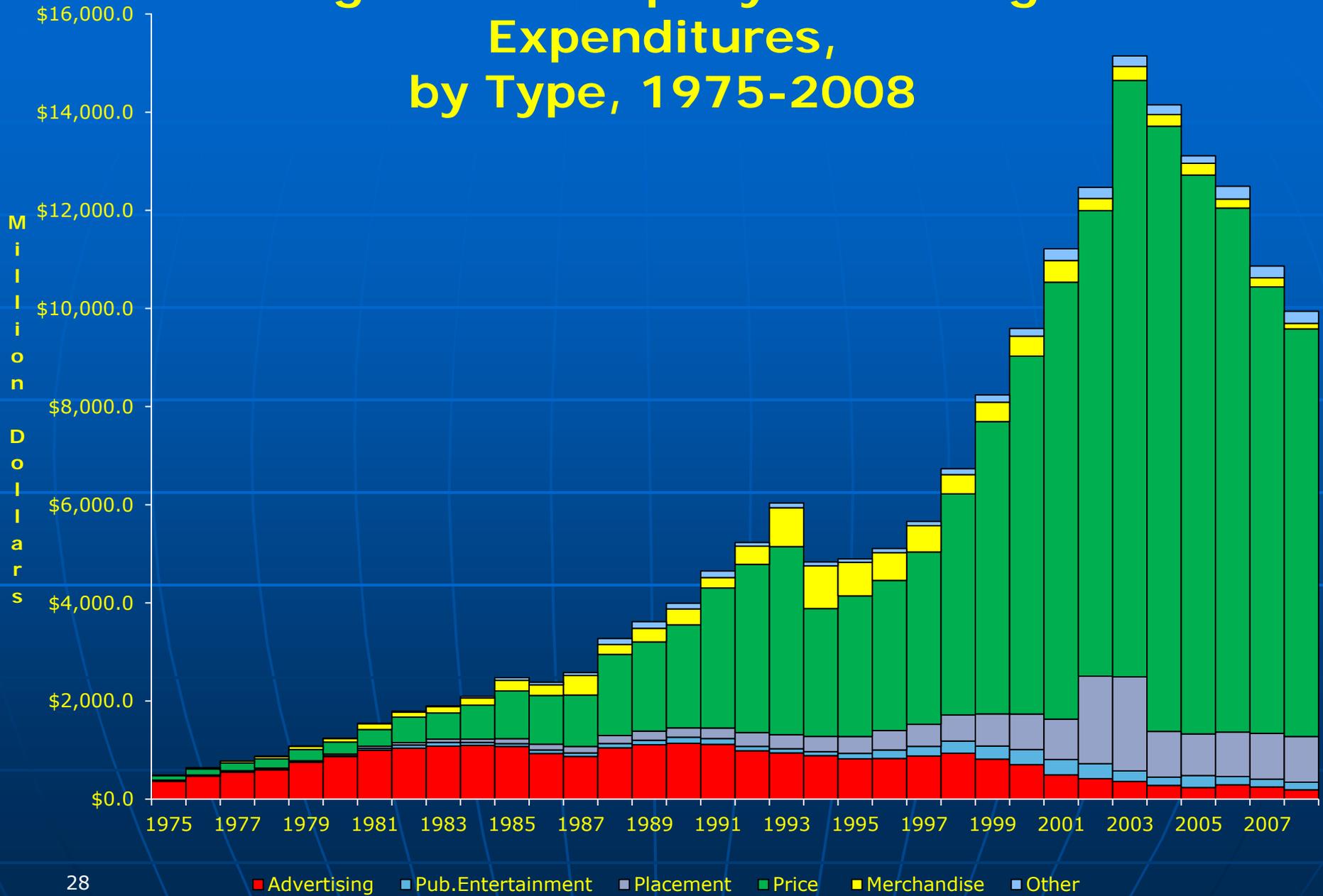
Taxes, Prices and Health: US, 1980-2005



Source: Nat Rev Cancer © 2009 Nature Publishing Group

Industry Price Marketing

Cigarette Company Marketing Expenditures, by Type, 1975-2008



Tobacco Industry Efforts to Offset Tax Increase

On February 4th, 2009, the Federal Government enacted legislation to fund the expansion of the State Children's Health Insurance Program (SCHIP) that increases excise taxes on cigarettes by 158%.

As a result, you will see the price of all cigarettes, including ours, increase in retail stores.

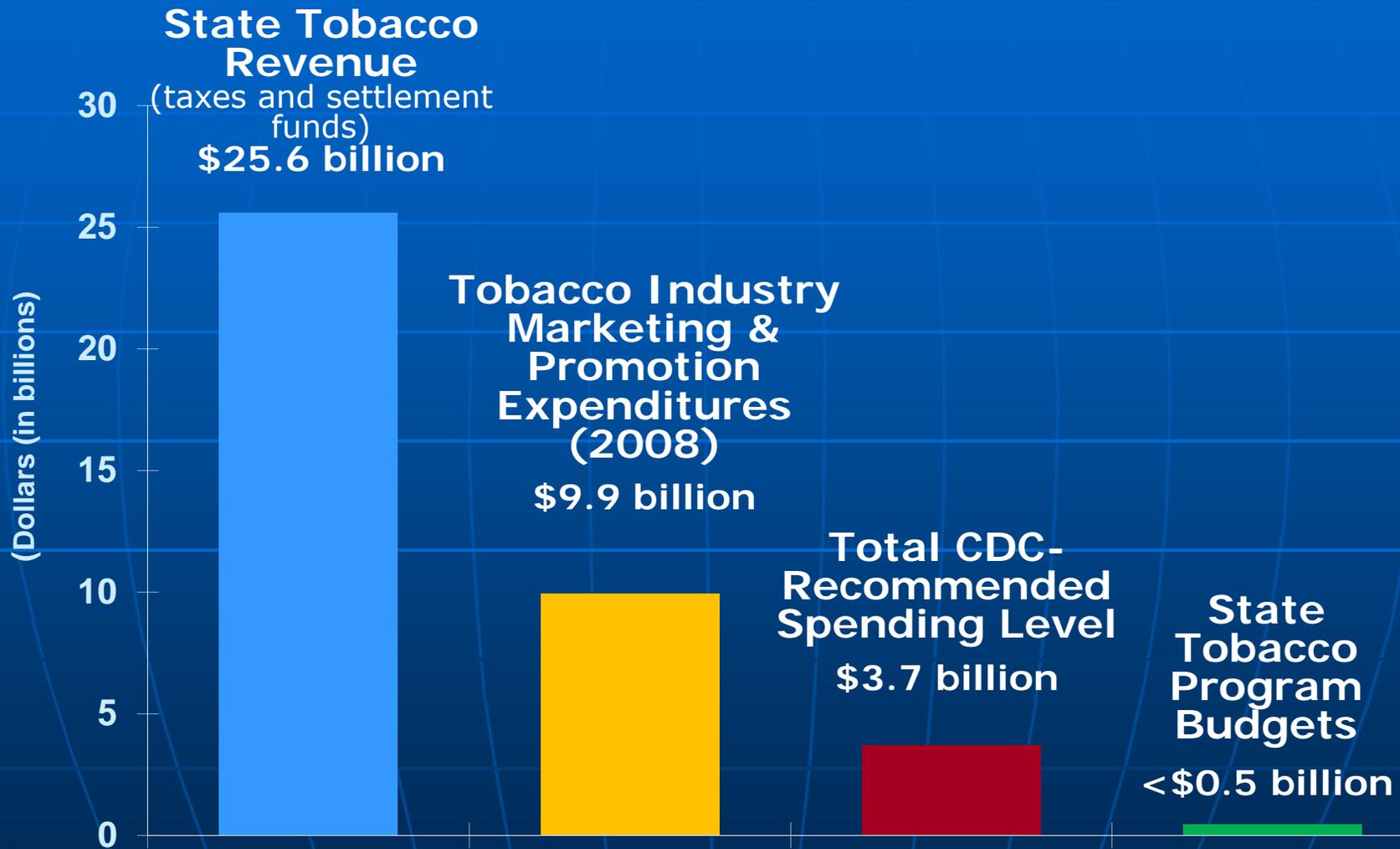
We know times are tough, so we'd like to help. We invite you to register at Marlboro.com to become eligible for cigarette coupons and special offers using this code: **MAR1558**

Thank You,

Philip Morris USA

Earmarking Tobacco Tax Revenues for Tobacco Control

Tobacco Industry is Outspending Prevention Efforts 22:1 —FY2012

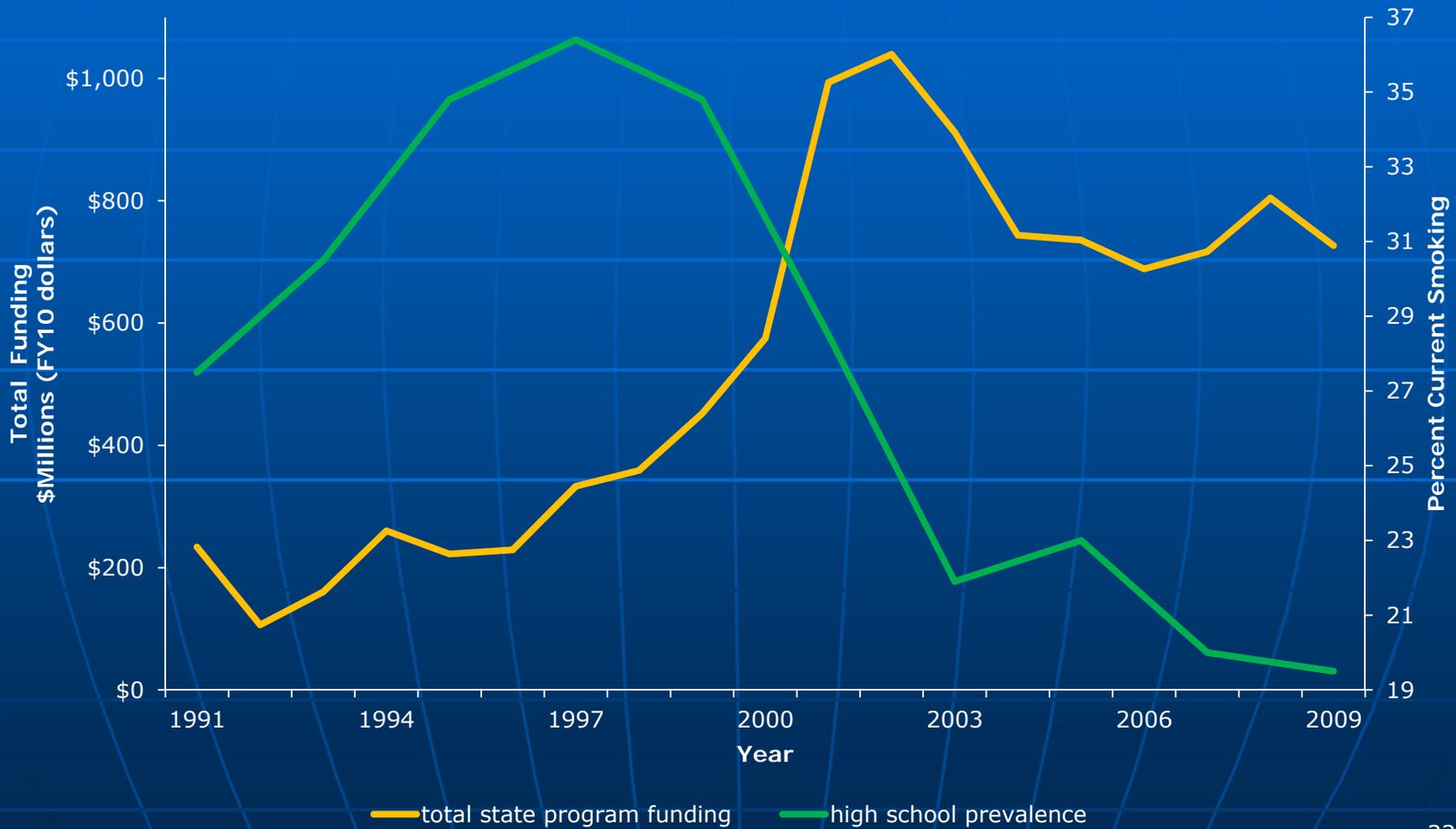


Campaign for Tobacco Free Kids, Federal Trade Commission, American Heart Association, American Cancer Society, American Lung Association, SmokeLess States National Tobacco Policy Initiative

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

State Tobacco Control Program Funding and Youth Smoking Prevalence



Common Oppositional Arguments

Myths & Facts

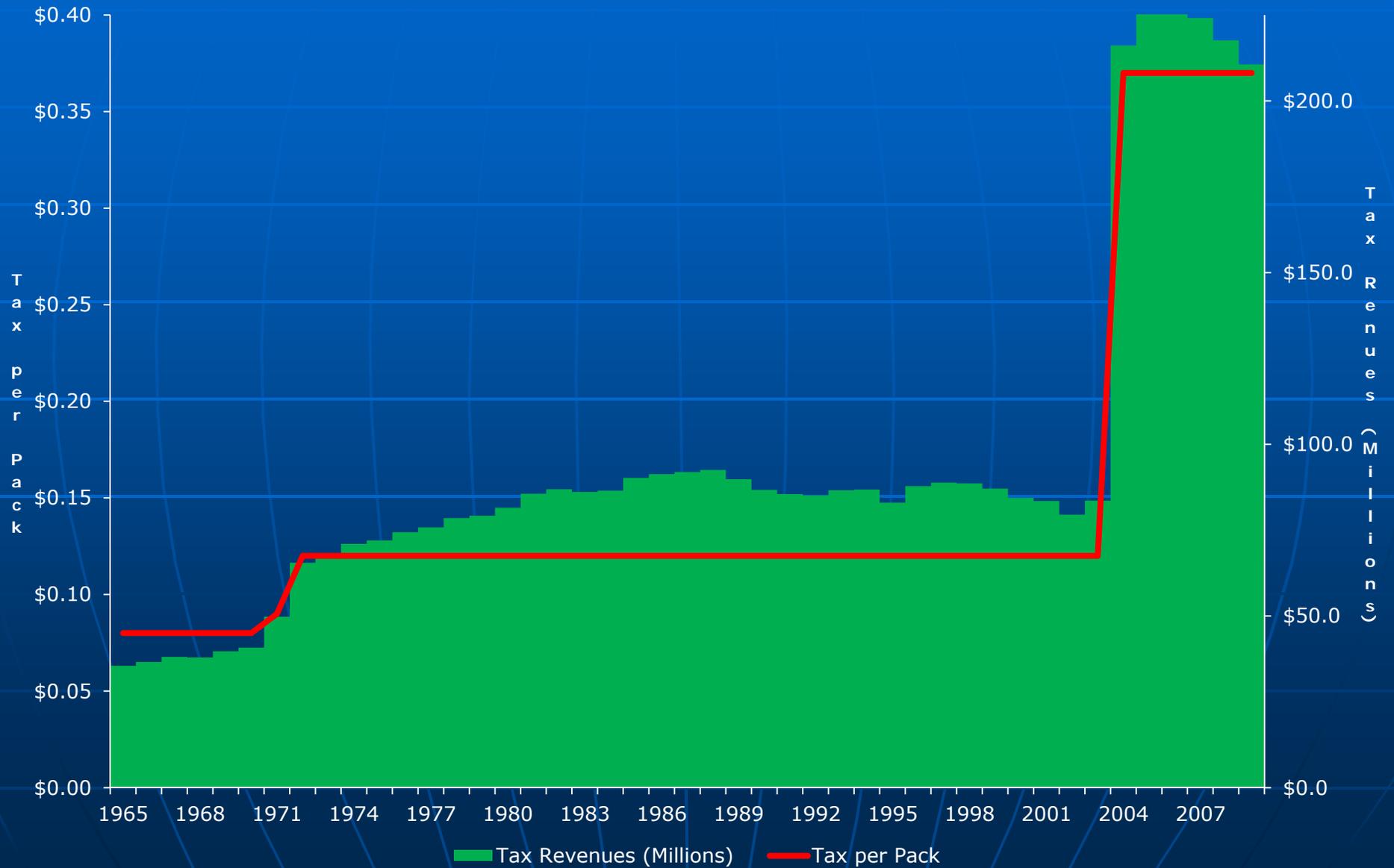
Impact on Revenues

By *J Scott Moody*, 4/2/08, from an [AP story](#):

AUGUSTA — “A coalition of health groups today urged lawmakers to increase the cigarette tax by a \$1 per pack, saying the increase will encourage more people to quit smoking and generate more money for health programs.

Translation: Fewer people smoking equals more cigarette tax revenue? Someone needs a math lesson.”

Cigarette Tax and Tax Revenues Georgia, 1965-2009



Positive Effect of Tax Increase on Revenue Results from:

Low share of tax in price:

- state taxes account for about 25% of price
- total taxes account for less than half of price
- *Implies large tax increase has much smaller impact on price*

Less than proportionate decline in consumption:

- 10% price increase reduces consumption by 4%

Positive Effect of Tax Increase on Revenues

Example – with significant tax avoidance

- Price \$4.00, State tax \$1.00, Sales 500 million packs
 - Revenues: = \$500 million
- Double tax to \$2.00; price rises to \$5.00
 - 100% tax increase; 25% price increase
- 25% price increase reduces sales by 20% (reduced consumption plus tax avoidance)
 - new sales 400 million packs
 - *80% of original sales at double the tax increases revenues by 60%*
 - new revenues = \$800 million

Impact on Jobs

JULY, 14, 2010 – The Associated Press

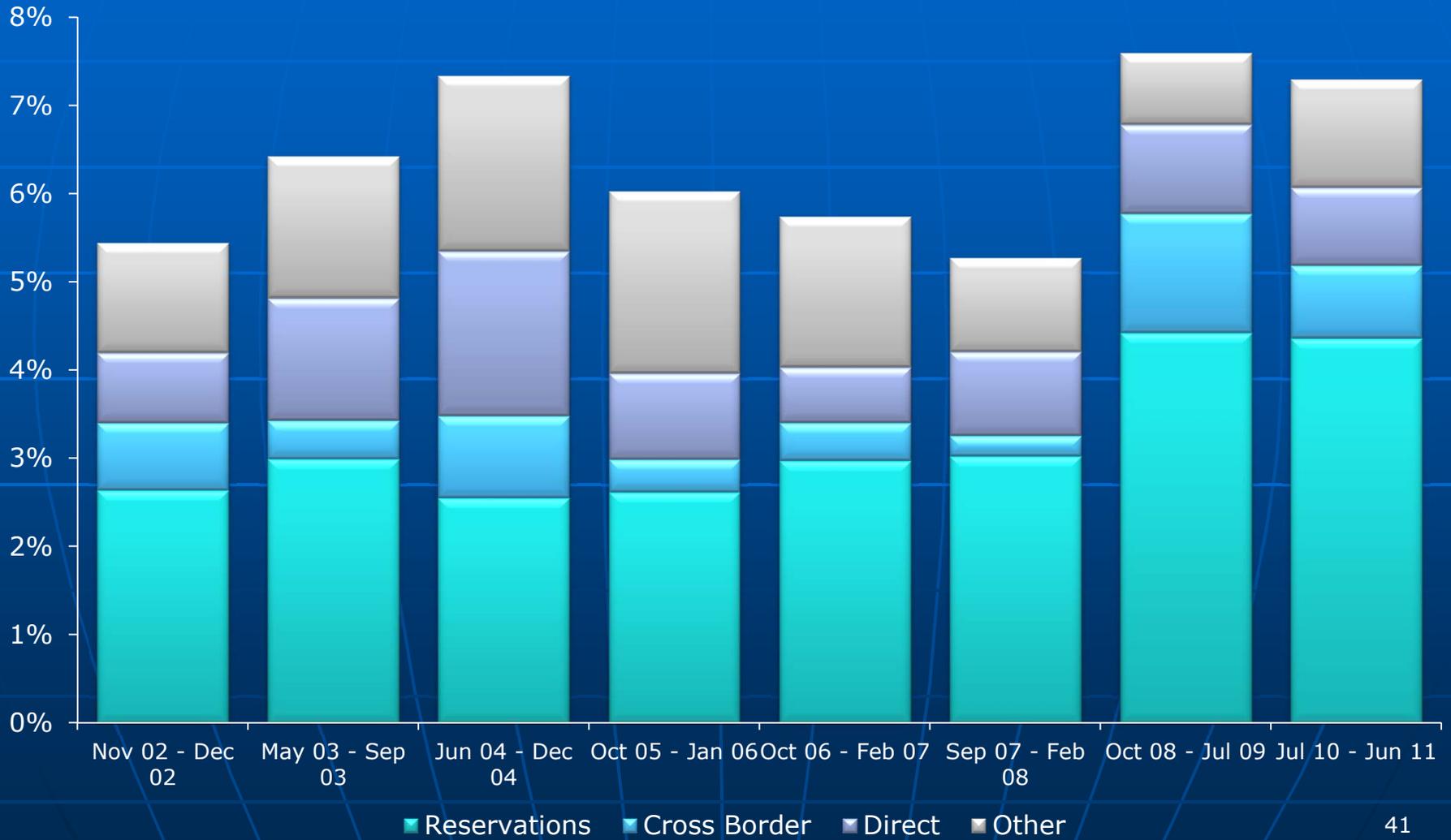
- RICHMOND, Va. — The tobacco industry is running a full-court press ahead of a federal scientific panel's meeting to discuss how to regulate menthol cigarettes, a still-growing part of the shrinking cigarette market.
- The union representing nearly 4,000 tobacco workers sent a letter to the Food and Drug Administration committee examining the public health effects of the minty smokes, warning that a ban could lead to "severe jobs loss" and black market cigarettes.

Impact on Jobs

- Tobacco excise tax will lead to decreased consumption of tobacco products
 - Small loss of jobs in tobacco sector
- Money not spent on tobacco products will be spent on other goods and services
 - Gains in jobs in other sectors
- Increase in tax revenues will be spent by government
 - Additional job gains in other sectors
- Net increase in jobs in most states

Tax Avoidance

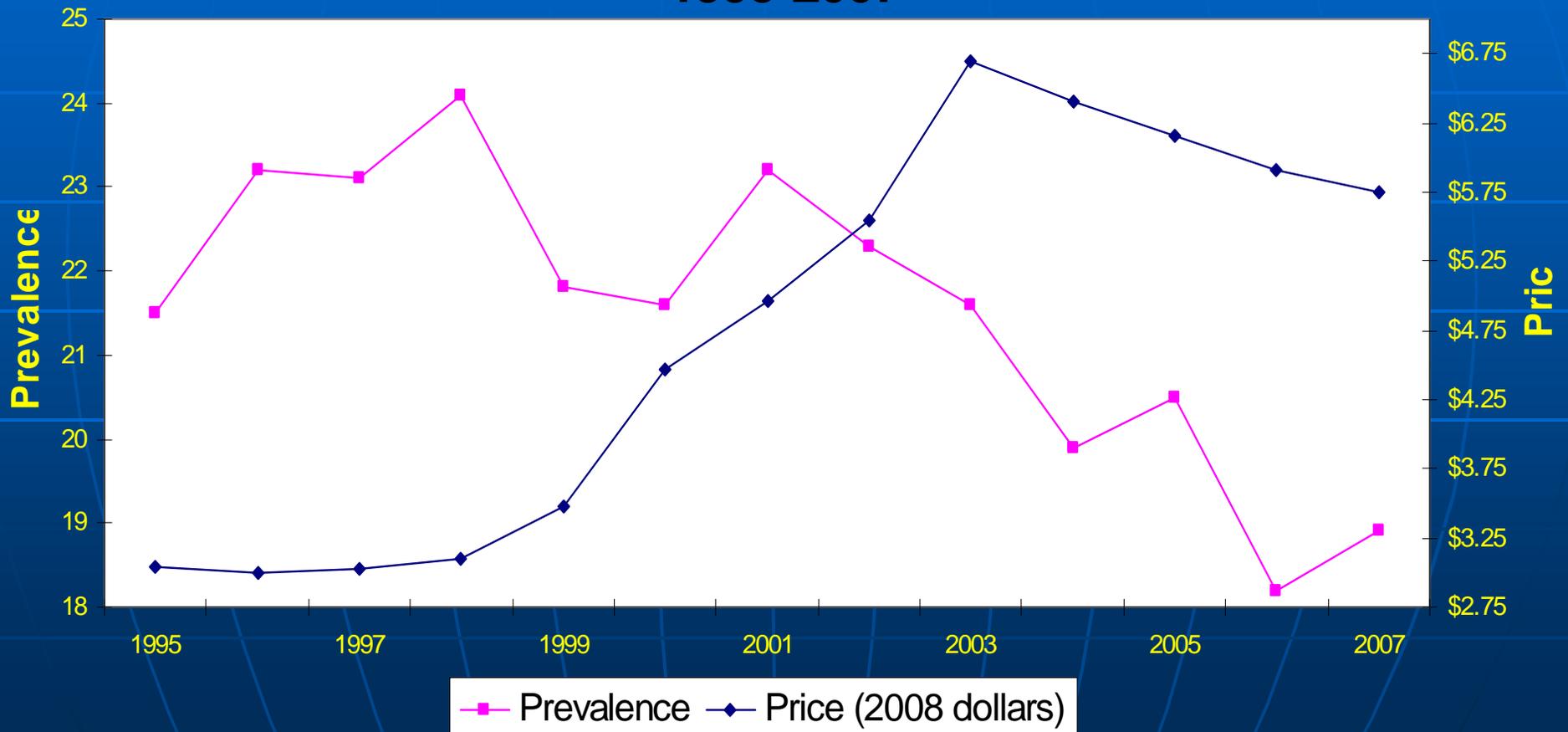
US Smokers, Last Purchase, November 2002-June 2011



Source, ITC project, US survey, Waves 1-8

Tax Avoidance & Evasion Do NOT Eliminate Health Impact of Higher Taxes

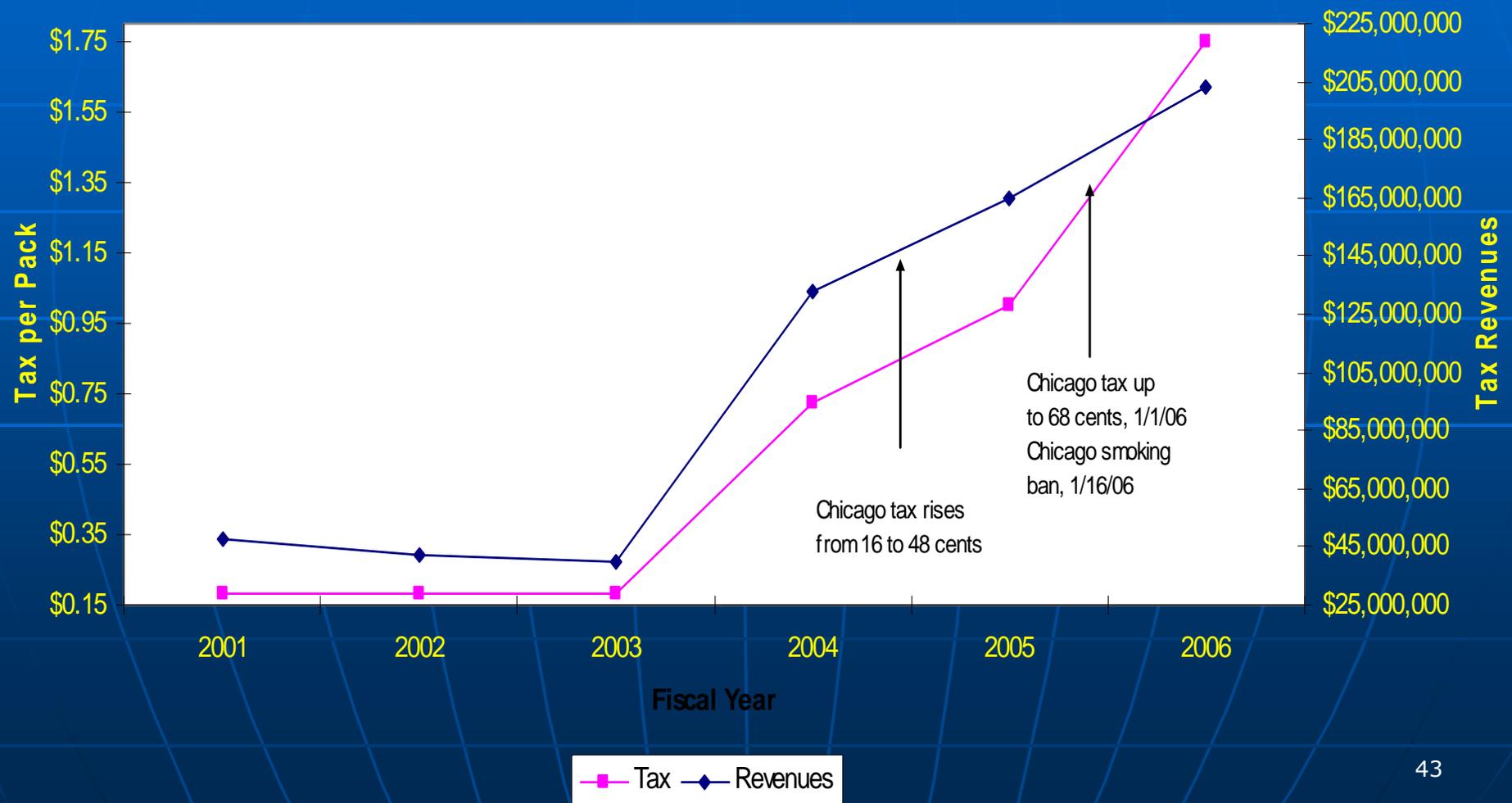
Cigarette Prices and Adult Prevalence, New York, 1995-2007



Source: Tax Burden on Tobacco, 2008 and BRFSS

Tax Avoidance & Evasion Do NOT Eliminate Revenue Impact of Higher Taxes

Cook County Cigarette Tax and Tax Revenues - FY01-FY06



Combating Tax Evasion

- High-tech tax stamps
- Licensing of all involved in distribution and sale
- Strong enforcement
- Swift, severe penalties
- Focus on large scale, criminal activity
- Coordinated efforts
 - NAAG efforts targeting Internet
 - Agreements with tribes



Impact on the Poor

July 23, 2010 – San Francisco Examiner

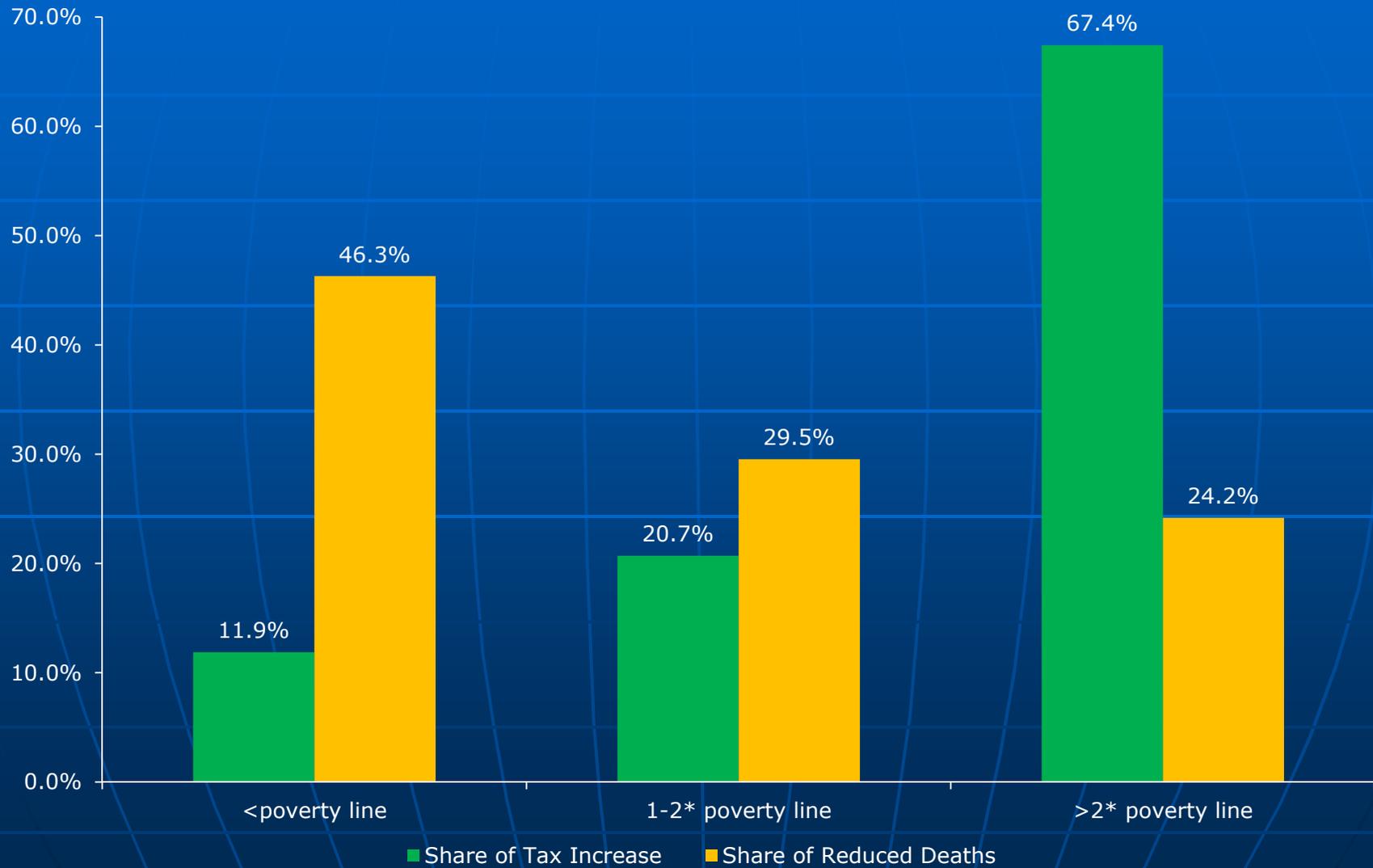
- “Democrats are relying more heavily in their midterm 2010 election message that Republicans care nothing about the poor. Conveniently absent from this analysis is Republican opposition to President Barack Obama’s cigarette tax increase..... **While higher cigarette taxes do discourage smoking, they are highly regressive.** Analyzing a slightly less severe proposal in 2007, the Tax Foundation noted that **‘no other tax hurts the poor more than the cigarette tax.’**” Peyton R. Miller, special to the Examiner.

Impact on the Poor

- Concerns about the regressivity of higher tobacco taxes
 - Tobacco taxes are regressive, but tax increases can be progressive
 - Greater price sensitivity of poor – relatively large reductions in tobacco use among lowest income populations, small reductions among higher income populations
 - Health benefits that result from tax increase are progressive

Who Pays & Who Benefits

Impact of Federal Tax Increase, U.S., 2009



Source: Chaloupka et al., in progress; assumes higher income smokers smoke more expensive brands

Impact on the Poor

- Need to consider overall fiscal system
 - Key issue with tobacco taxes is what's done with the revenues generated by the tax
 - Greater public support for tobacco tax increases when revenues are used for tobacco control and/or other health programs
 - Net financial impact on low income households can be positive when taxes are used to support programs targeting the poor
 - Concerns about regressivity offset by use of revenues for programs directed to poor

Summary

Summary

- Tobacco tax increases have significantly reduced tobacco use in the US
 - Increased quitting
 - Prevented initiation
 - Reduced intensity
- Taxes generate significant revenues and revenues increase when tax increases
 - Added reductions in use/consequences when revenues earmarked for prevention/control efforts
- Adverse economic impact false or overstated

For more information:

www.bridgingthegapresearch.org

www.impactteen.org

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