

SmokeLess States: Evaluating Tobacco Legislation to Understand Policy Outcomes

**Cindy Tworek¹, Anna Sandoval², Mecca
Thompson², Deborah Harper², Sandy Slater², Frank
Chaloupka²**

**¹Pacific Institute for Research and Evaluation, Center for Public Health
Improvement and Innovation; ²University of Illinois at Chicago, Institute for
Health Research and Policy**

American Public Health Association, Boston, MA

November 7, 2006

Introduction

- **A legislative component was included in the SLS Evaluation Project to study tobacco control policy and regulation by tracking tobacco-related bills through the legislative process.**
- **A coding system and database were developed to track tobacco-related legislation and obtain measures of impact on tobacco control policies.**
- **A total of 17 tobacco-related categories were identified and defined to create a coding scheme.**

Purpose

- **To describe the volume of tobacco-related bills, and their topic areas, introduced and/or enacted in state legislatures.**
- **To recognize different topic areas and tobacco-related legislation introduced, enacted, and coded as part of SLS Evaluation Project.**

Methods

- Tobacco-related bills considered for legislation in the US Congress among 50 states from January 2002 to December 2003 were downloaded from StateNet and Westlaw websites.
- Search terms used to identify tobacco related bills were “tobacco,” “smok,” “master settlement,” and “cigar.”
- A database with all downloaded bills was created to capture the total number of tobacco-related bills introduced by states during this time period.

Methods

- Five SLS researchers coded 26 samples of bills, with 20 tobacco-related bills per sample, to validate the developed coding scheme and assess coding reliability.
- Descriptive analyses were used to determine the number of tobacco-related bills per coding category and state.
- A SAS program was used to generate Cohen's Kappa values, measuring agreement among researchers.

Tobacco-Related Coding Categories

AGR	Agriculture	BUDG	Budget
DIST	Distribution	INS	Insurance
INV	Investment	TAX	Taxation
SFA	SmokeFree Air	SMRTS	Smokers Rights
MKTG	Marketing	MED	Medicaid
TORT	Tobacco Litigation	YASM	Youth Access: Sales to Minors
MSA	Master Settlement Agreement	YAPUP	Youth Access: Purchase, Use, Possession
PECTCP	Prevention, Education, Cessation, and Tobacco Control	MISC	Miscellaneous
		XNOTL	Exclude: No Tobacco Language

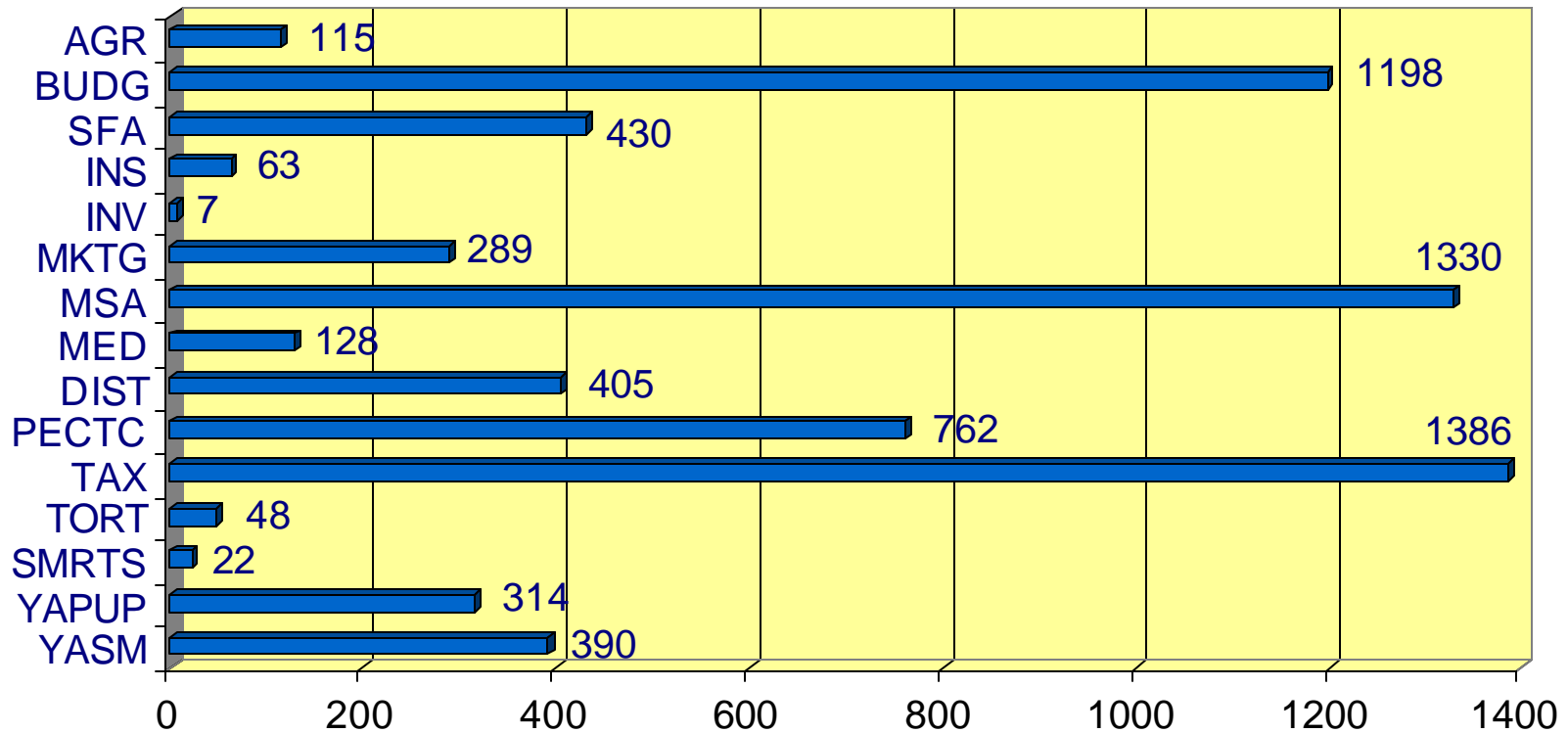
Kappa Values: Tobacco-Related Coding Categories

AGR	.76
BUDG	.81
SFA	.84
INS	.57
MKTG	.54
MSA	.91
MED	.41
MISC	.53
PECTCP	.77
DIST	.56
TAX	.87
YASM	.72
YAPUP	.56
XNOTL	.91

Kappa Value	Strength of Agreement
= 0	Poor
.01 – .20	Slight
.21 – .40	Fair
.41 – .60	Moderate
.61 – .90	Substantial
.91 – 1.00	Almost Perfect

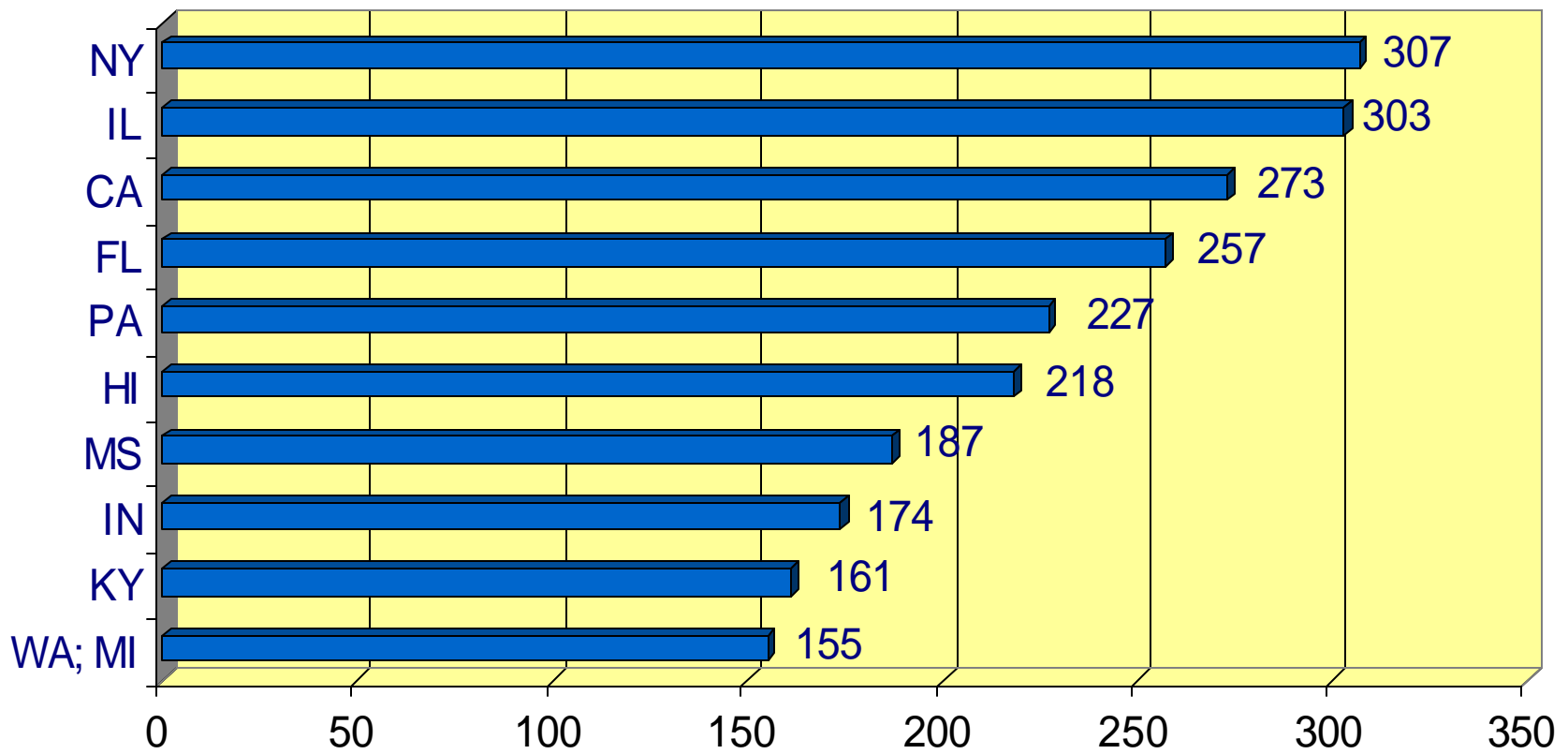
Tobacco-Related Coding Categories

Total Number of Bills per Category



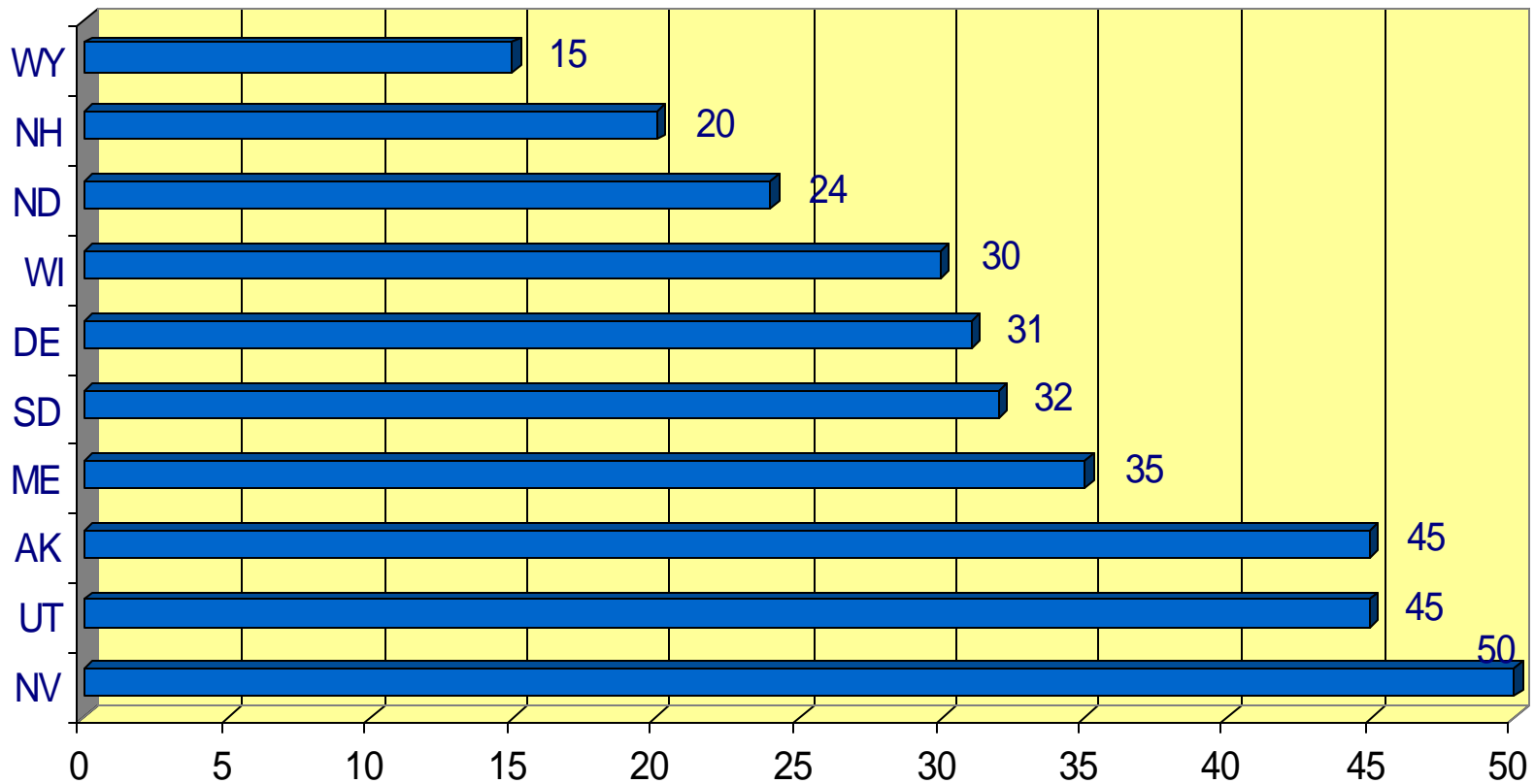
Tobacco-Related Legislation

States with Highest Number of Tobacco-Related Bills



Tobacco-Related Legislation

States with Lowest Number of Tobacco-Related Bills



Enacted Tobacco-Related Legislation

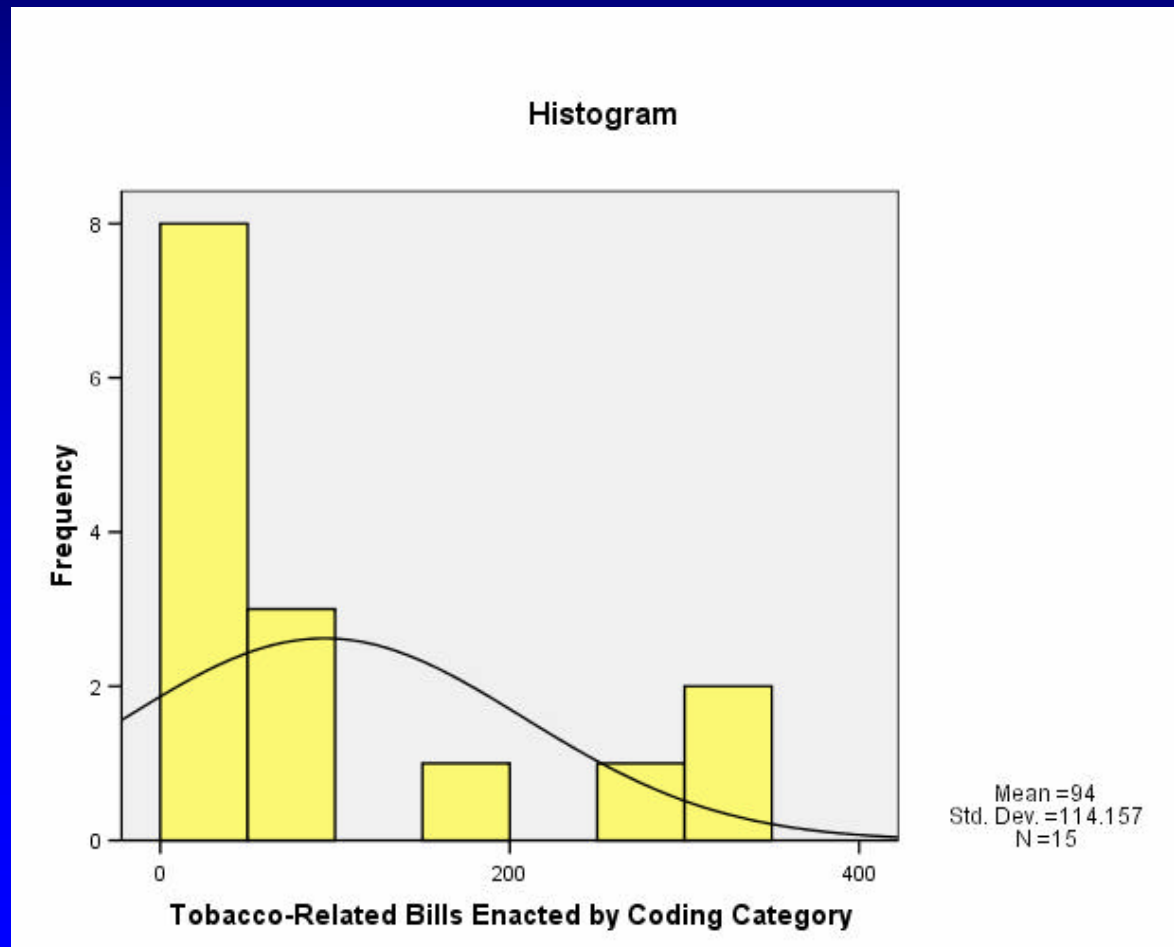
- **Researchers coded: 5,618 tobacco-related bills from the 50 states in the 2002-2003 legislative session, with a mean of 112 bills coded per state (SD = \pm 71.90).**
- **This corresponds to 12,634 tobacco-related bill versions coded among 50 states, with a mean of 253 bill versions coded per state (SD = \pm 214.96).**
- **On average, there were approximately 2 bill versions coded for each tobacco-related bill identified and coded.**

Enacted Tobacco-Related Legislation

- **Bill status was tracked and documented through the legislative process for all versions of a bill identified and coded.**
- **There were a total of 1,149 tobacco-related bills that became enacted legislation from 15 coding categories in all 50 states.**
- **These enacted bills represent 20.5% of all tobacco-related bills identified and coded among 50 states in the 2002-2003 legislative session.**

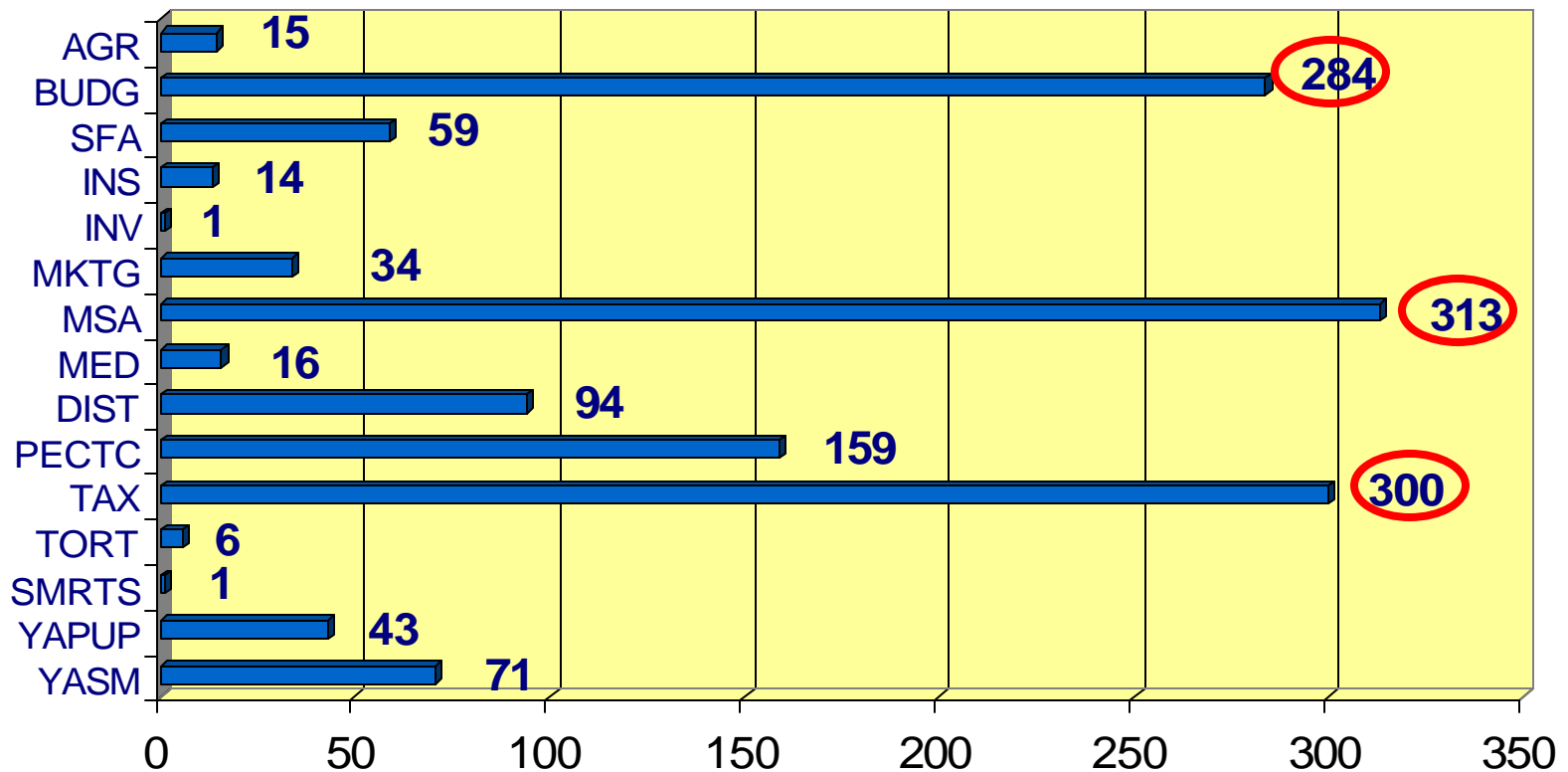
Enacted Tobacco-Related Legislation

- The mean number of enacted tobacco-related bills per coding category was 94 (representing the mean among 15 tobacco-related coding categories, $SD = \pm 114.16$).



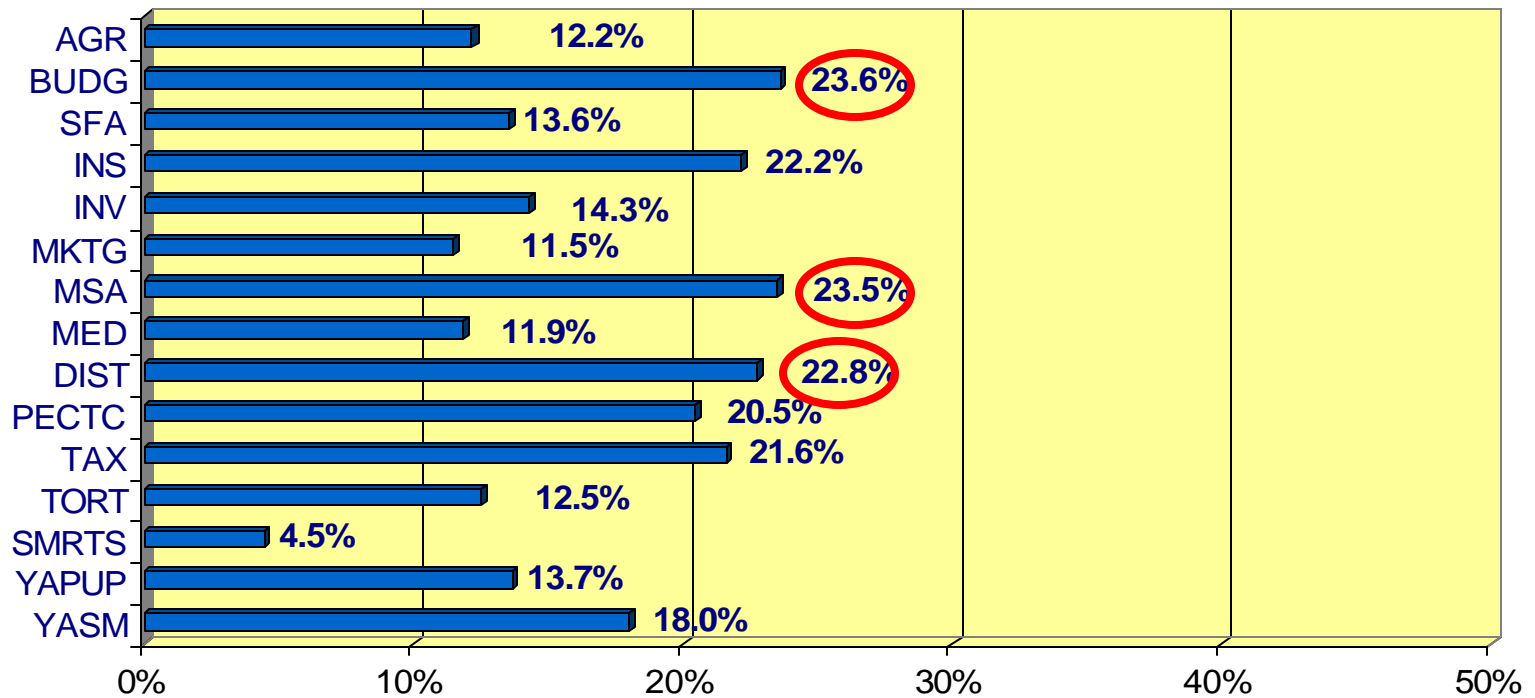
Enacted Tobacco-Related Legislation by Coding Category

Total Number of Enacted Tobacco-Related Bills per Coding Category



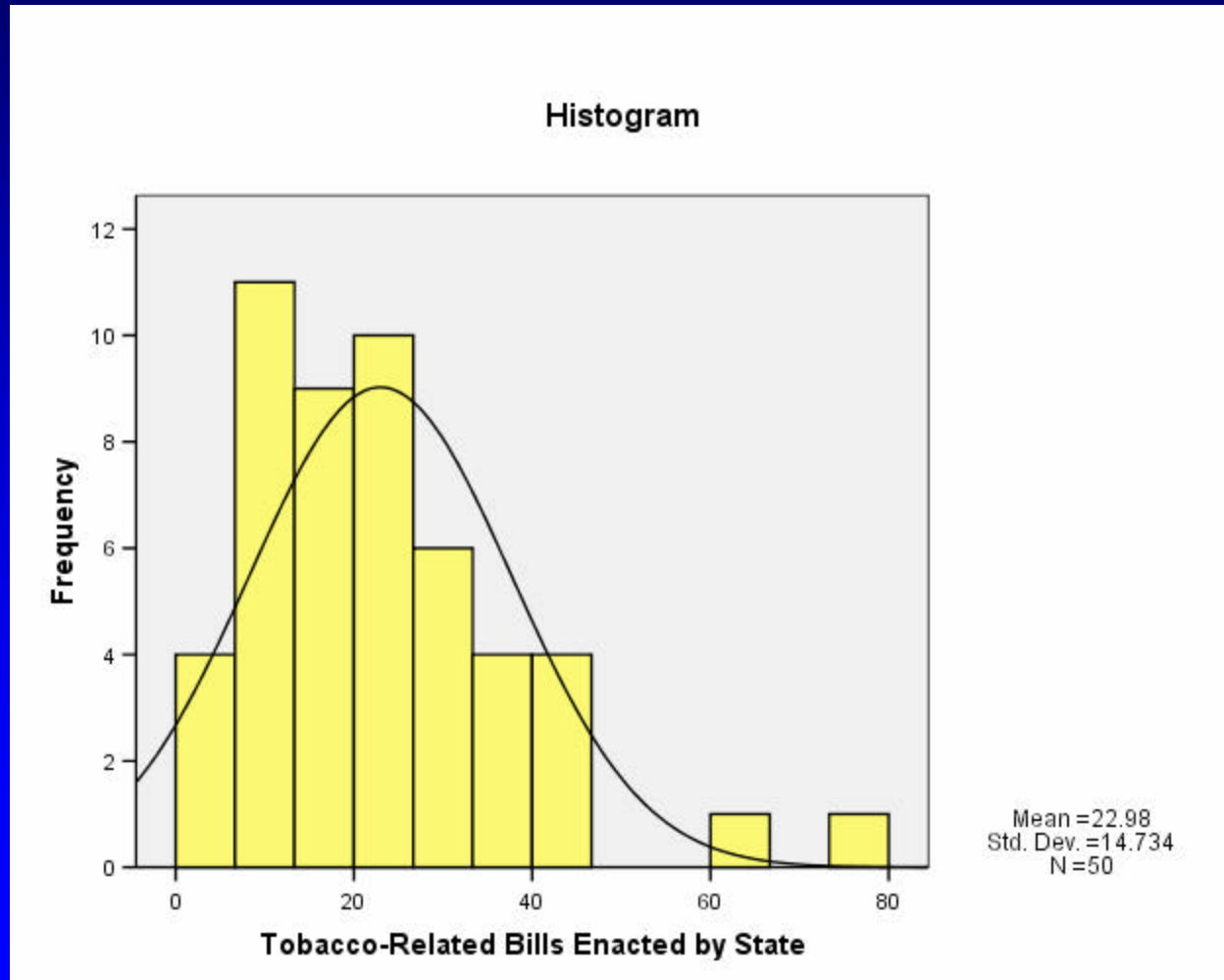
Percent of Enacted Tobacco-Related Legislation by Coding Category

Percent of Enacted Tobacco-Related Bills per Coding Category



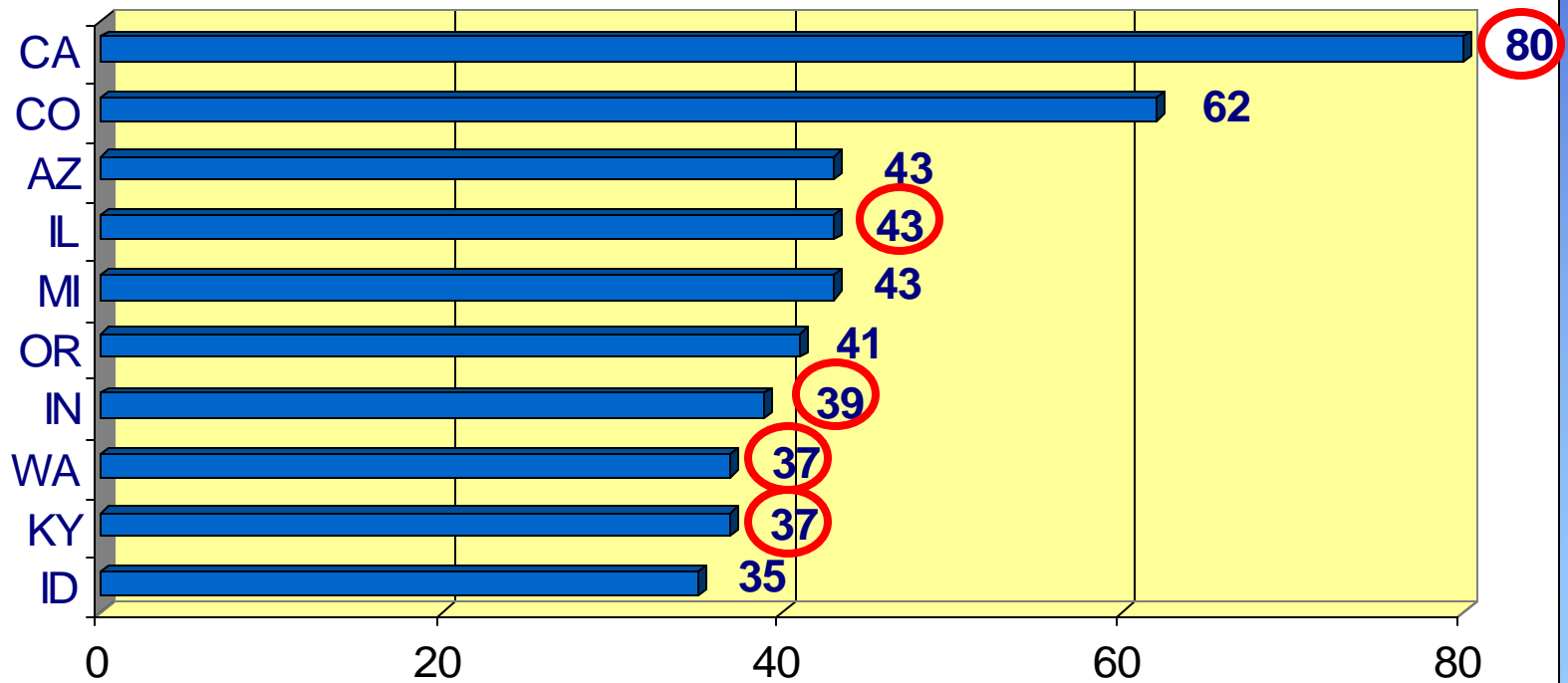
Enacted Tobacco-Related Legislation

- The mean number of enacted tobacco-related bills per state was 23 (representing the mean among 50 states, $SD = \pm 14.73$).



Tobacco-Related Enacted Legislation

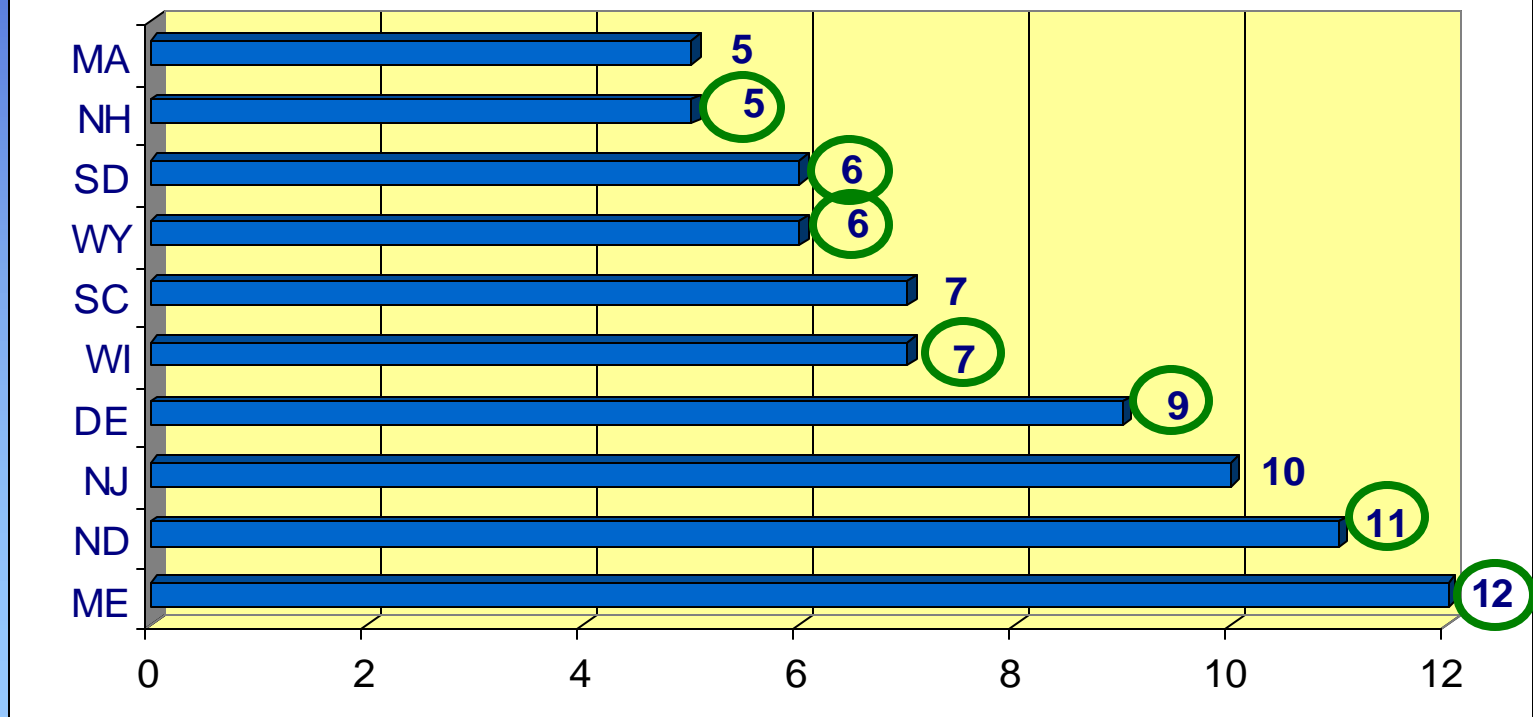
States with Highest Number of Enacted Tobacco-Related Bills




 = also states with highest number of tobacco-related bills

Enacted Tobacco-Related Legislation

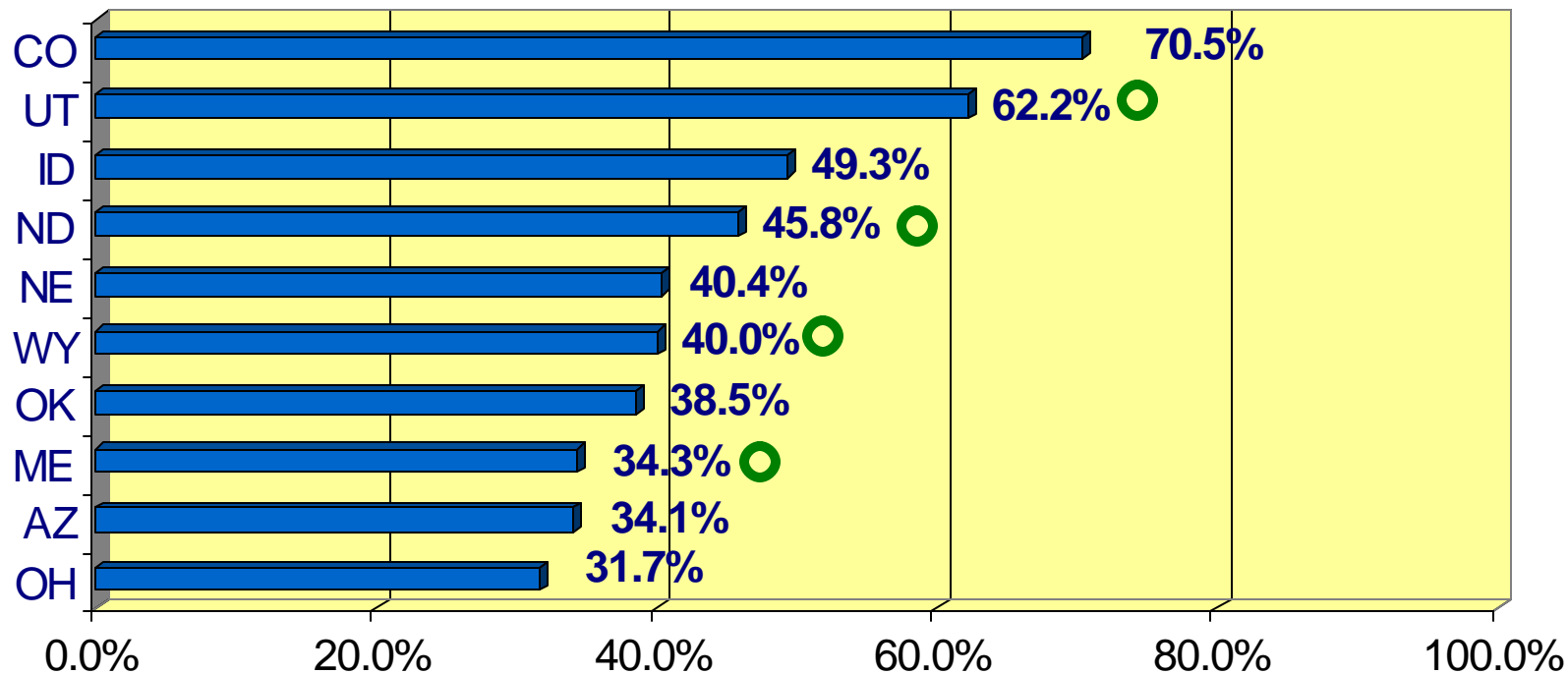
States with Lowest Number of Enacted Tobacco-Related Bills



 = also states with lowest number of tobacco-related bills

Percent of Enacted Tobacco-Related Legislation by State

Percent of Highest Number of Enacted Tobacco-Related Bills per State

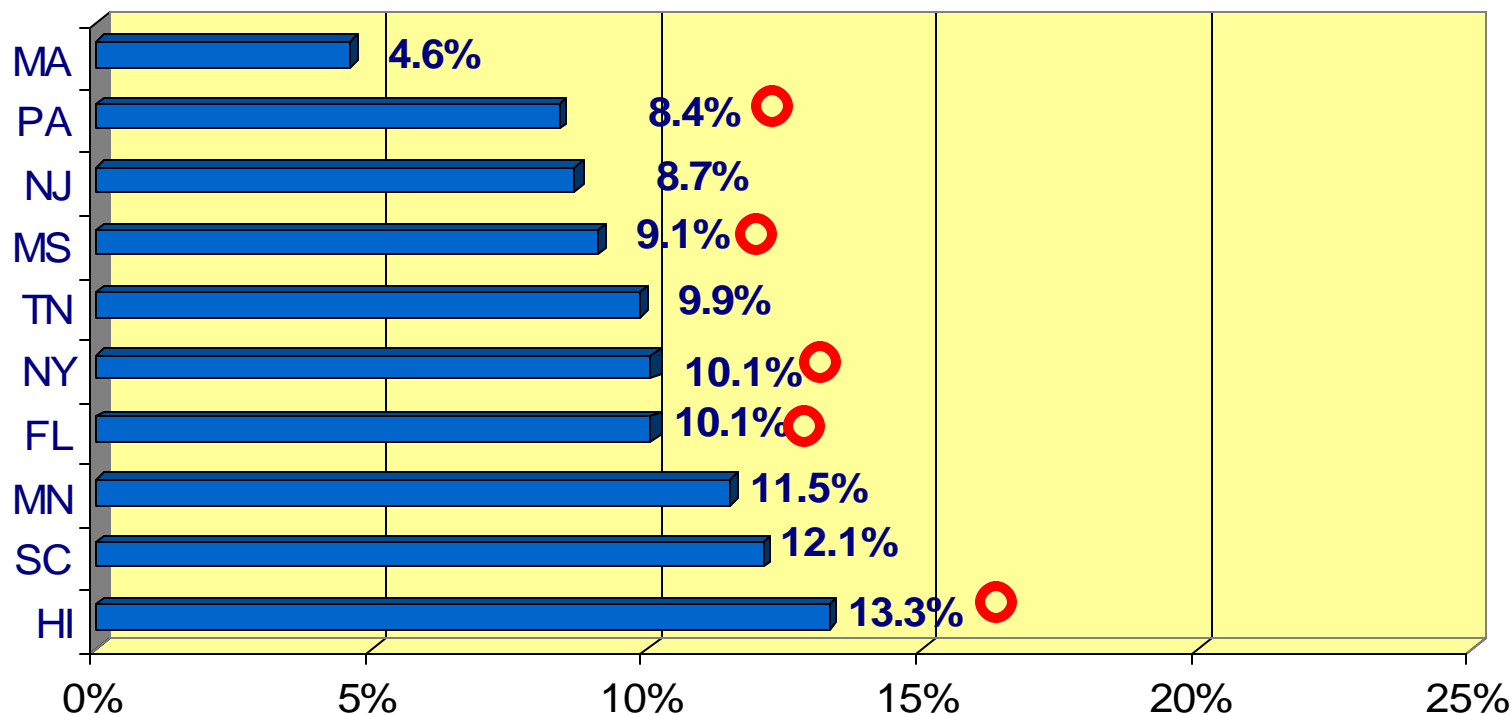


○ = also states with highest number of tobacco-related bills

○ = also states with lowest number of tobacco-related bills

Percent of Enacted Tobacco-Related Legislation by State

States with the Lowest Percent of Enacted Tobacco-Related Bills



○ = also states with highest number of tobacco-related bills

○ = also states with lowest number of tobacco-related bills

Tobacco-Related Bills: Highest by State

States: Highest Number Tobacco-Related Bills	States: Highest Number Enacted Tobacco-Related Bills	States: Highest Percent Enacted Tobacco-Related Bills
NY (307)	CA (80)**	*CO (70.5%)*
IL (303)**	*CO (62)*	UT (62.2%)
CA (273)**	*AZ (43)*	*ID (49.3%)*
FL (257)	IL (43)**	ND (45.8%)
PA (227)	MI (43)**	NE (40.4%)
HI (218)	OR (41)	WY (40.0%)
MS (187)	IN (39)**	OK (38.5%)
IN (174)**	WA (37)**	ME (34.3%)
KY (161)**	KY (37)**	*AZ (34.1%)*
MI; WA (155)**	*ID (35)*	OH (31.7%)

Tobacco-Related Bills: Lowest by State

States: Lowest Number Tobacco-Related Bills	States: Lowest Number Enacted Tobacco-Related Bills	States: Lowest Percent Enacted Tobacco-Related Bills
WY (15)**	*MA (5)*	*MA (4.6%)*
NH (20)**	NH (5)**	PA (8.4%)
ND (24)**	SD (6)**	*NJ (8.7%)*
WI (30)**	WY (6)**	MS (9.1%)
DE (31)**	*SC (7)*	TN (9.9%)
SD (32)**	WI (7)**	NY (10.1%)
ME (35)**	DE (9)**	FL (10.1%)
AK (45)	*NJ (10)*	MN (11.5%)
UT (45)	ND (11)**	*SC (12.1%)*
NV (50)	ME (12)**	HI (13.3%)

Discussion

- **Results represent a snapshot of tobacco-related bills considered and enacted in the 2002-2003 state legislative session among 50 states and 15 tobacco-related coding categories.**
- **'BUDG', 'MSA', 'DIST', and 'TAX' were the coding categories with the highest number and/or percent of enacted tobacco-related bills.**
- **The number of enacted tobacco-related bills by coding category is highly related to the total number of bills per category, and significantly correlated (Pearson Correlation = .992, $p = 0.000$).**

Discussion

- **The number of enacted tobacco-related bills by state is somewhat related to the total number of bills per state, and significantly correlated (Pearson Correlation = .562, $p = 0.000$).**
- **However, the percents of enacted legislation by coding category (Pearson Correlation = .692, $p = 0.004$), and by state (Pearson Correlation = .352, $p = 0.012$), are less correlated with their respective total numbers of bills.**
- **States differ in success related to enacting tobacco legislation, which varies by state and coding category.**

Discussion

- **Further study and detailed coding of legislation is necessary to better understand policies considered and enacted.**
- **Considered and/or enacted tobacco-related legislation cannot always be a proxy for pro-tobacco control policy** (i.e. smoke-free air preemption bills, which prohibit local ordinances with stronger SFA protection than state law).
- **Identifying tobacco-related legislation, both enacted and lacking, for specific categories can help to focus efforts and resources among public health researchers, policy advocates, and coalitions.**