

# impacTEEN



*A Policy Research Partnership  
to Reduce Youth Substance Use*



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# State-Specific Trends in Tobacco Laws, Policies, and Behaviors – 1991-2003

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National Conference on Tobacco OR Health

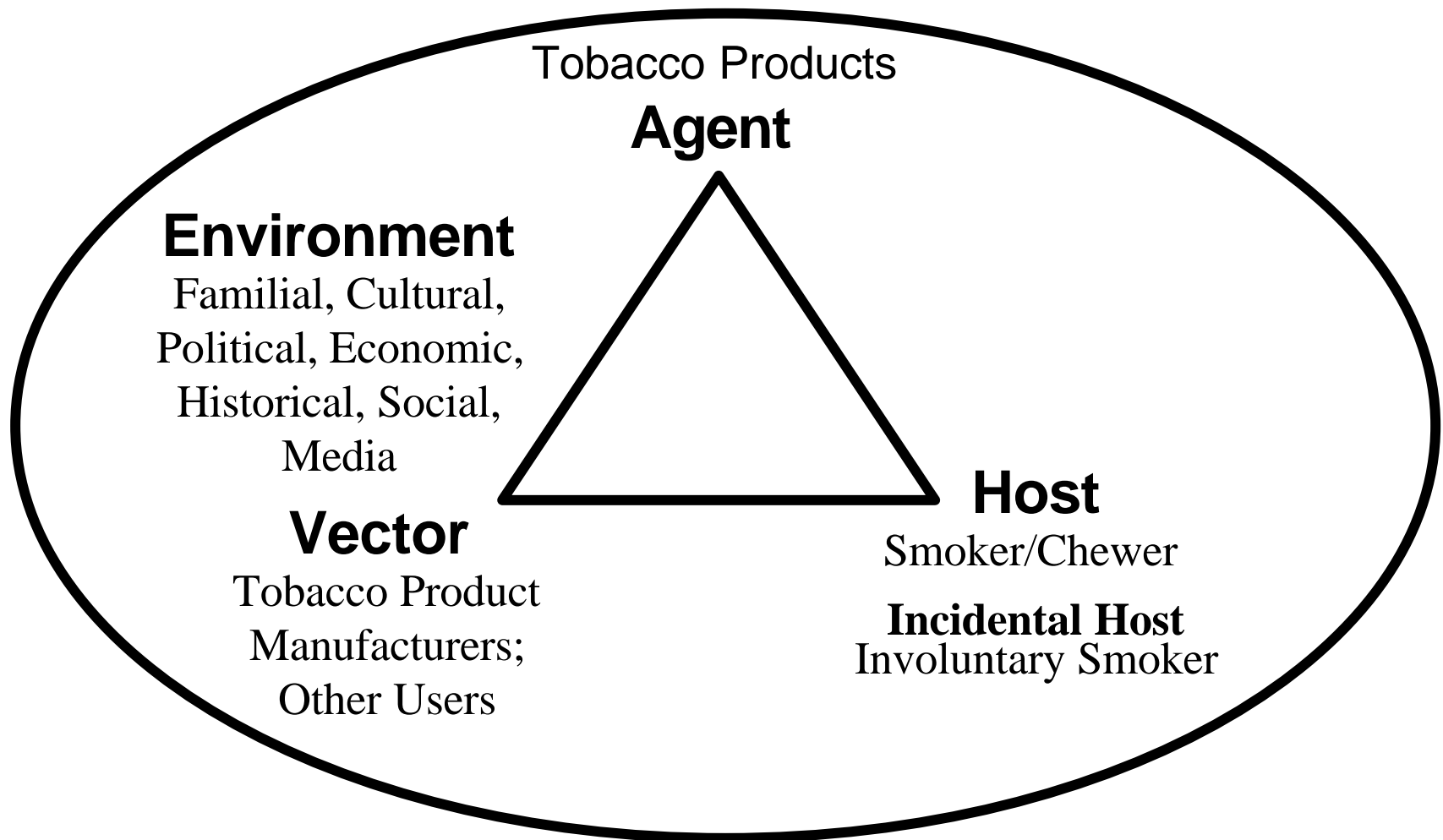
December 10, 2003

# Introduction

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- Tobacco prevention and control activities occur at the national, state, local, and individual levels.
- **National:** Warning labels, advertising restrictions, smoke-free airlines
- **State:** Smoke-free air laws; excise tax rate; sales to minor laws; possession, use, & purchase laws
- **Local:** Smoke-free air ordinances, excise tax rate
- **Individual:** Smoke-free homes, MD advice to quit, individual behaviors (current smoking, someday smoking)

# Epidemiologic Model of Tobacco Addiction and Control



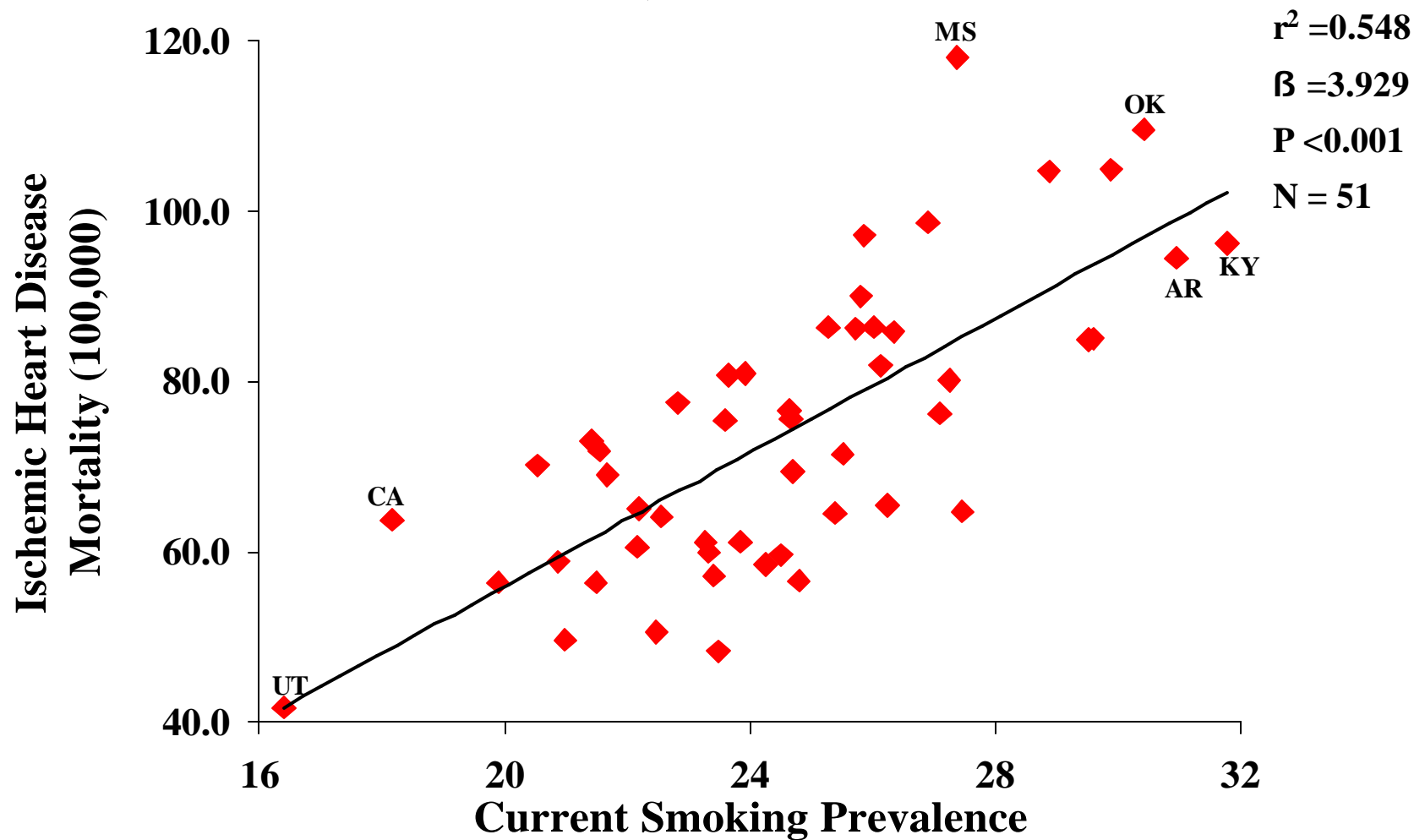
Adapted from Orleans & Slade, 1993

# Introduction

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- Monitoring patterns of laws, policies, interventions, and use is an important component of public health practice.
- Monitor progress overall and in the context of desired goals and/or theoretical ranges.

# State-Specific Estimates of Current Smoking Prevalence <sup>(1)</sup> and Ischemic Heart Disease Mortality <sup>(2)</sup> among Persons 35 to 64 Years in the United States, 1998-2000

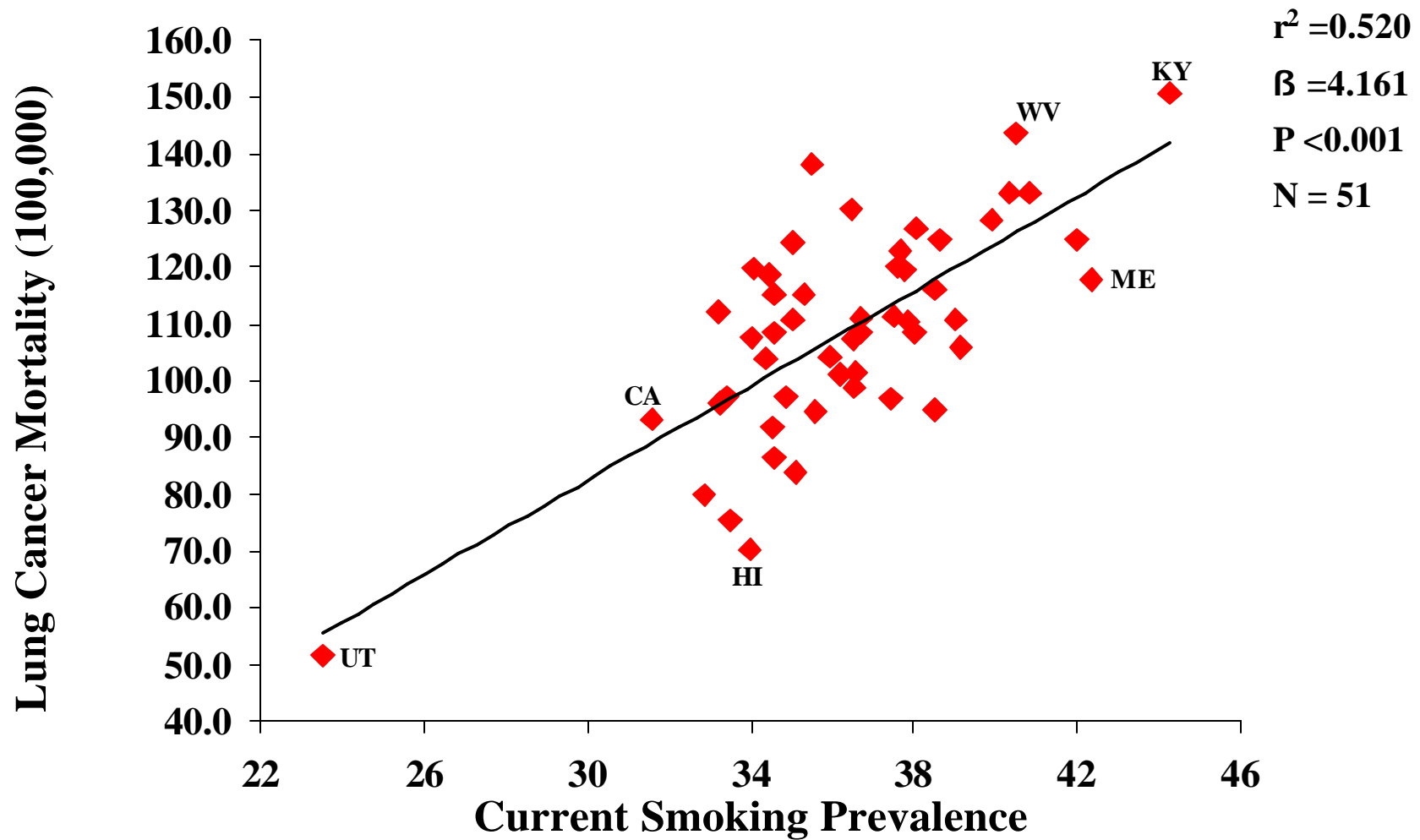


1. Source: NCI-sponsored Tobacco Use Supplement to the Current Population Survey, 1998-99;

2. Source: NCHS mortality data from CDC Wonder System, 1999-2000.

Note: Mortality data were age-adjusted to the 2000 U.S. population.

# State-specific Estimates of Current/Former Smoking (< 15 Years) <sup>(1)</sup> and Lung Cancer Mortality <sup>(2)</sup> among Persons 35 Years or Older in the United States, 1998-2000

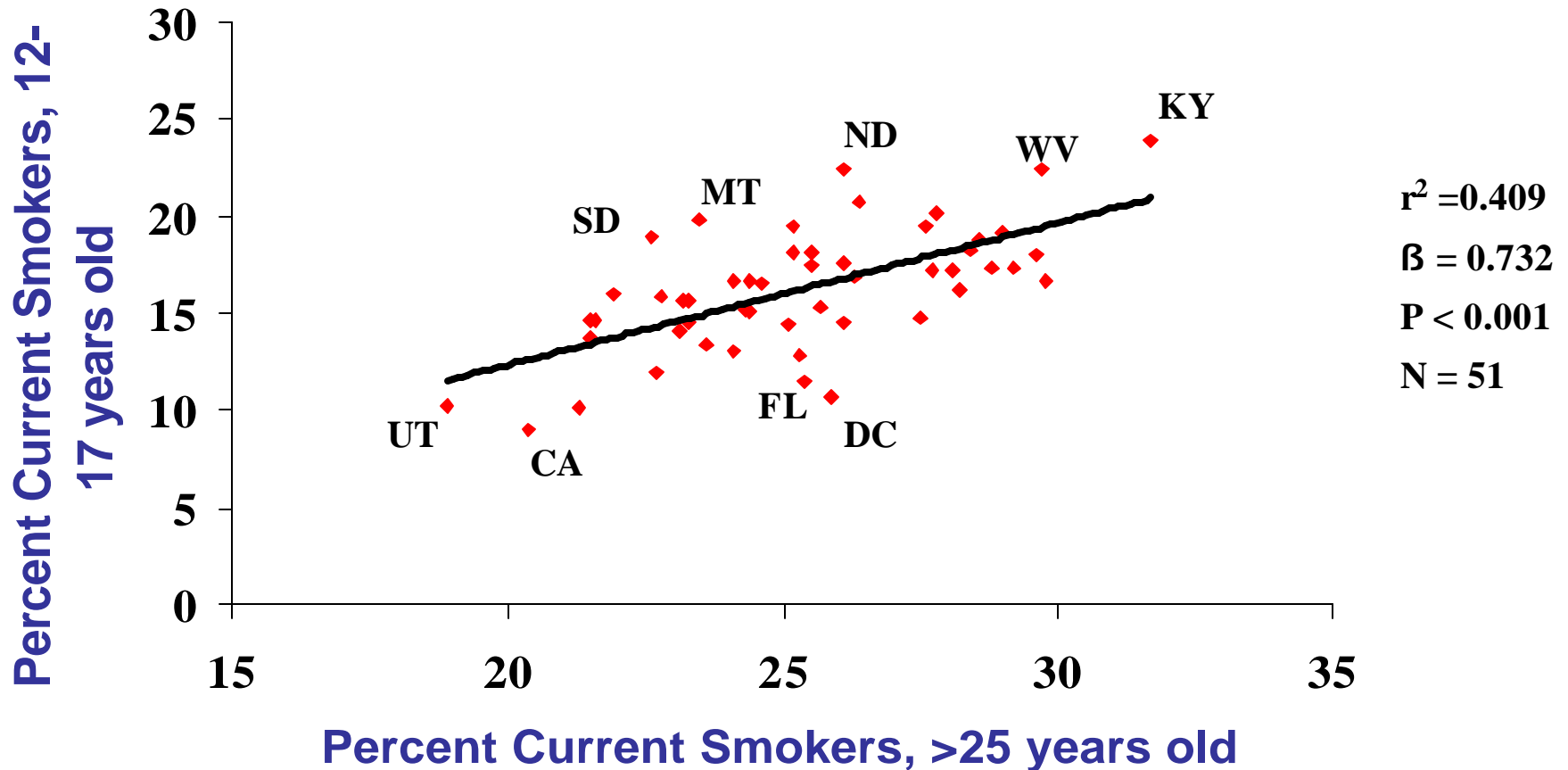


1. Source: NCI-sponsored Tobacco Use Supplement to the Current Population Survey, 1998-99;

2. Source: Mortality data from CDC Wonder System, 1999-2000.

Note: Smoking and mortality estimates were age-adjusted to the 2000 U.S. population

# Smoking Prevalence Among Youths Aged 12-17 Years Old and Adults Aged >26 Years Old in All 50 States and the District of Columbia, 1999 NHSDA



Note: Current smokers were persons who smoked on  $\geq 1$  day during the previous 30 days  
Source: 1999 National Household Survey on Drug Abuse

# Tobacco Chartbook

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- CDC has published State Highlights for 1999, 2001, and 2002 ([http://www.cdc.gov/tobacco/ntcp\\_exchange/links.htm](http://www.cdc.gov/tobacco/ntcp_exchange/links.htm)).
- NCI has published Monographs that provide useful information.
- ImpacTeen (RWJF) and NCI will publish an electronic and printed chartbook. See <http://www.impactteen.org/tobaccodata.htm> for much of data in this presentation (TUS-CPS data to be added).

# Tobacco Use Supplements to the Current Population Survey (TUS-CPS)

<http://riskfactor.cancer.gov/studies/tus-cps/>

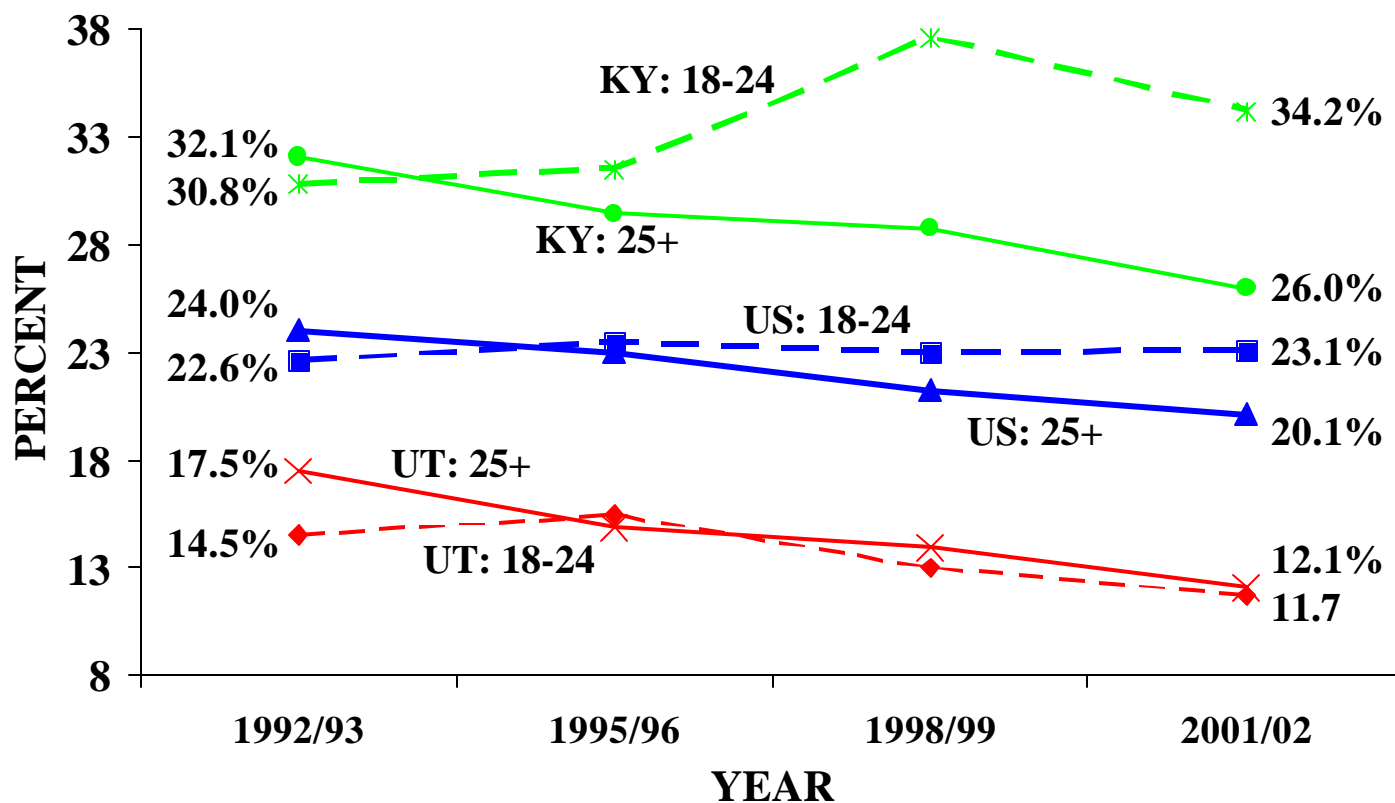
- NCI sponsored a Tobacco Use Supplement to the Current Population Survey (TUS-CPS) to evaluate ASSIST. Surveys conducted in 1992-93, 1995-96, & 1998-99. NCI and CDC co-sponsored the TUS-CPS in 2001-02.
- State estimates based on sample sizes of 2,100 – 21,800.
- NCI TUS-CPS surveys for 1992-1999 are public use data available on 2 CDs (from Census Bureau) (2001-02 data available shortly). Limited access to preliminary 2001-02 data for this presentation was granted based on collaborative Chartbook/Public Website Project with NCI.

# Tobacco Use Supplements to the Current Population Survey (TUS-CPS)

<http://riskfactor.cancer.gov/studies/tus-cps/>

- TUS-CPS is a household survey; civilian, non-institutionalized population ages 15 years and older (18+ here).
- National and state-specific estimates -- mostly self-reports (about 20% proxy - for measures of use).

# Trends in Cigarette Smoking Among Adults by Age – United States, Utah, and Kentucky; 1992/93 to 2001/02



Source: NCI Tobacco Use Supplement to the Current Population Survey Series. In 2001-02, CDC joined NCI in co-sponsoring the Supplement.

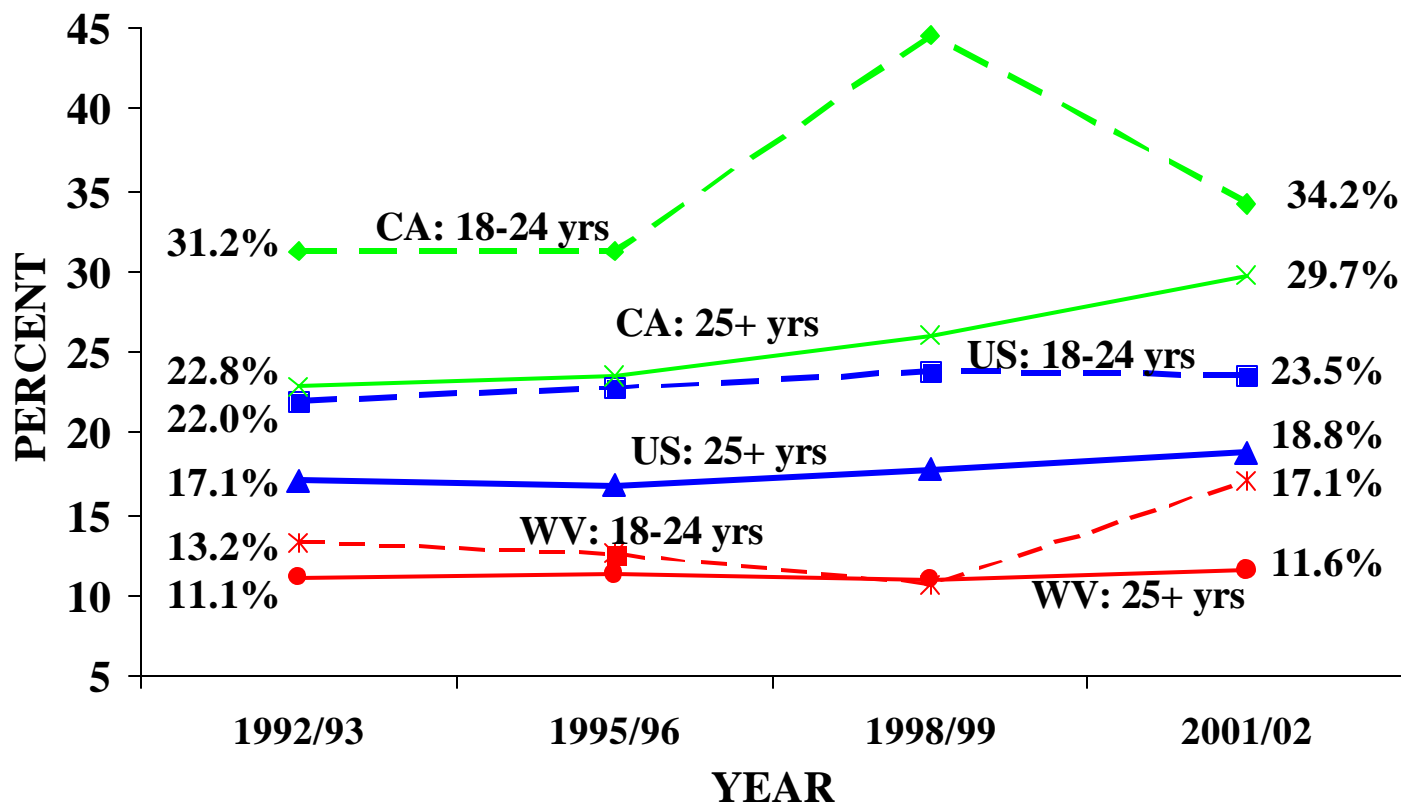
# Prevalence of Cigarette Smoking, ages 25+ years (CPS)

	92/93 (%)	01/02 (%)	% Change
<b>National</b>	24.0	20.1	- 16.6
<b>Low States</b>			
Utah	17.5	12.1	- 30.5
California	19.3	14.6	- 24.3
Mass.	21.4	15.5	- 27.7
<b>High States</b>			
Kentucky	32.2	26.0	- 19.0
Tennessee	29.1	25.6	- 12.0
Oklahoma	27.0	25.4	- 5.9

# Prevalence of Cigarette Smoking, ages 18-24 years (CPS)

	92/93 (%)	01/02 (%)	% Change
<b>National</b>	22.6	23.1	+ 2.3
<b>Low States</b>			
Utah	14.5	11.7	- 19.8
California	17.0	14.2	- 16.0
D.C.	18.9	15.8	- 16.5
<b>High States</b>			
Kentucky	30.8	34.2	+11.0
Indiana	29.2	32.6	+11.3
Vermont	26.9	32.2	+19.7

# Trends in Someday Smoking\* Among Current Smokers, by Age – United States, California, and West Virginia; 1992/93 to 2001/02

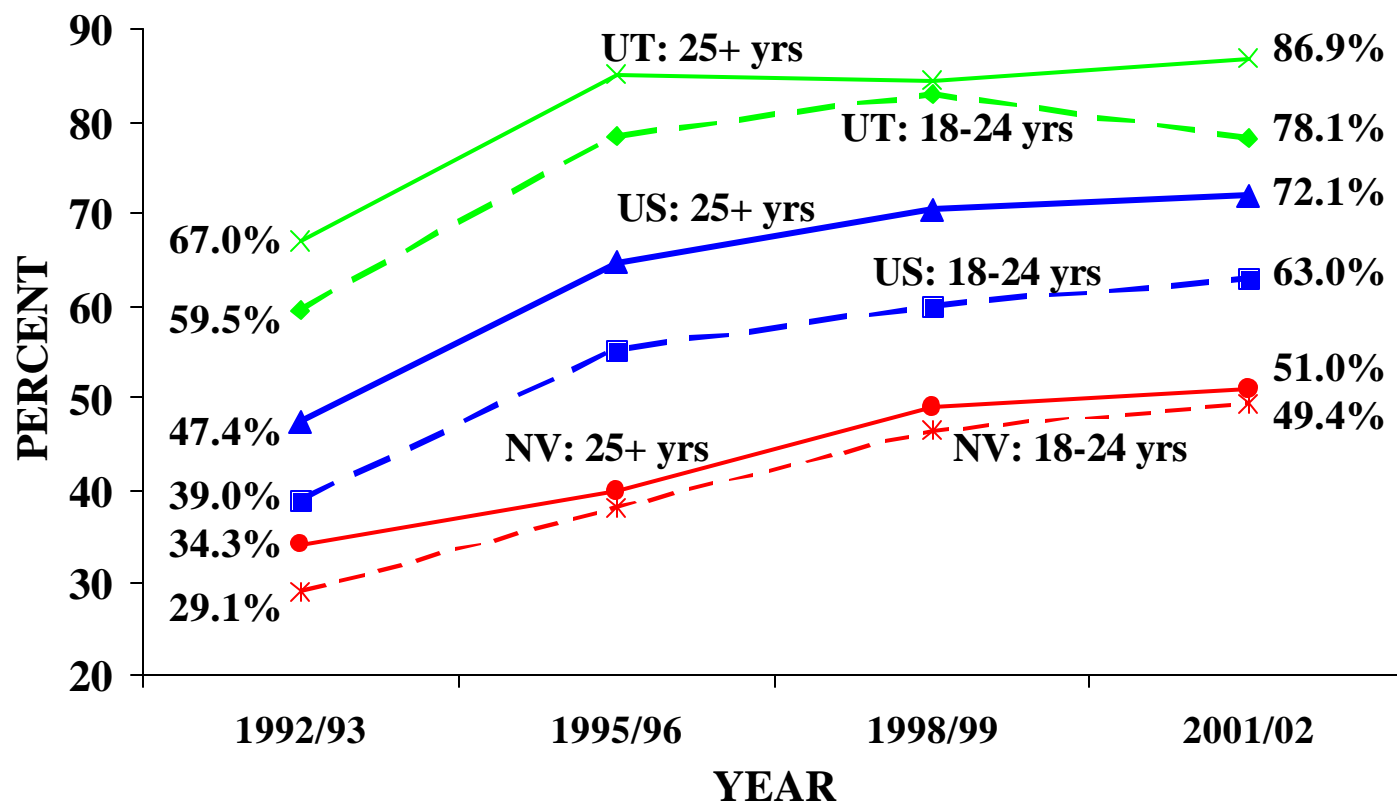


Source: NCI Tobacco Use Supplement to the Current Population Survey Series. In 2001-02, CDC joined NCI in co-sponsoring the Supplement. \* Someday smokers are persons who smoke, but not on every day.

# Percentage of Current Smokers Who Are Some-Day Smokers, ages 25+ years (CPS)

	<u>92/93 (%)</u>	<u>01/02 (%)</u>	<u>% Change</u>
<b>National</b>	17.1	18.8	+ 9.8
<b>High States</b>			
California	22.8	29.7	+ 30.2
D.C.	30.2	28.4	- 6.2
Minnesota	17.8	24.4	+ 37.6
<b>Low States</b>			
W. Virginia	11.1	11.6	+ 4.6
N. Hamp.	15.4	12.7	- 17.7
Missouri	12.5	12.9	+ 2.6

# Percentage of Workers with Smoke-Free Work Places, by Age – United States, Utah, and Nevada; 1992/93 to 2001/02

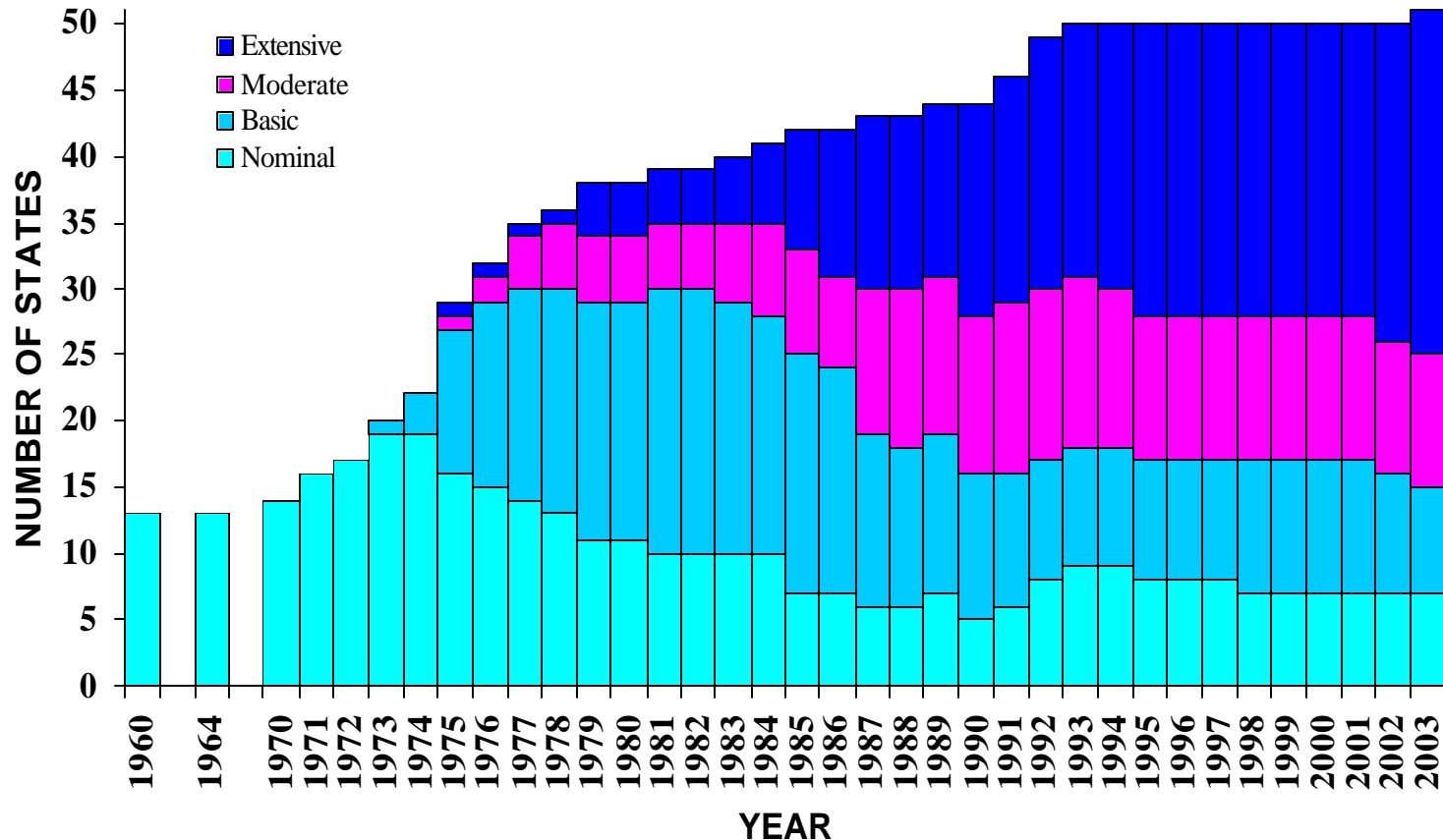


Source: NCI Tobacco Use Supplement to the Current Population Survey Series. In 2001-02 CDC joined NCI in co-sponsoring the Supplement.

# Smoke-Free Work Places – ages 25+ years (CPS)

	<u>92/93 (%)</u>	<u>01/02 (%)</u>	<u>% Change</u>
<b>National</b>	47.4	72.1	+ 52.2
<b>High States</b>			
Utah	67.0	86.9	+ 29.7
Mass.	48.2	82.0	+ 70.0
Maine	56.4	81.5	+ 44.5
<b>Low States</b>			
Nevada	34.3	51.0	+ 48.7
Kentucky	30.4	61.8	+103.4
Hawaii	47.2	62.4	+ 32.1

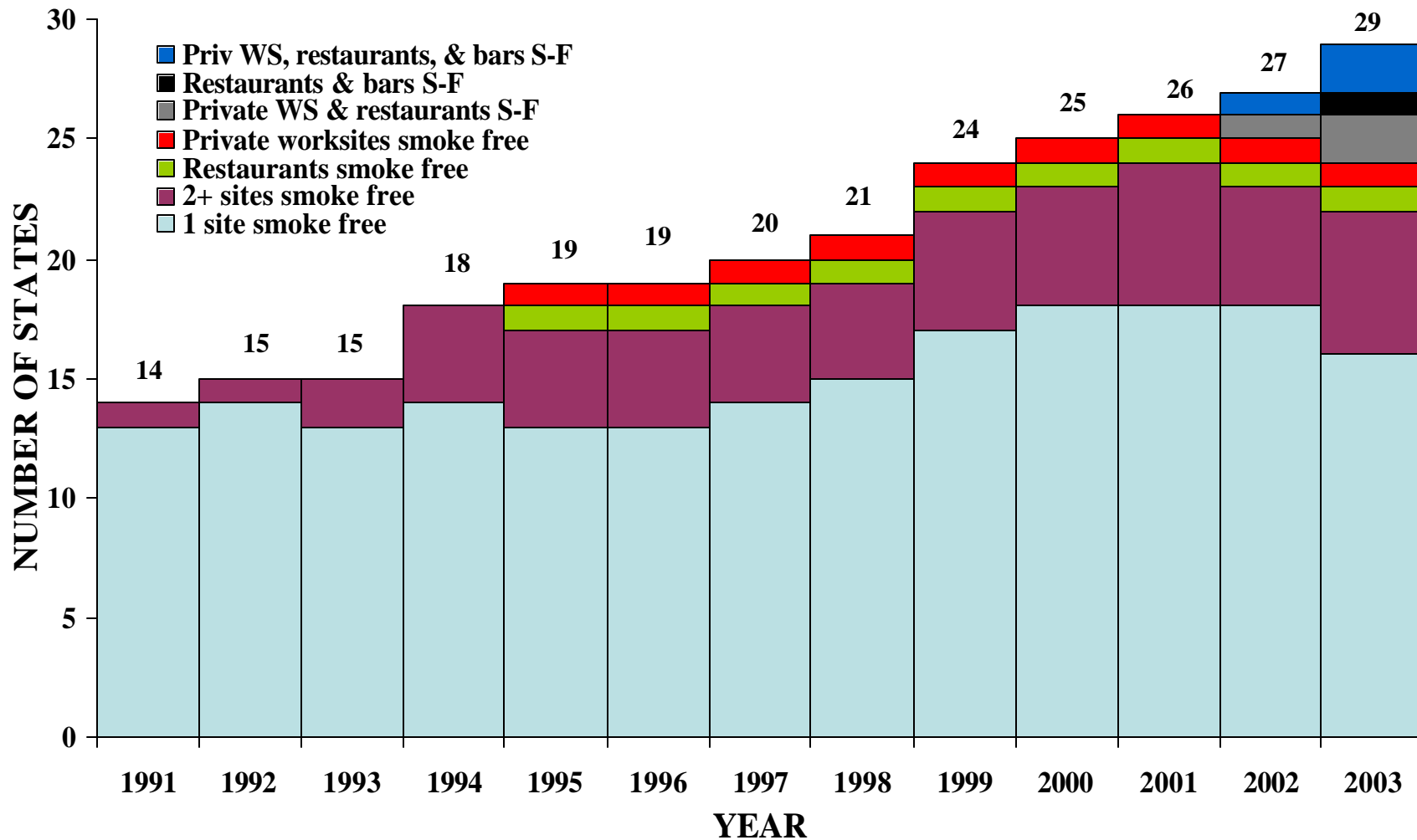
# Restrictiveness Of State Laws Regulating Smoking In Public Places – U.S., 1960-2003\*



Sources: 1989 Surgeon General's Report, ALA's SLATI, CDC's STATE system, MayaTech Corporation, Roswell Park Cancer Institute. Note: Includes the District of Columbia;

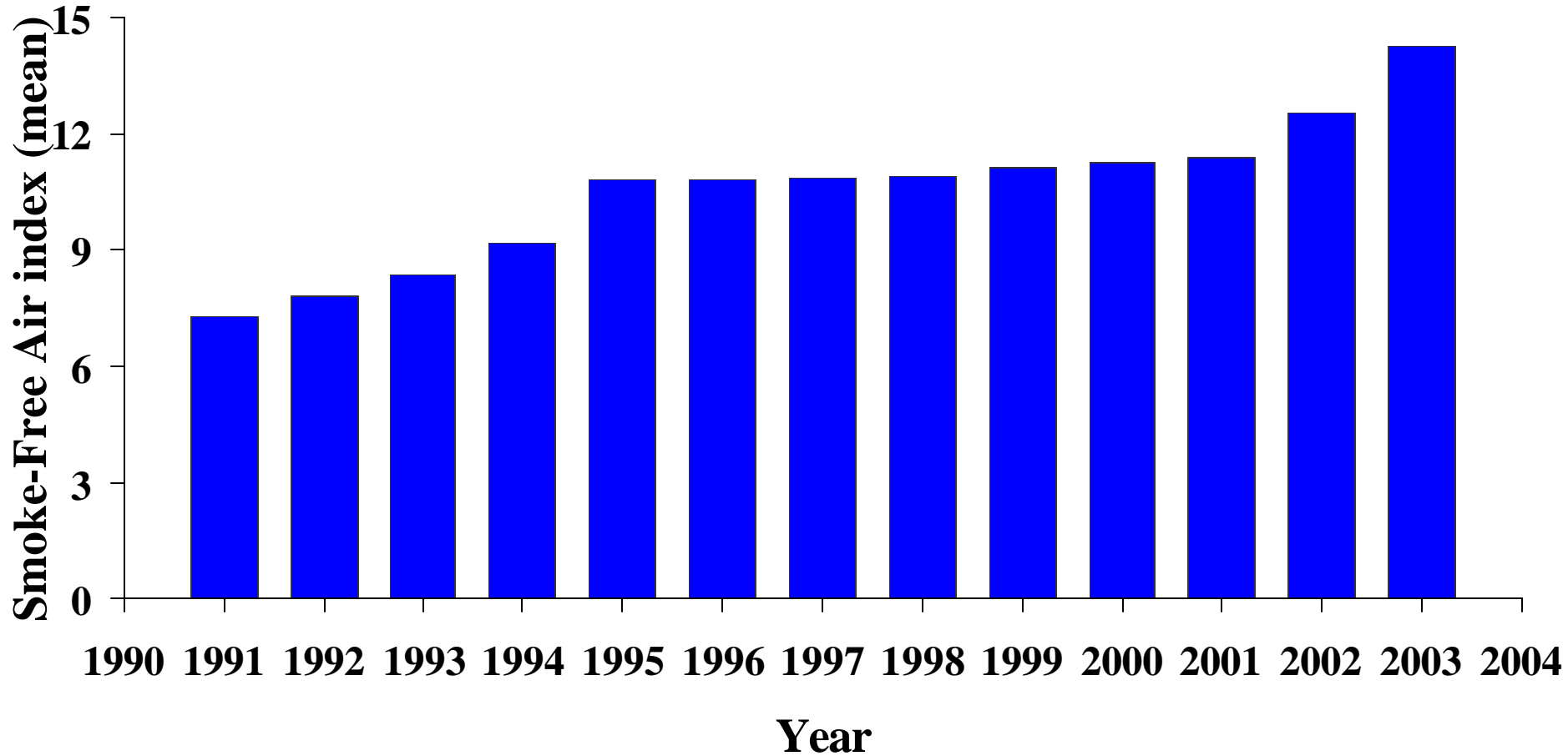
\* 2003 data are represented for the first three quarters of the year.

# Smoke-Free Air Legislation in the 50 States and the District of Columbia -- United States, 1991-2003



Sources: ALA's SLATI, CDC's STATE system, the MayaTech Corp., and the Roswell Park Cancer Institute.

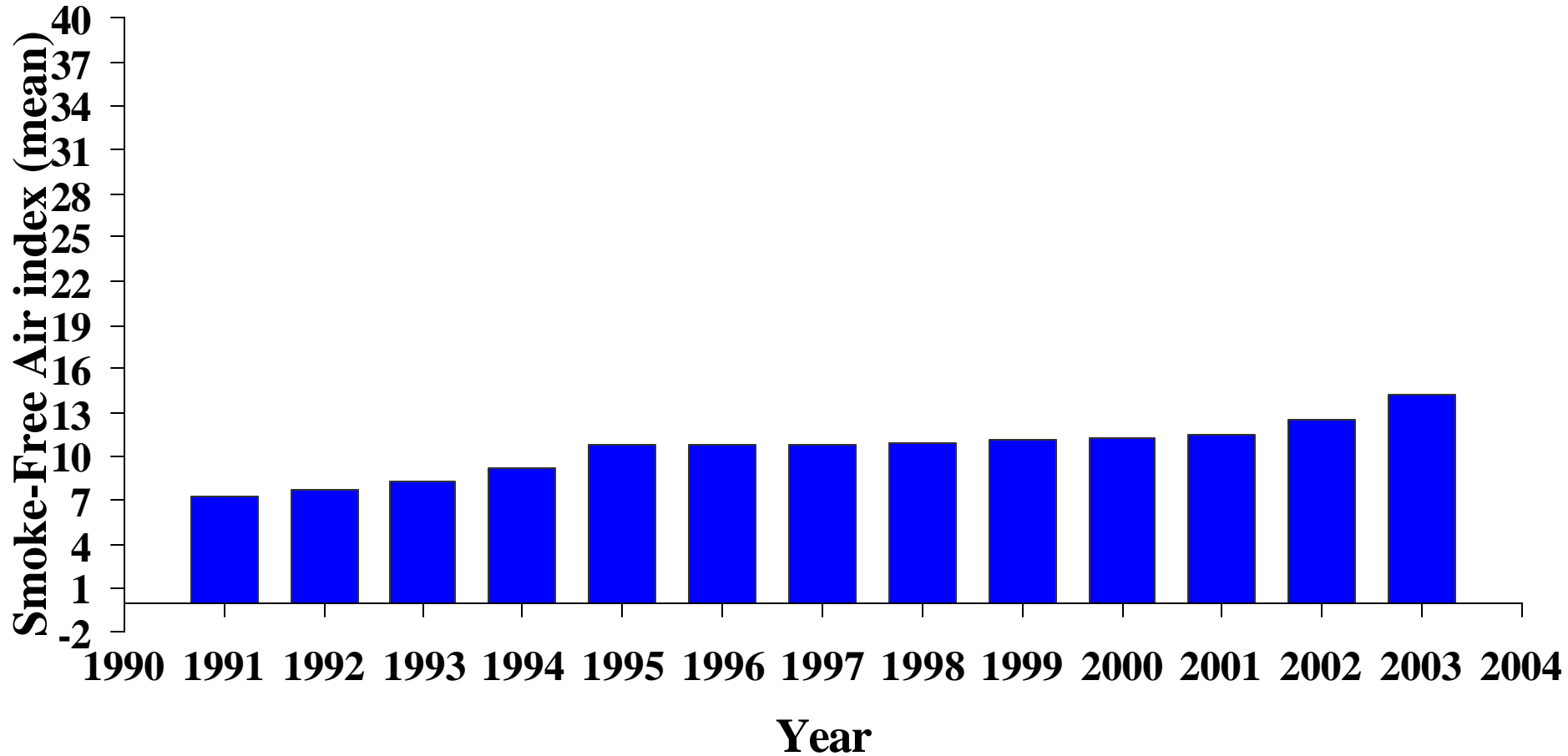
# Mean Smoke-Free Air Law Rating in 50 States and the District of Columbia, United States, 1991-2003



Note: Smoke-free air index without preemption was used; theoretical range = 0~40

Sources: ALA's SLATI, CDC's STATE system, the MayaTech Corporation, and the Roswell Park Cancer Institute.

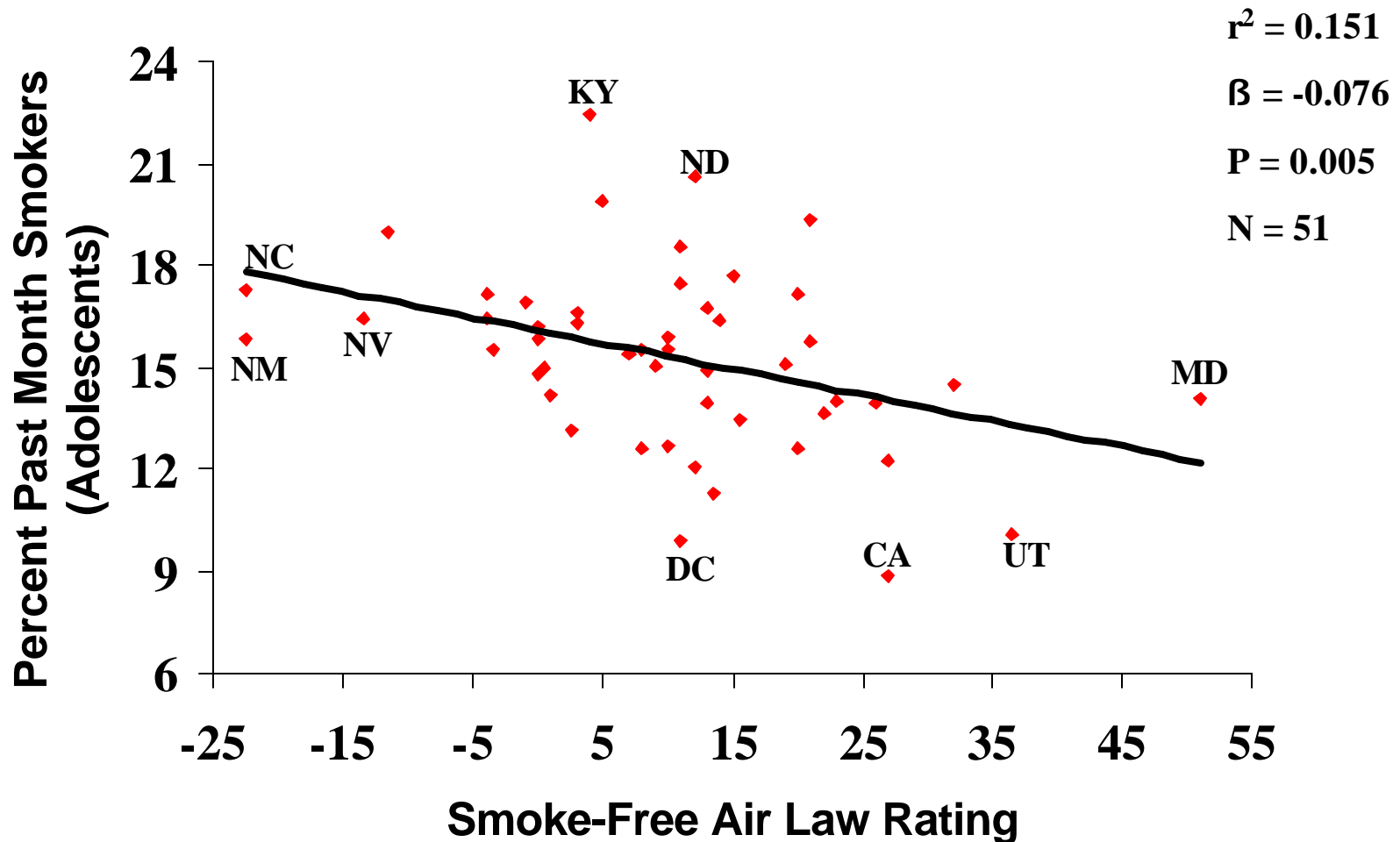
# Mean Smoke-Free Air Law Rating in 50 States and the District of Columbia, United States, 1991-2003



Note: Smoke-free air index without preemption was used; theoretical range = 0~40

Sources: ALA's SLATI, CDC's STATE system, the MayaTech Corporation, and the Roswell Park Cancer Institute.

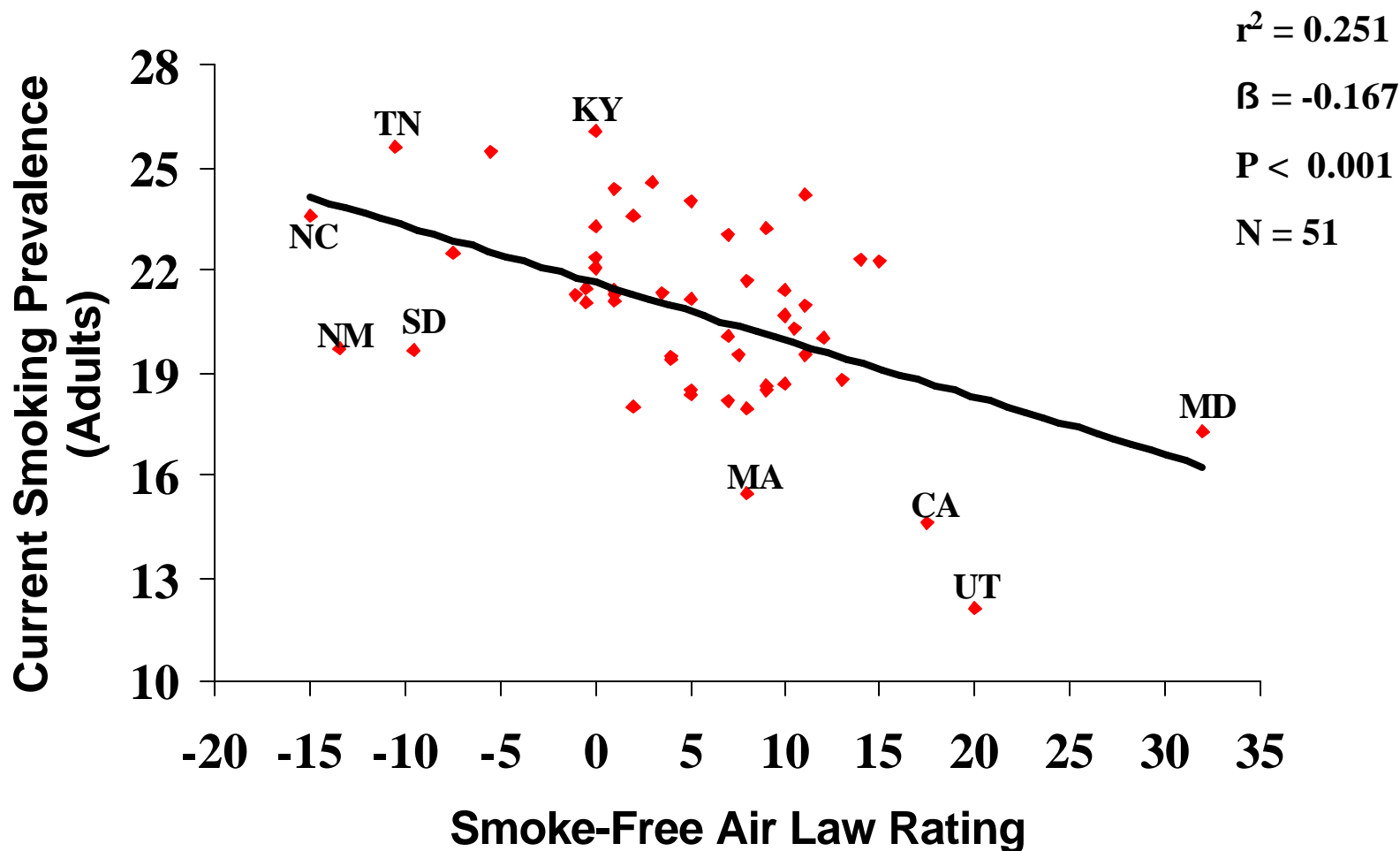
# Cigarette Smoking Among Youth by the Smoke-Free Air Law Rating in 50 States and the District of Columbia, 1999/2000



Sources: 1999/2000 NHSDA (12-17 year olds); ALA's SLATI, CDC's STATE system, the MayaTech Corporation, and the Roswell Park Cancer Institute.

Note: 1. Past Month Smoking = smoked on  $\geq 1$  day in the previous 30 days;  
2. Smoke-Free Air law rating for youth in 1999 was used.

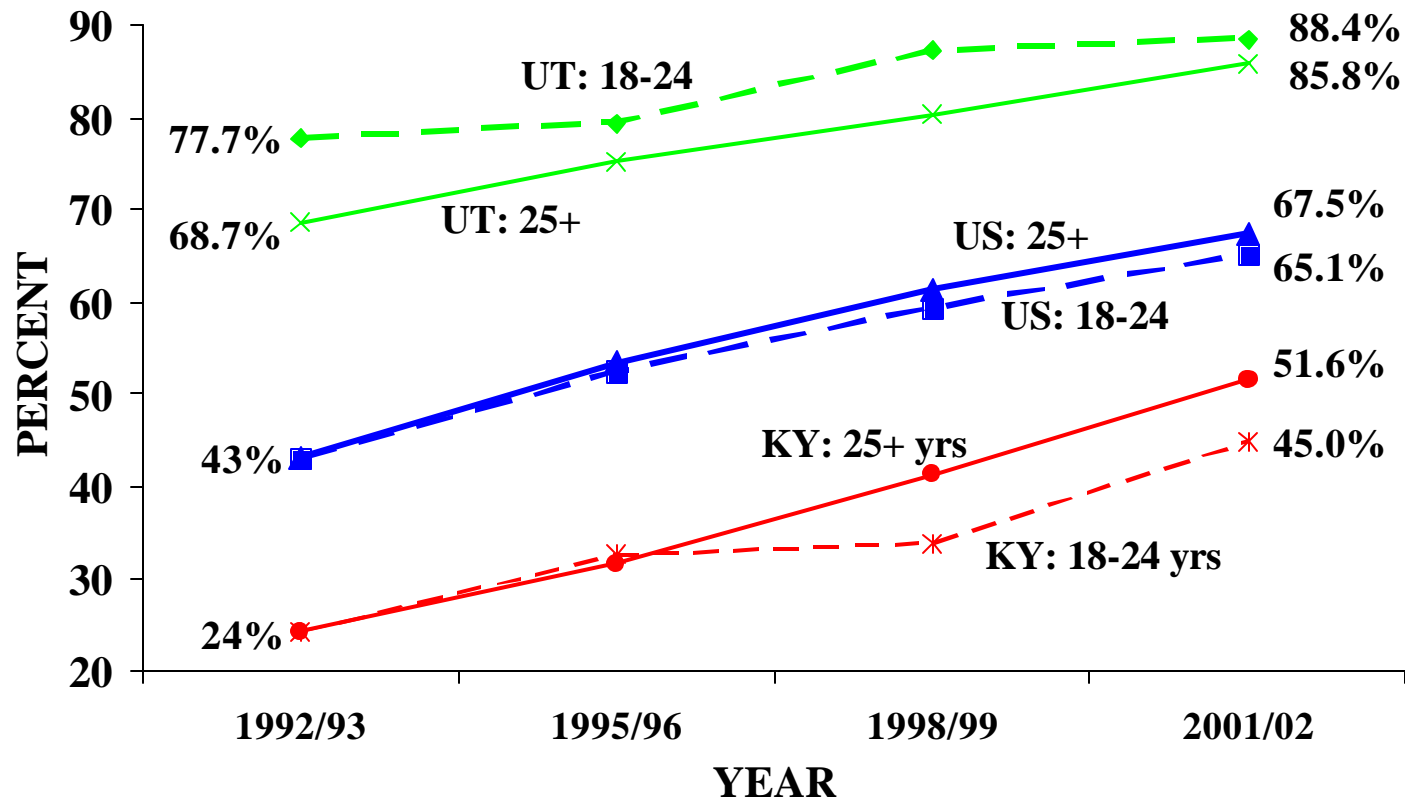
# Cigarette Smoking Among Adults Aged 25 Years and above by the Smoke-Free Air Law Rating in 50 States and the District of Columbia, 2001/2002



Sources: 2001/2002 TUS-CPS (25 years or older); ALA's SLATI, CDC's STATE system, MayaTech, and the Roswell Park Cancer Institute.

Note: Smoke-Free Air law rating for adults in 2001 was used.

# Prevalence of Smoke-Free Homes, by Age – United States, Utah, and Kentucky; 1992/93 to 2001/02



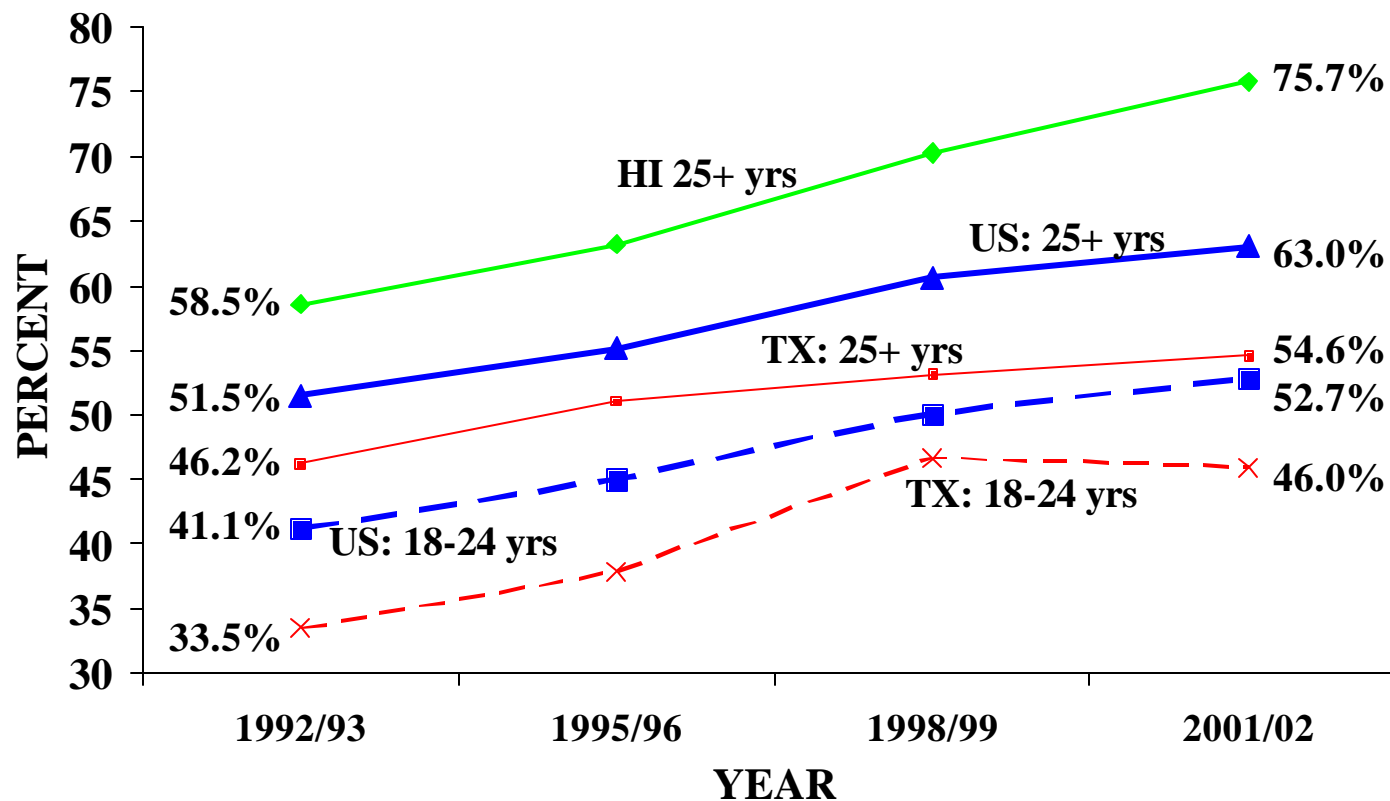
Source: NCI Tobacco Use Supplement to the Current Population Survey Series. In 2001-02, CDC joined NCI in co-sponsoring the Supplement.

# Smoke-Free Homes – ages 25+ years (CPS)



	<u>92/93 (%)</u>	<u>01/02 (%)</u>	<u>% Change</u>
<b>National</b>	43.1	67.5	+ 56.7
<b>High States</b>			
Utah	68.7	85.8	+ 24.8
California	59.2	79.4	+ 34.2
Idaho	51.7	75.8	+ 46.6
<b>Low States</b>			
Kentucky	24.4	51.6	+111.6
Missouri	33.4	57.8	+ 73.1
N. Carolina	34.3	58.3	+ 69.9

# Percent of Smokers who Received Advice to Quit from a Physician During the Previous Year – United States, Hawaii, and Texas, 1992/93 to 2001/02



Source: NCI Tobacco Use Supplement to the Current Population Survey Series. In 2001-02, CDC joined NCI in co-sponsoring the Supplement. Note: Percentages are among current smokers who had visited a physician during the previous year. Estimates for 18-24 year old smokers in Hawaii were not reliable and thus are not presented.

# Receipt of Stop-Smoking Advice from a Physician During Previous Year – ages 25+ years (CPS)

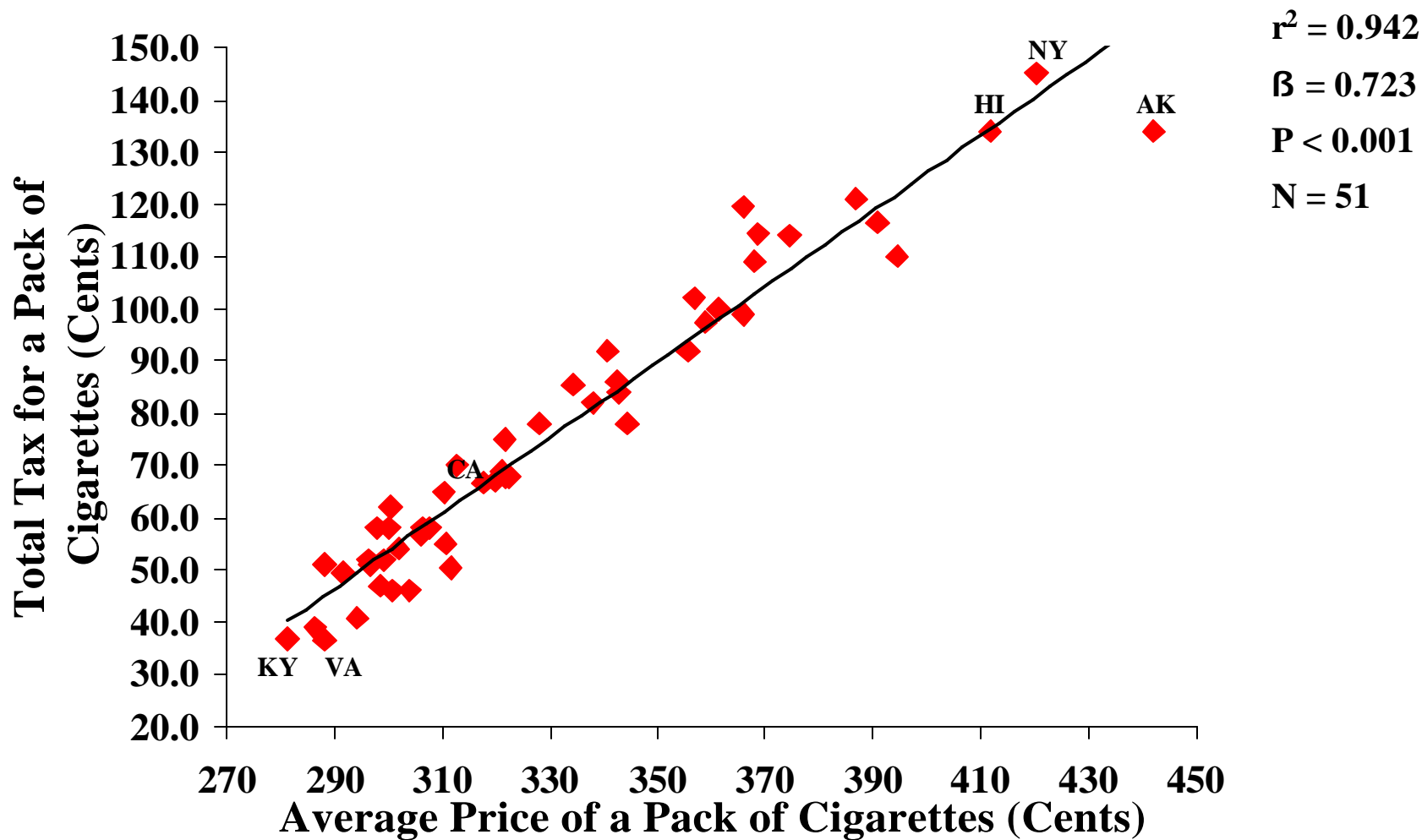
	<u>92/93 (%)</u>	<u>01/02 (%)</u>	<u>% Change</u>
<b>National</b>	51.5	63.0	+ 22.2
<b>High States</b>			
Hawaii	58.5	75.7	+ 29.5
Maine	54.6	72.3	+ 32.5
R. Island	58.4	71.8	+ 23.0
<b>Low States</b>			
Texas	46.2	54.6	+ 18.1
Arkansas	43.0	55.6	+ 29.3
Nebraska	41.3	55.9	+ 35.2

**Note: Percentages are among current smokers who had visited a physician during the previous year**

# Cigarette Taxes as a Percentage of Retail Price (Tax Burden on Tobacco)

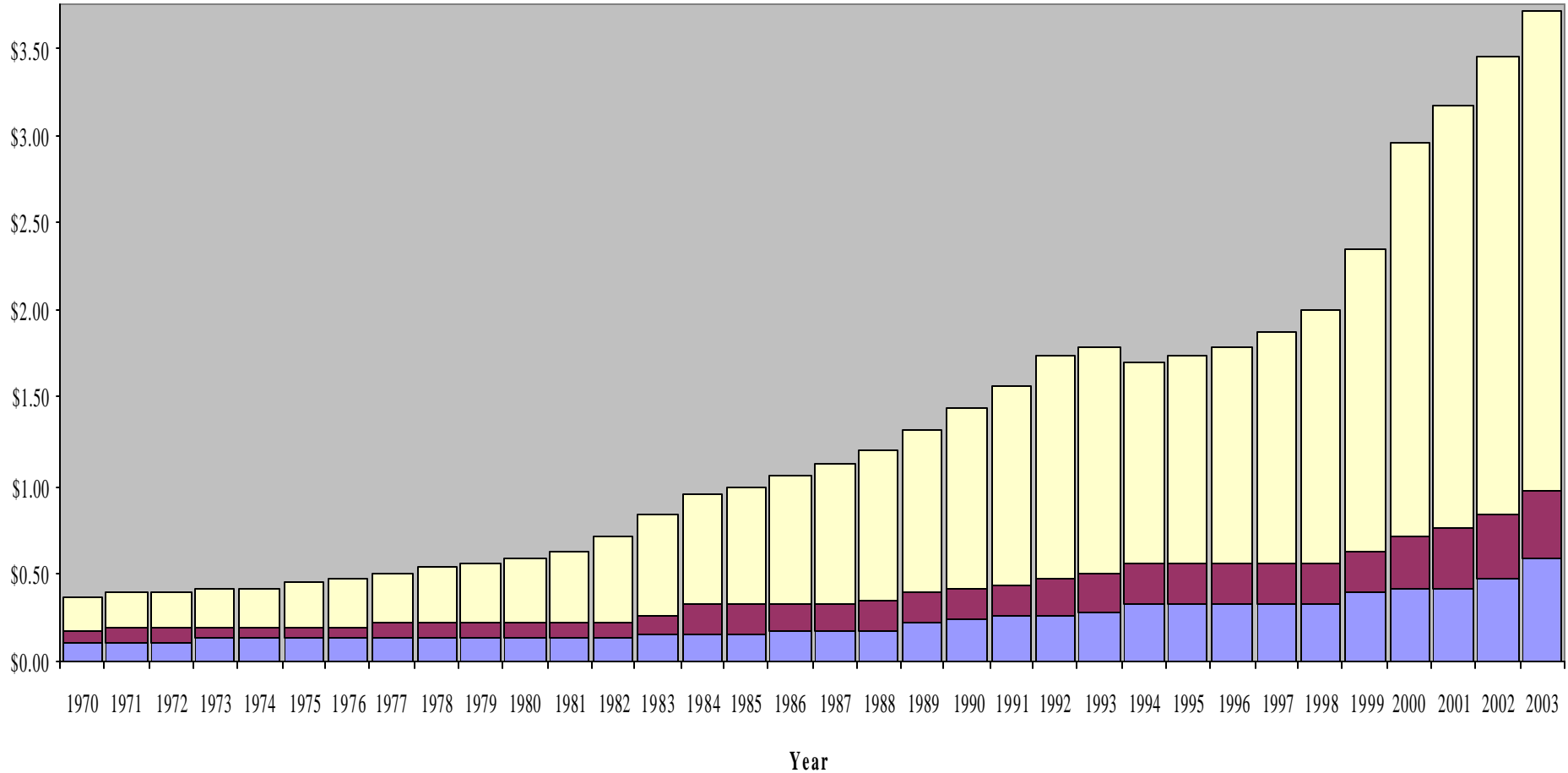
	<u>1991 (%)</u>	<u>2001 (%)</u>	<u>% Change</u>
<b>National</b>	<b>25.5</b>	<b>22.5</b>	<b>- 11.8</b>
<b>High States</b>			
New York	30.4	34.5	+ 13.5
Rhode Island	30.9	32.7	+ 5.8
Hawaii	18.5	32.5	+ 75.9
<b>Low States</b>			
North Carolina	16.7	13.6	- 18.3
Kentucky	17.4	13.2	- 24.5
Virginia	14.8	12.7	- 14.4

# Total Tax for a Pack of Cigarettes <sup>(1)</sup> and Average Price of a Pack of Cigarettes <sup>(2)</sup> in the United States, 2001



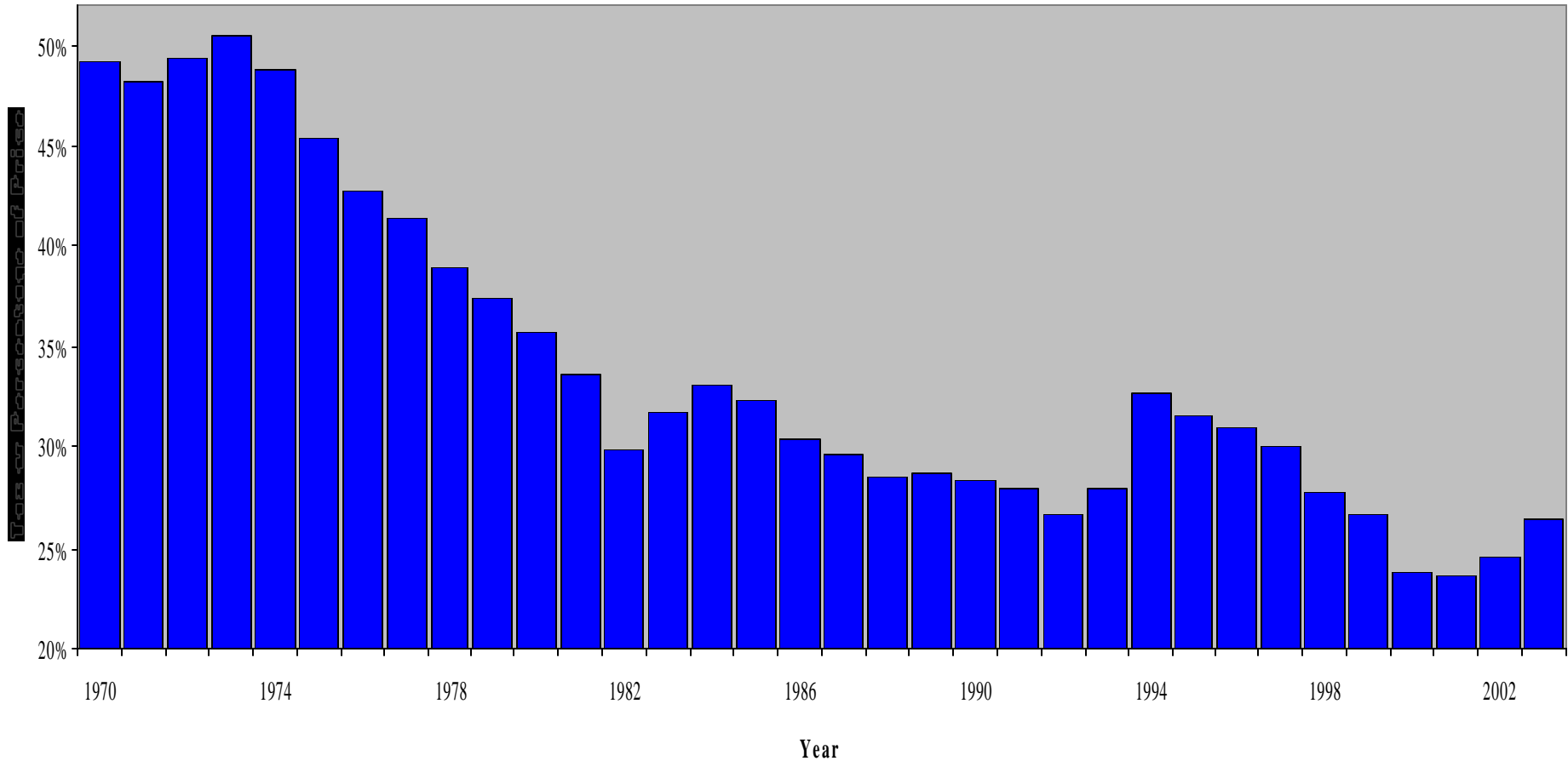
Note: Tax and price of cigarettes were adjusted for inflation;  
Price of cigarettes included generic cigarettes.

# Cigarette Taxes and Prices, 1970-2003



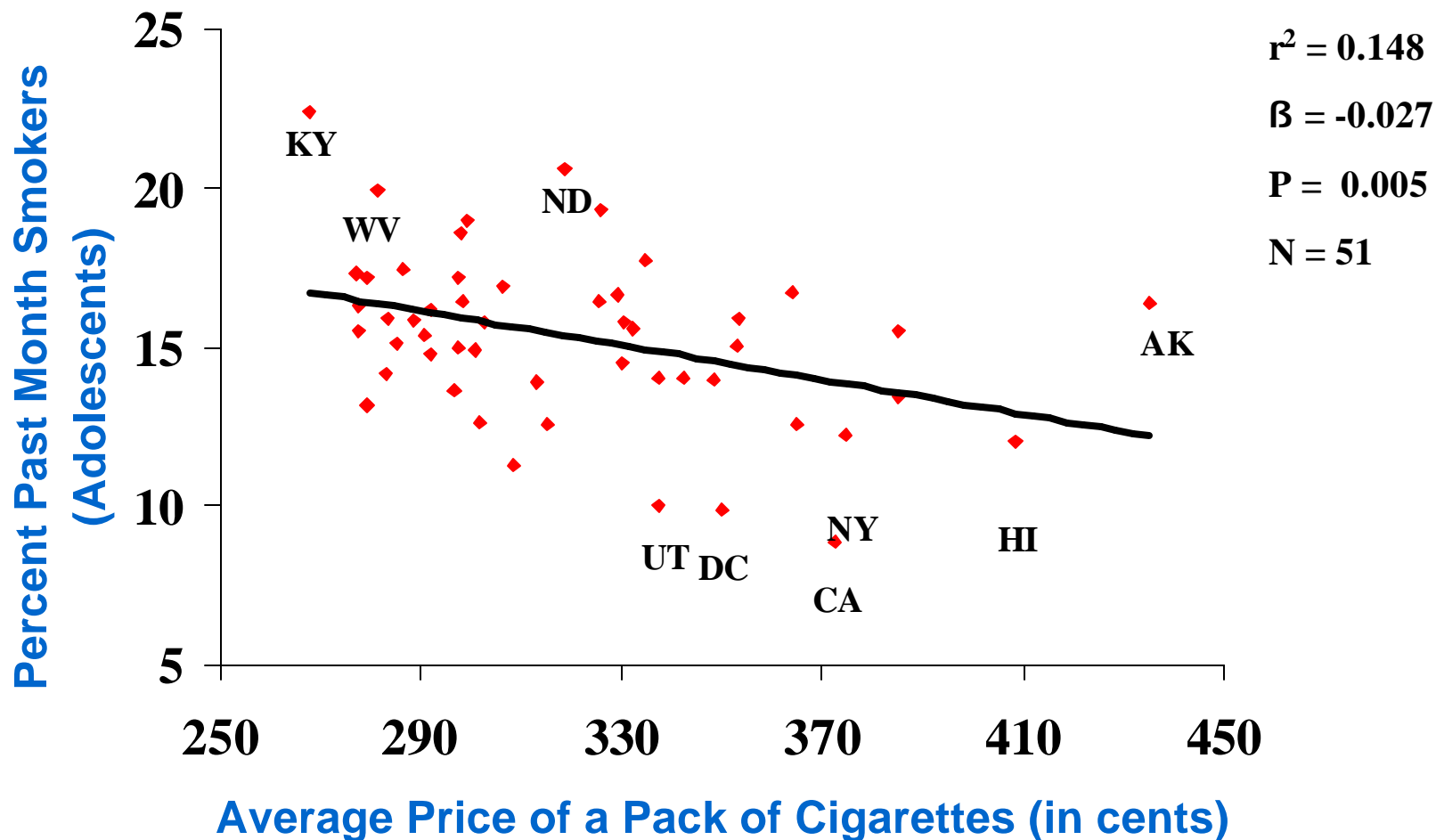
State Tax Federal Tax Net of Tax Price

# Tax as Percentage of Price, 1970-2003



■ Tax as Percentage of Price

# Cigarette Smoking Among Youth by the Average Price of a Pack of Cigarettes in 50 States and the District of Columbia, 1999/2000

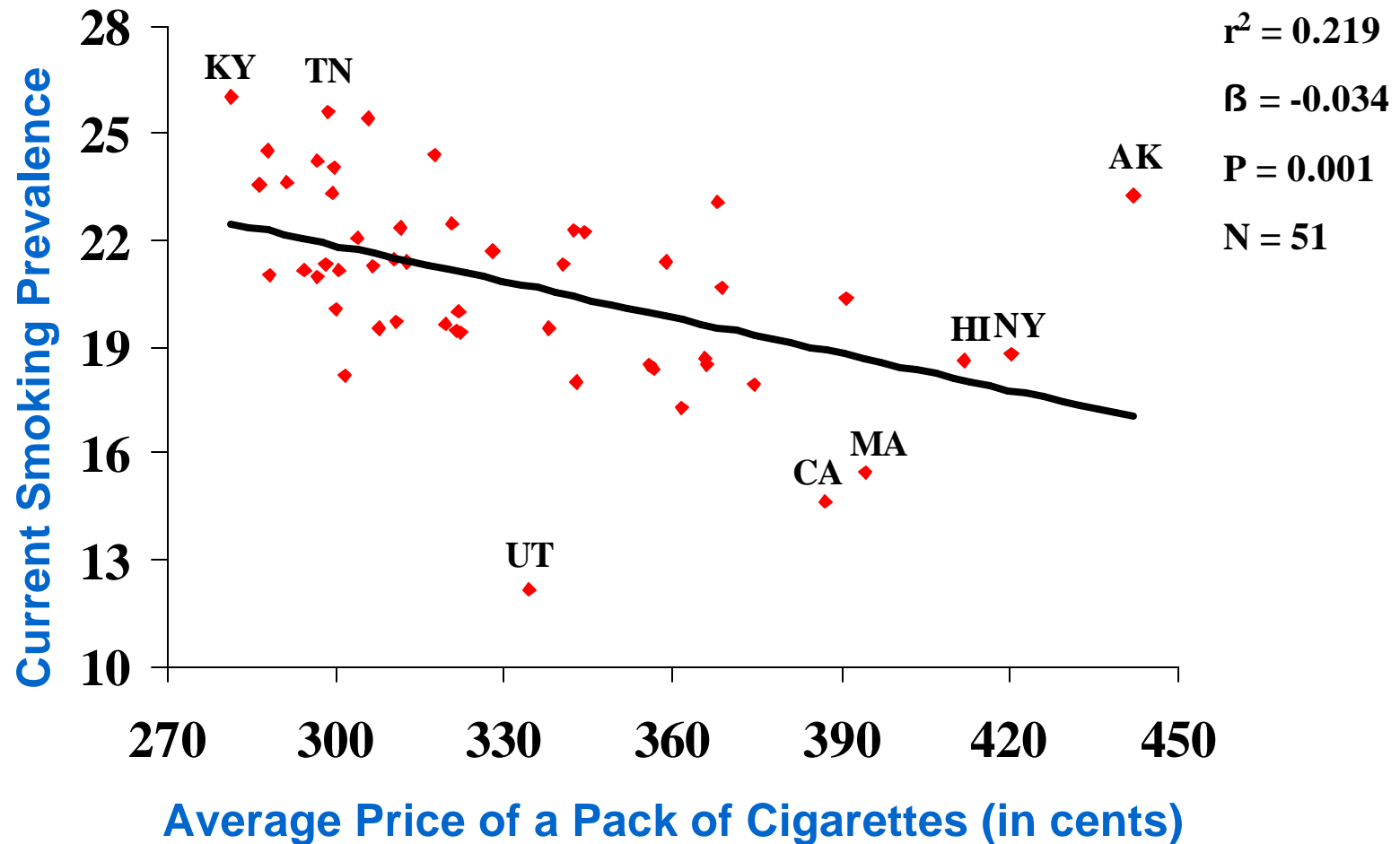


Sources: 1999/2000 NHSDA (12-17 year olds); 1999/2000 *Tax Burden On Tobacco*.

Note: 1) Past Month Smoking = smoking on  $\geq 1$  day during the previous 30 days;

2) Price of cigarettes was adjusted for inflation, and it did not include generic brands of cigarettes.

# Current Smoking Prevalence among People Aged 25 Years or Older by the Average Price of a Pack of Cigarettes in 50 States and the District of Columbia, 2001/2002

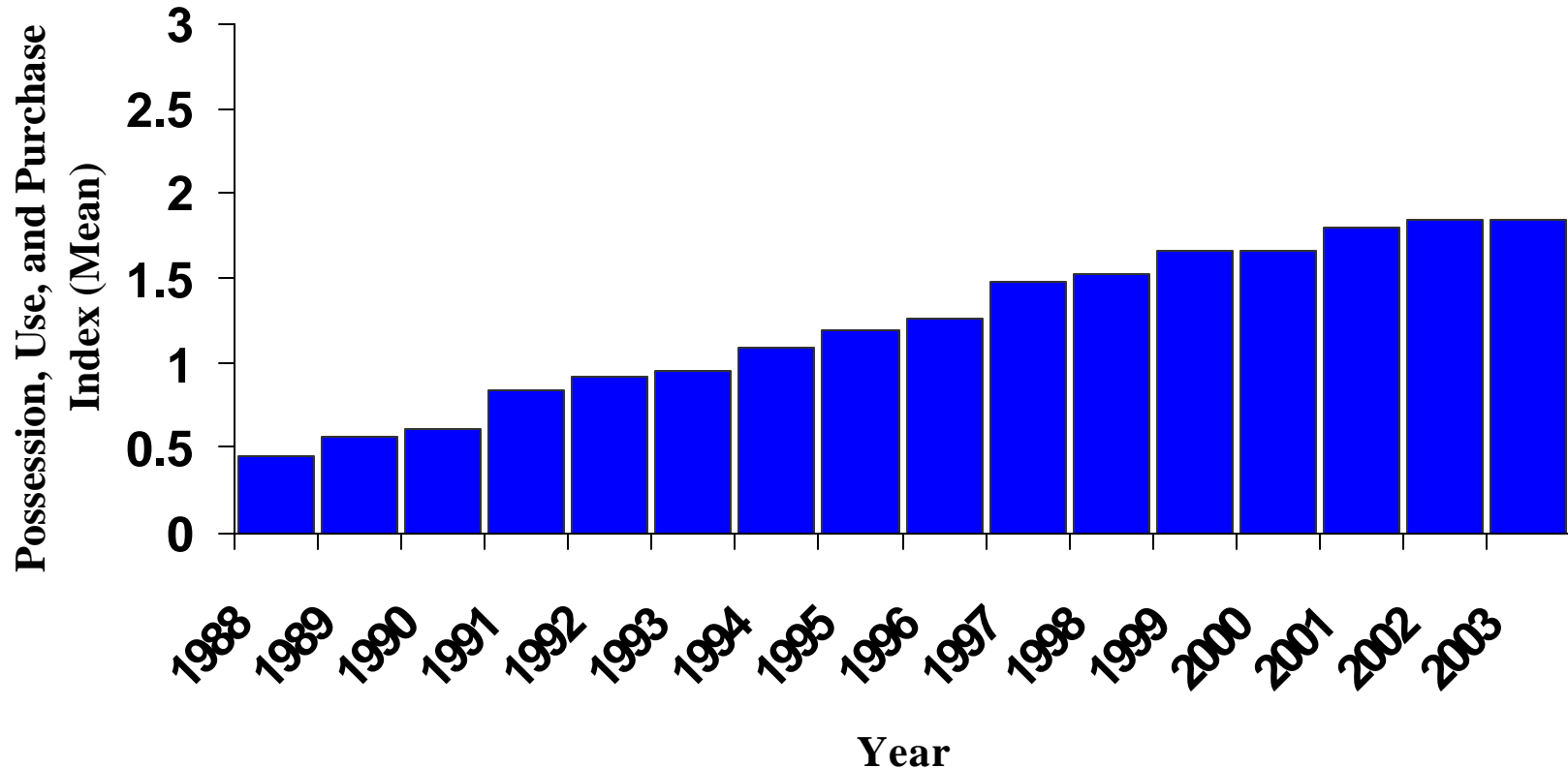


Sources: 2001/2002 TUS-CPS; 2001 *Tax Burden On Tobacco*.

Note: 1) Current smoking prevalence was based on crude estimate;

2) Price of cigarettes was adjusted for inflation, and it included generic brands of cigarettes.

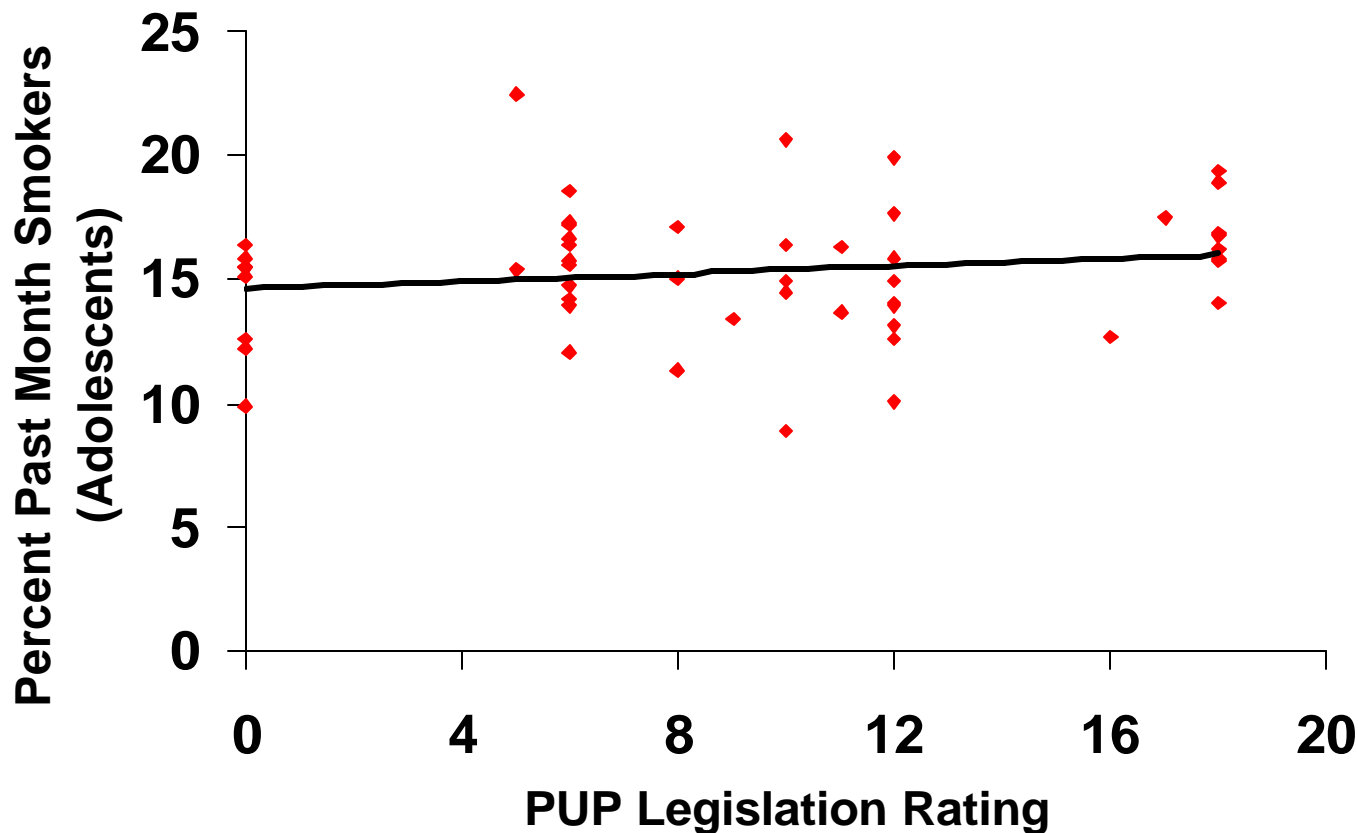
# Mean Number of Possession, Use, and Purchase Laws per State\* -- United States, 1988-2003\*\*



\*Includes the District of Columbia; Theoretical Range = 0-3; Includes 1<sup>st</sup> quarter of 2003 only.

\*\*Sources: ALA's SLATI, CDC's STATE system, the MayaTech Corporation, and the Roswell Park Cancer Institute.

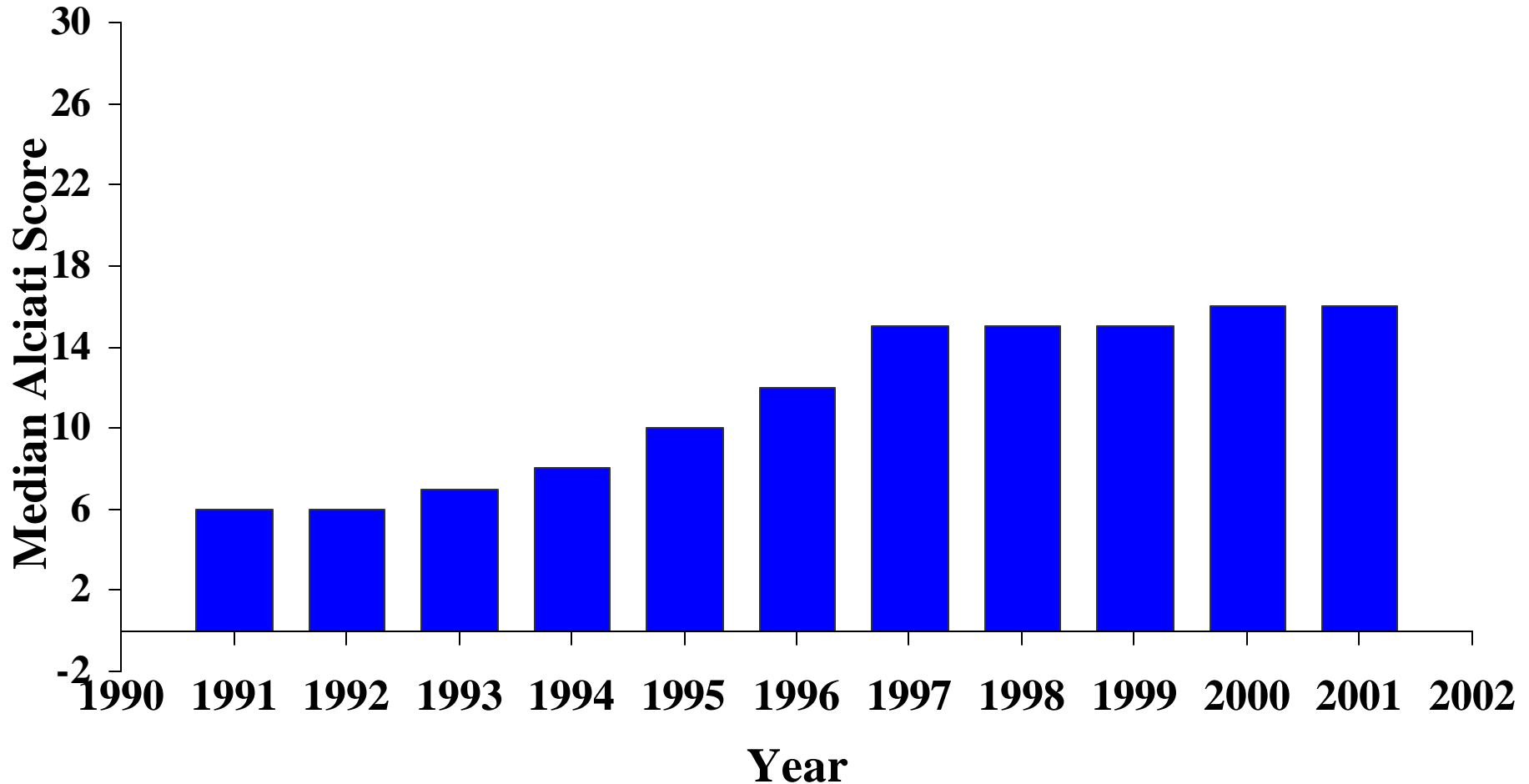
# Cigarette Smoking Among Youth in 1999/2000 by the Historical PUP Legislation Rating in 50 States and the District of Columbia from 1995 to 2000\*



Note: Past Month Smoking = smoked on  $\geq 1$  day during the previous 30 days; Historical PPU Legislation Rating = Sum of PPU laws for previous 1995-2000; (0 = no law; 1 = law present, from 0 to 3 laws)

Sources: Prevalence data from 1999-2000 NHSDA (12-17 year olds); PUP data from ALA's SLATI, CDC's STATE system, the MayaTech Corporation, and the Roswell Park Cancer Institute

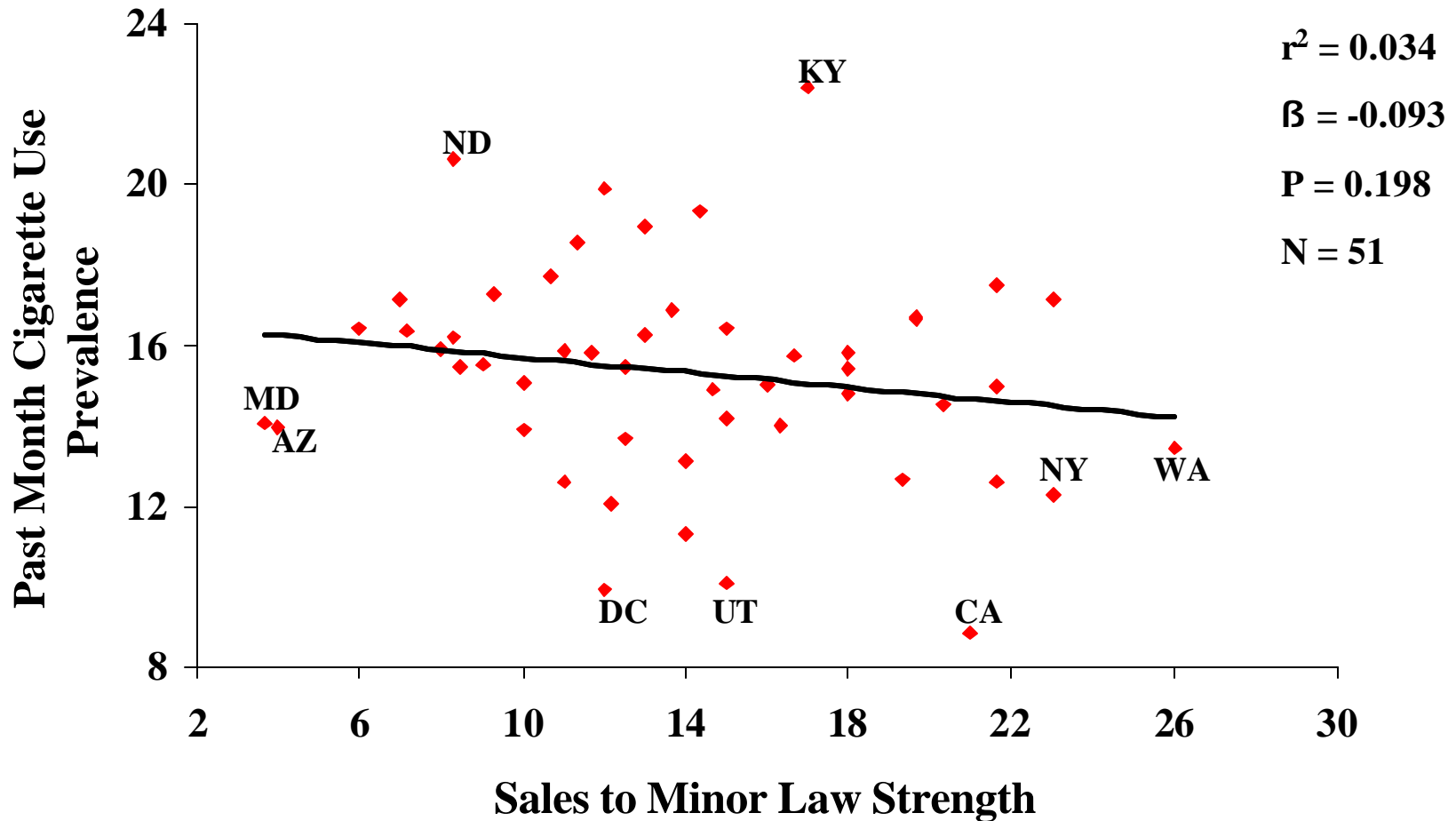
# Sales to Minor Law Strength (Alciati) in 50 States and the District of Columbia, United States 1991-2001



Note: Median scores of Alciati index were used. Theoretical range = 0-30.

Sources: The MayaTech Corporation and the Roswell Park Cancer Institute.

# Sales to Minor Law Strength and NHSDA Past Month Cigarette Use Prevalence among 12-17 Years Old--United States, 1995 to 2000



Sources: Past month cigarette use from 1999/2000 NHSDA (12-17 year olds); STM index data from the MayaTech Corporation. Based on Alciati et al. in *Tobacco Control*, 1998;7:345-352.

Notes: 1. Past Month Smoking = smoking on  $\geq 1$  day during the previous 30 days; STM Index was averaged from 1995 to 2000.

# Conclusions

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- Many encouraging prevalence trends – even some slopes in lagging states are often similar to those in leading states.
- Many state-specific policies also improving.
- Ecologic data presented here are consistent with tobacco control literature: price/tax and smoke-free air laws are generally considered the most effective policies.
- Visit <http://www.impacteen.org/tobaccodata.htm>.
- Analyses of media and tobacco control expenditures are available from other sources.