

Improved Life Expectancy: What Does the Literature Tell Us? What Does Experience Tell Us?

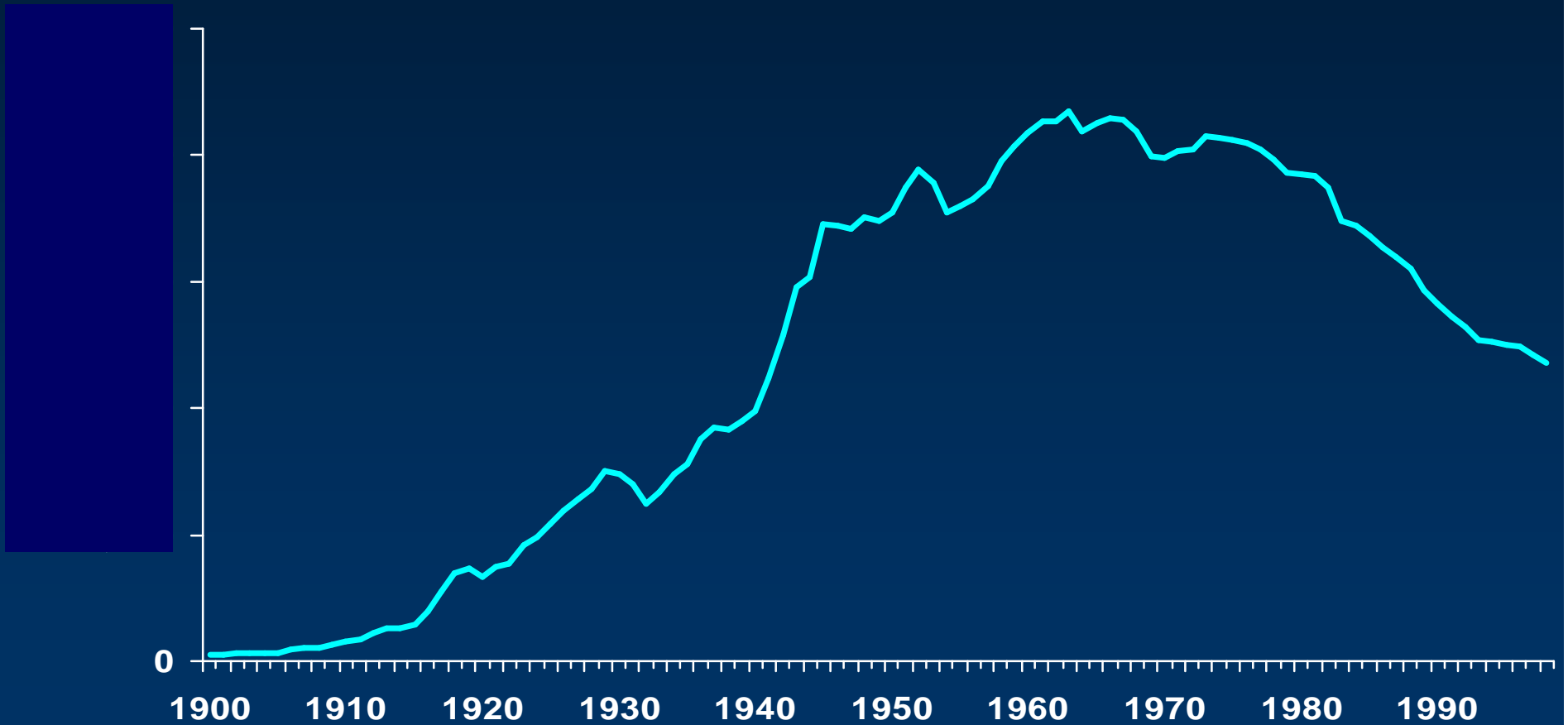
Lessons from Public Health Successes of the Last Third of the 20th Century

**Institute of Medicine Roundtable on the Promotion of
Health Equity and the Elimination of Health Disparities**

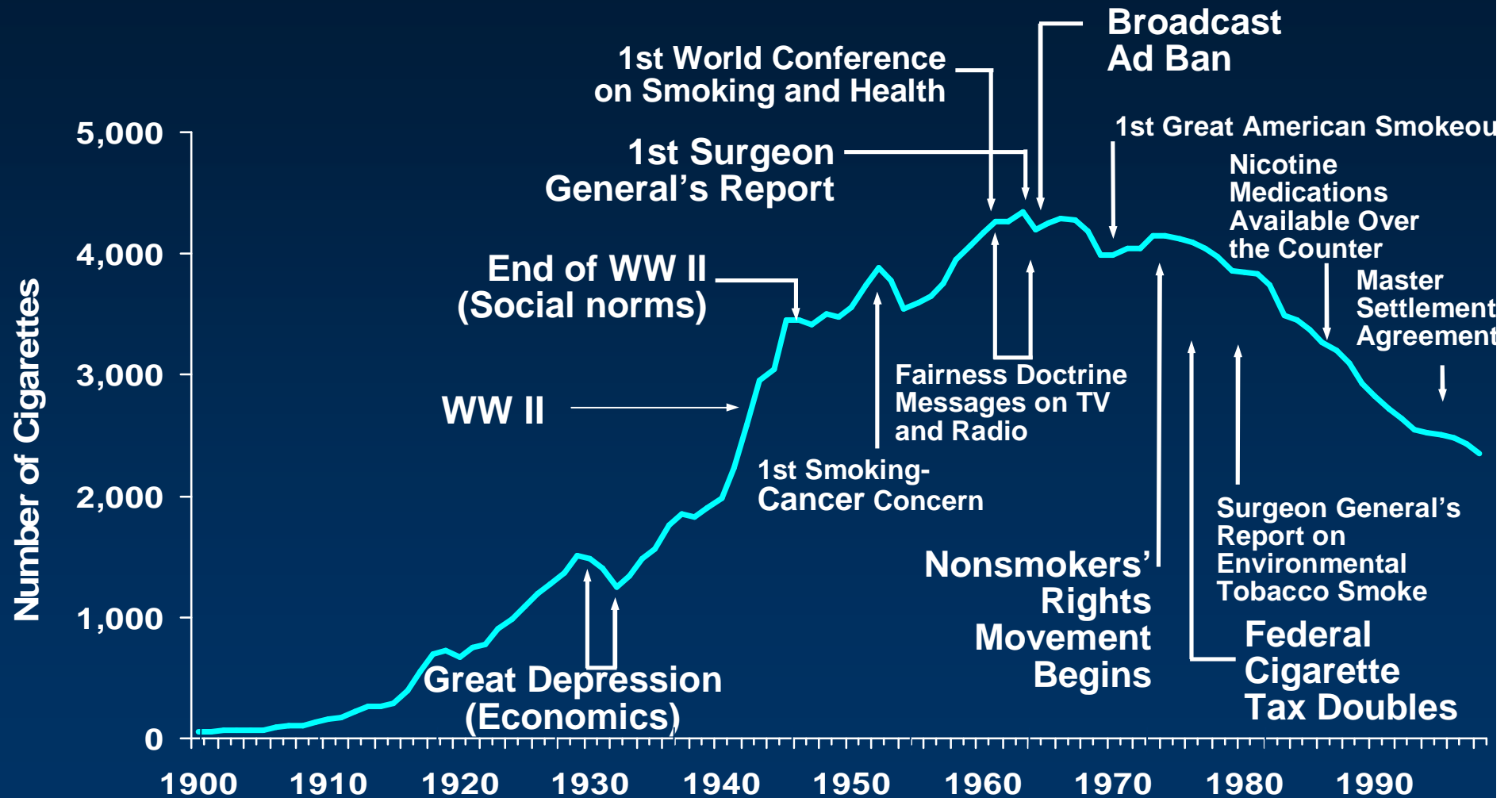
Washington, DC, Feb. 24, 2011

**Lawrence W. Green
Department of Epidemiology & Biostatistics
School of Medicine & Comprehensive Cancer Center
University of California at San Francisco**

**What is this public health achievement of the 20th Century?
What is the evaluation method to judge this an achievement?**



Adult Per Capita Cigarette Consumption and Major Historical Events—United States, 1900-2000



Source: USDA; 1986 Surgeon General's Report. MMWR 2001.

Lesson 1. The Informed Electorate Imperative: Public Health Education

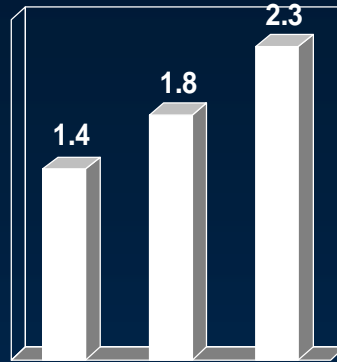
- Making citizens aware of what is happening
 - Alerting them to growing problems, trends
 - Building their understanding of consequences
- Making the public aware of its relevance to them
 - Belief in their or their children's susceptibility
 - Belief in seriousness/severity of the problem
- Making the public aware of causes, culprits, counter-actions, and community capacities
- Building community capacity for communications

Lesson 2: The Surveillance Imperative: Making Better Use of Our Natural Experiments

- Key to establishing baselines & trend lines that can be projected to warn against neglect
- Key to putting an issue on the advocacy and policy agenda
- Key to showing change in relation to other trends, policies, and program interventions
- Key to comparing progress in relation to objectives and programs, over time and between jurisdictions or settings.
- Community capacity issue: Local data are scarce.

Emergence of a Sedentary Society

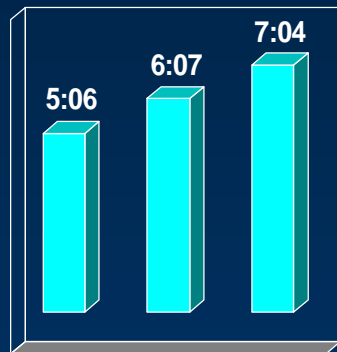
Millions of Person-Miles in Automobiles, 1970-1990



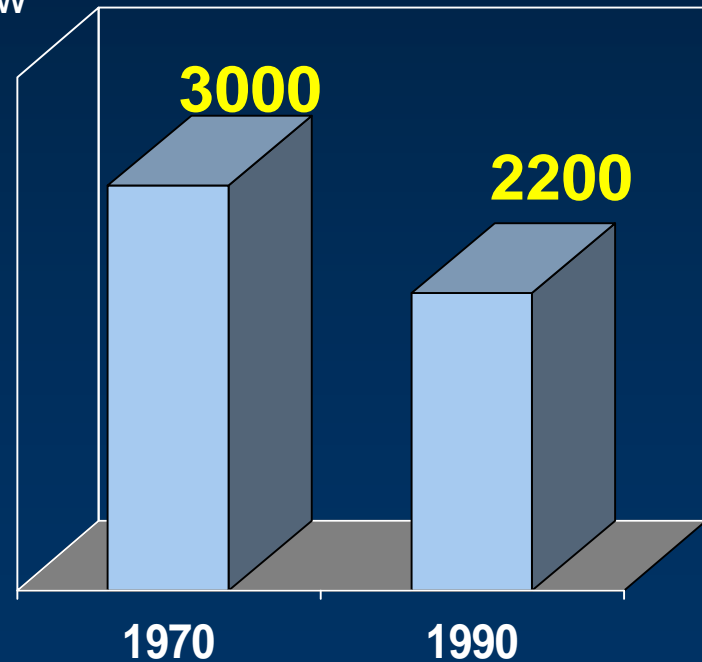
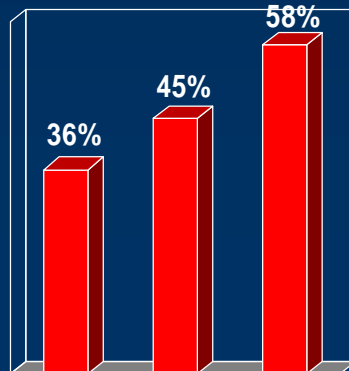
800 k-calories/day decrease in 20 years

60% of kids walked to school in 1970. 13% do now

Hours of TV Viewed Daily 1960-1992



Percent of Workforce in Sedentary Occupations, 1950-1996



Source: Schroeder, 2003

Lessons from the Successes

IMPERATIVES

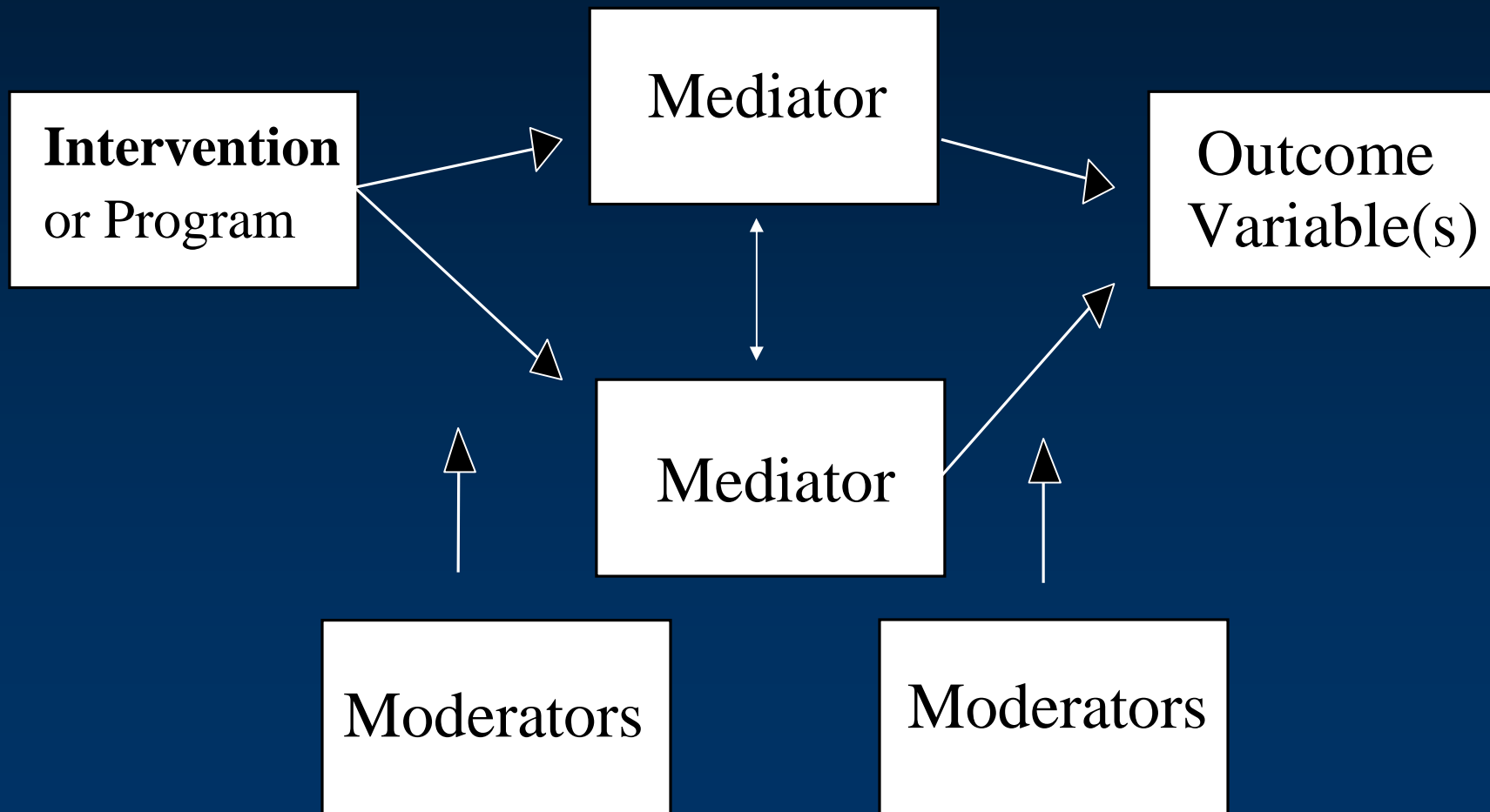
- Public health education
- Surveillance and context
- Comprehensiveness
- Economic imperative
- Advocacy imperative
- Funded mandate
- Objectives, priorities
- Ecological imperative

TRADE-OFFS, COROLARIES

- Reach vs effectiveness
- Population effect vs disparities
- Evidence- vs process-based
- Threshold spending
- Intersectoral collaboration
- Referendum with earmark
- Programs need time to work
- Centralization/decentralization
- Infrastructure, workforce

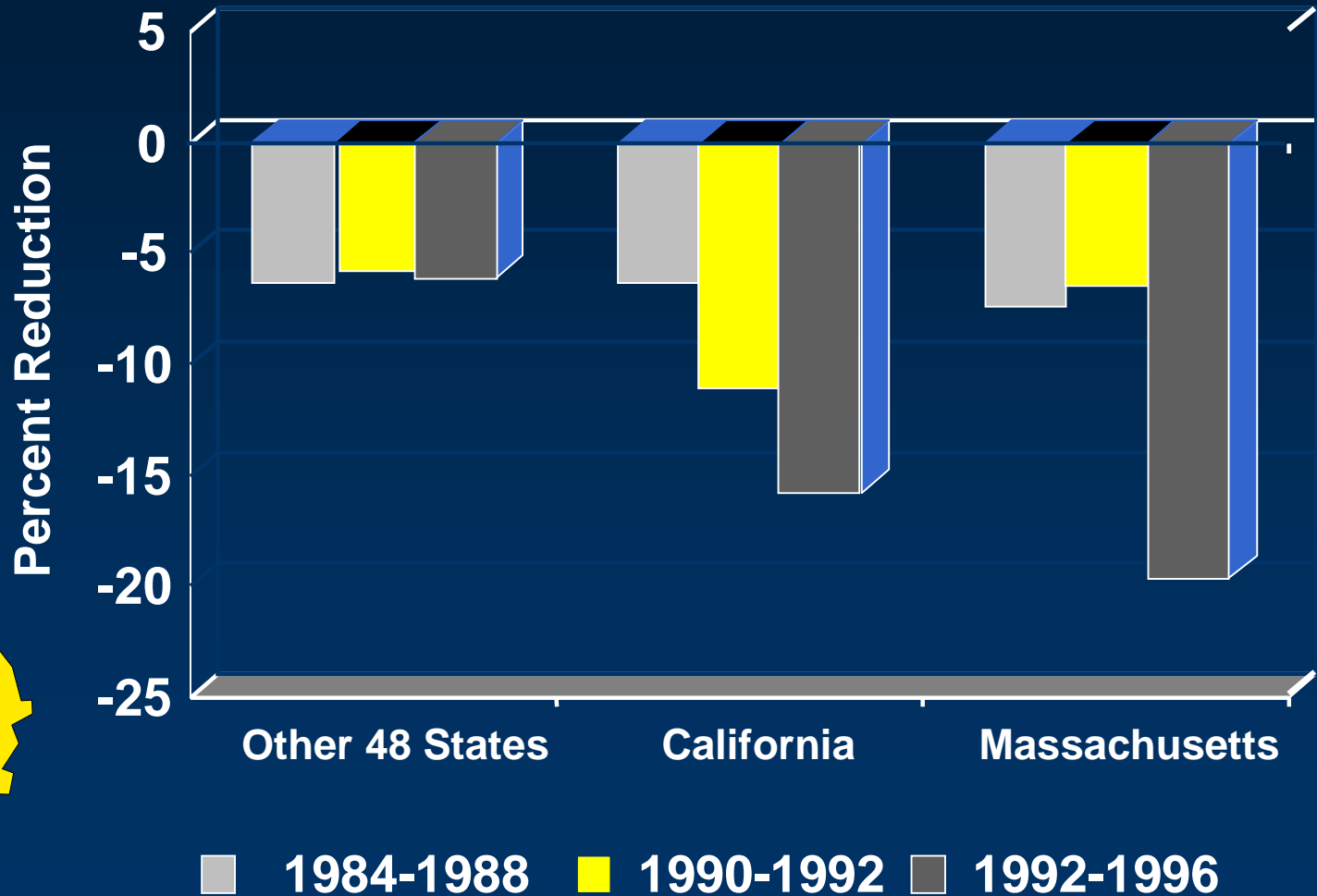
Lesson 3: The Context Imperative

What Moderates the Mediating Variables?



Change in Per Capita Cigarette Consumption

California & Massachusetts vs Other 48 States, 1984-1996



Best Practices

for Comprehensive
Tobacco Control
Programs

August 1999



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention
National Center for Chronic Disease Prevention and Health Promotion
Office on Smoking and Health

<http://www.cdc.gov/tobacco>

Lesson 4: The *Comprehensiveness* Imperative

- **Efficacy-tested interventions by themselves ineffective when taken to scale**
- **In trying to isolate the essential components of tobacco control programs that made them effective, none could be shown to stand alone**
- **Any combination of methods was more effective than the individual methods**
- **The more components, the more effective**
- **The more components, the better coverage**
- **Local AND state AND national advocacy, initiative**