UW-CTRI
UNIVERSITY OF WISCONSIN
Center for Tobacco Research & Intervention

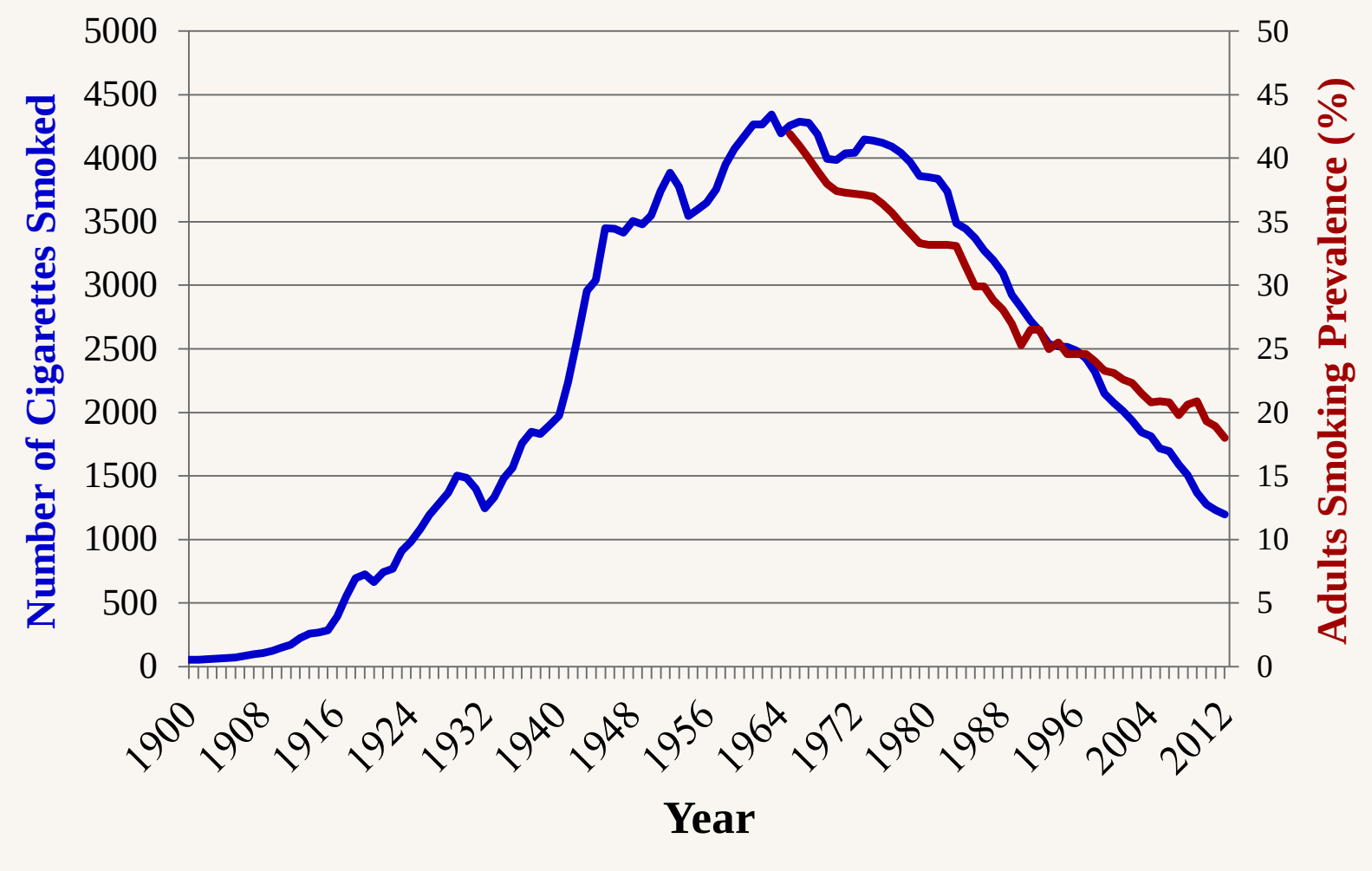
New Directions in Smoking Cessation: A 2014 Update

National Cancer Advisory Board Meeting

Michael Fiore, MD, MPH, MBA
Professor of Medicine
Director, Center for Tobacco Research & Intervention
University of Wisconsin School of Medicine and Public Health

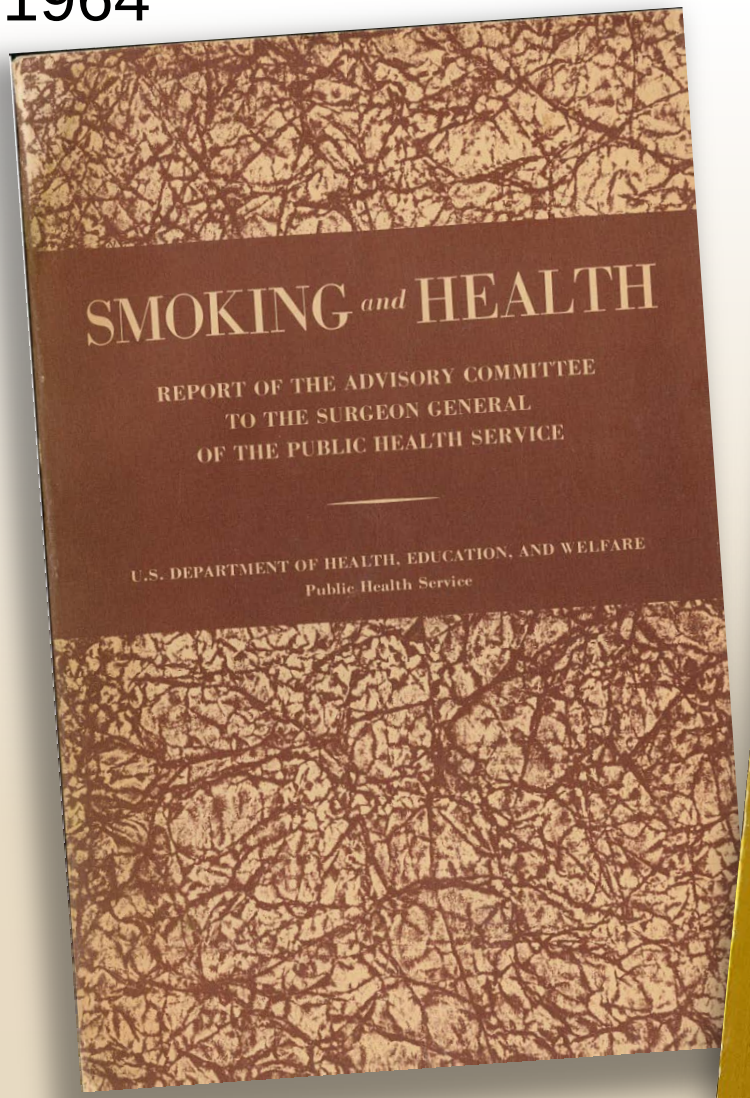
February 27, 2014

Adult Per Capita Annual Cigarette Consumption (1900-2012) and Smoking Prevalence (1965-2012), United States

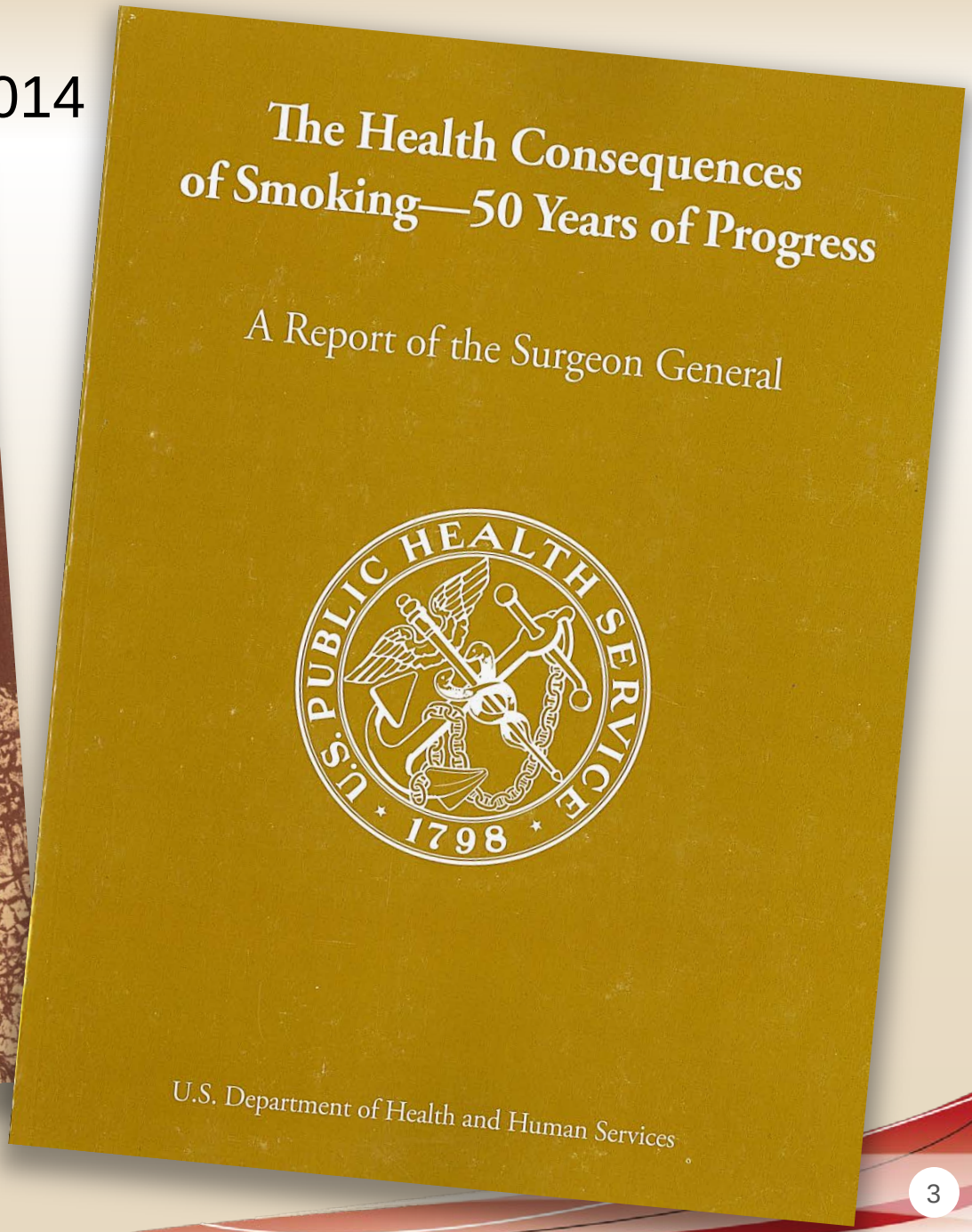


Cole H, Fiore MC. The war against tobacco: 50 years and counting. JAMA. 2014;311(2):131-132.

1964


SMOKING and HEALTH
REPORT OF THE ADVISORY COMMITTEE
TO THE SURGEON GENERAL
OF THE PUBLIC HEALTH SERVICE
U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service

2014


The Health Consequences of Smoking—50 Years of Progress
A Report of the Surgeon General
U.S. PUBLIC HEALTH SERVICE
1798
U.S. Department of Health and Human Services

While the last 50 years represent enormous progress in reducing tobacco use:

- Almost 50 million Americans continue to use tobacco
- Highest rates of tobacco use are concentrated in our most vulnerable, underserved populations
- Evidence-based cessation interventions have poor population penetrance

Core Research Needs – How Can We Develop and Deliver:

- Evidence-based cessation for underserved populations
- Population-based cessation interventions
- Cessation interventions that seize the healthcare visit

The Changing Demographics of Smoking in America in 2014

- Rates of smoking among the poor, the least educated, the mentally ill, and substance abusers are at least twice the current overall adult prevalence rate of 18%

The Poor

- A smoking rate of 31% was recently reported among adults visiting Federally supported health centers.
- Of these, 83% reported a desire to quit
- The poor often report misconceptions regarding cessation methods and cessation science
- New scientific directions

Christiansen BA, Reeder K, Hill M, Baker TB, Fiore MC. Barriers to effective tobacco dependence treatment for the very poor. J Stud Alcohol Drugs. 2012;73(6):874-84.

Lebrun-Harris LA, Fiore MC, Tomoyasu N, Ngo-Metzger Q. Cigarette smoking, desire to quit, and tobacco-related counseling among adult health center patients. American Journal of Public Health. AJPH. In Press.

The Mentally Ill

- Account for almost half of all cigarettes smoked
- Experience lower rates of cessation success
- On average die 25 years younger than those without mental health diagnoses
- New scientific directions

Cook BL, Wayne GF, Kafali EN, Liu Z, Shu C, Flores M. Trends in Smoking Among Adults with Mental Illness and Association between Mental Health Treatment and Smoking Cessation. JAMA. 2014;311(2):172-182.

Telephone Cessation Quitlines – An Evidence-Based Population Cessation Approach

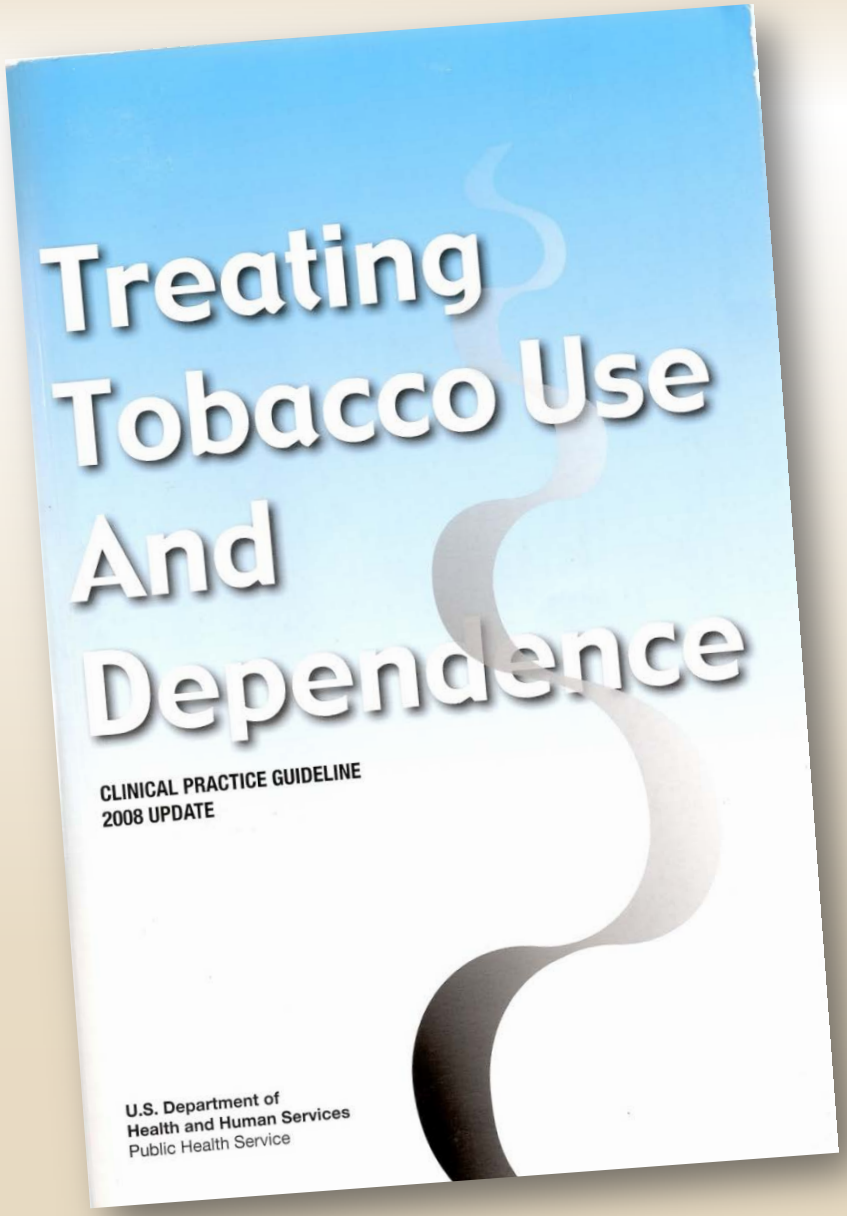
- Approximately 500,000 smokers call each year (1% of all smokers)
- Available nationwide at 1-800-QUIT NOW
- Unstable budgets across states lead to a patchwork of available services
- New scientific directions

eHealth and mHealth Approaches to Cessation

- NCI leads the nation
- Smokefree.gov and related sites
- 3 Million Users in 2013
- New scientific directions

Smokefree.gov Initiative Projects

- **Smokefree.gov**
  - Mobile-optimized Website
  - Mobile app (QuitGuide, QuitPal)
  - Social media: Twitter
- **Smokefree Women**
  - Mobile-optimized Website
  - Social media: Facebook, Twitter, Pinterest, Instagram, YouTube
- **Smokefree Teen**
  - Mobile-optimized Website
  - Social media: Facebook, Twitter, Instagram
  - Mobile app (QuitSTART, Momentum)
- **Smokefree Espanol**
  - Mobile-optimized Website
  - Social media: Pinterest, Twitter
- **Smokefree Pregnancy**
  - Web content
  - Online video
  - SmokefreeMOM text
    - Launch Early Summer 2014
- **SmokefreeTXT**
  - Teen
  - Young Adult
  - Spanish Language
  - QuitNow Library
  - Veteran (VHA)
  - Military (DoD)
  - Text interventions for diet, physical activity & weight management
    - Launch summer 2011



2008 Guideline Update

- 2008 - Updated Guideline published
- literature from 1999 – 2007
- approximately 8,700 total articles

Fiore MC, Jaén CR, Baker TB, et al. Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service.

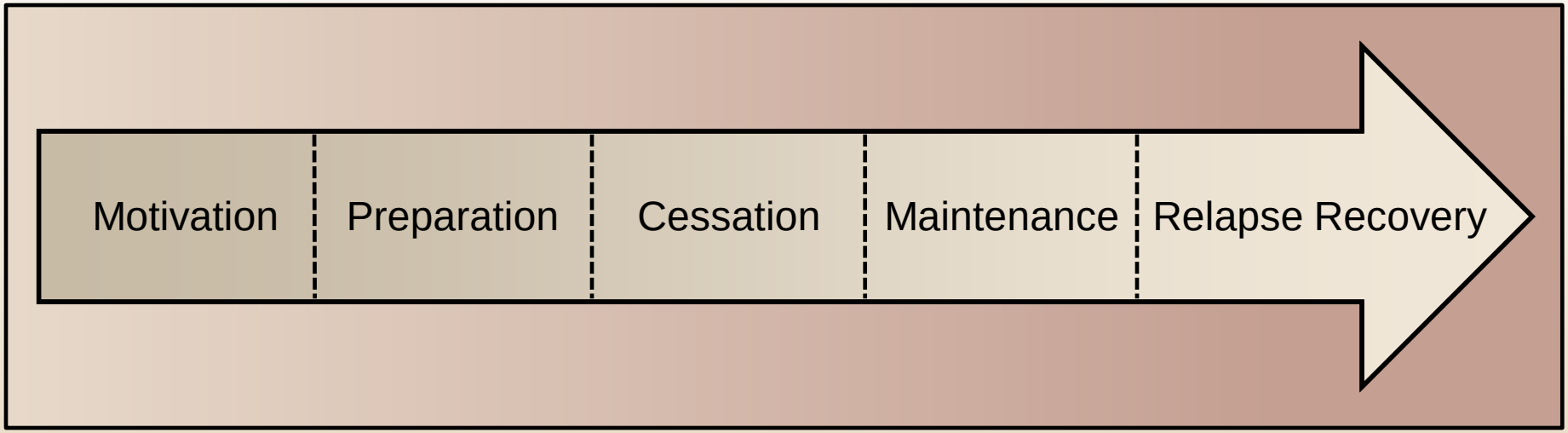
The Healthcare Setting as an Unequalled Venue to Intervene with Smokers

- 70% to 80% of smokers visit a primary care clinician each year
- About 80% have their smoking status documented
- The Challenge of Reach: Only about 40% receive any assistance in quitting (“The 5As”)
- Smokers who receive all of the 5As were almost 8 times more likely to use evidence-based counseling and medication to try to quit

Cessation Research in the Healthcare Setting – New Scientific Directions

- The Electronic health record potential
- Institutionalized changes
- Non-traditional healthcare settings
- Performance measures that prompt cessation

Phase-Based Model of Smoking Cessation



Baker TB, Mermelstein R, Collins LM, Piper ME, Jorenby DE, Smith SS, Christiansen BA, Schlam TR, Cook JW, Fiore MC. New methods for tobacco dependence treatment research. Ann Behav Med. 2011;41(2):192-207. PMCID: PMC3073306

Policies Can Markedly Promote Cessation

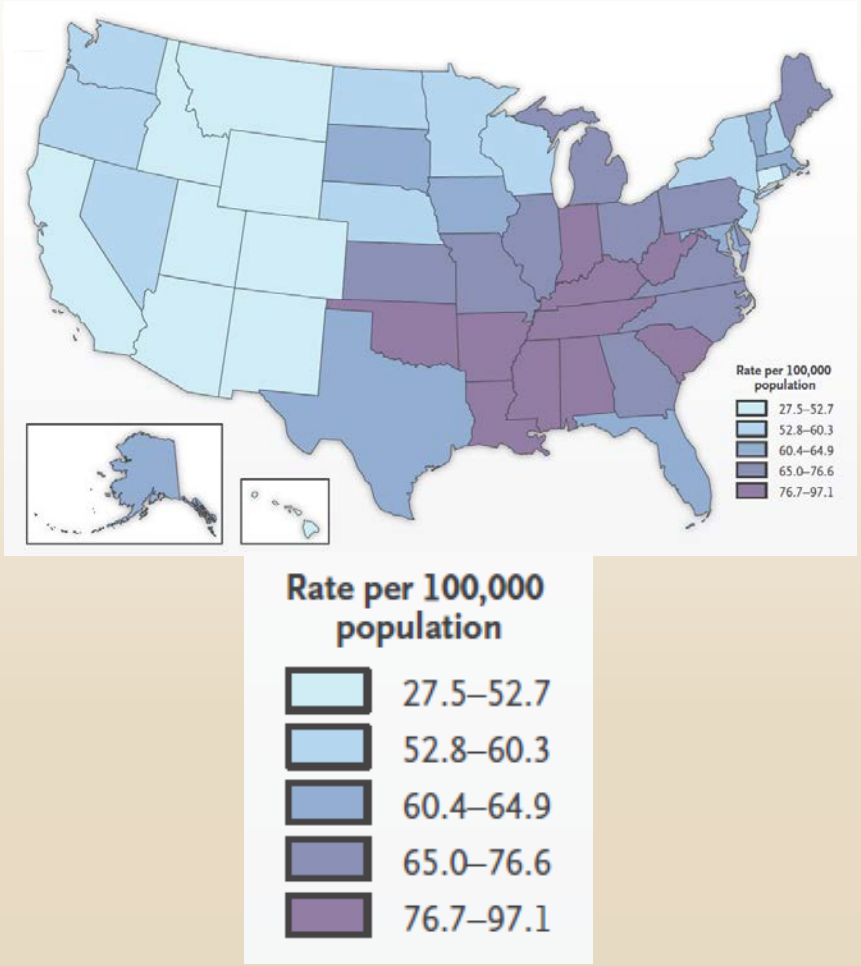
- Taxes
- Clean Indoor Air Laws
- Media Campaigns (TIPS, FDA and Legacy)

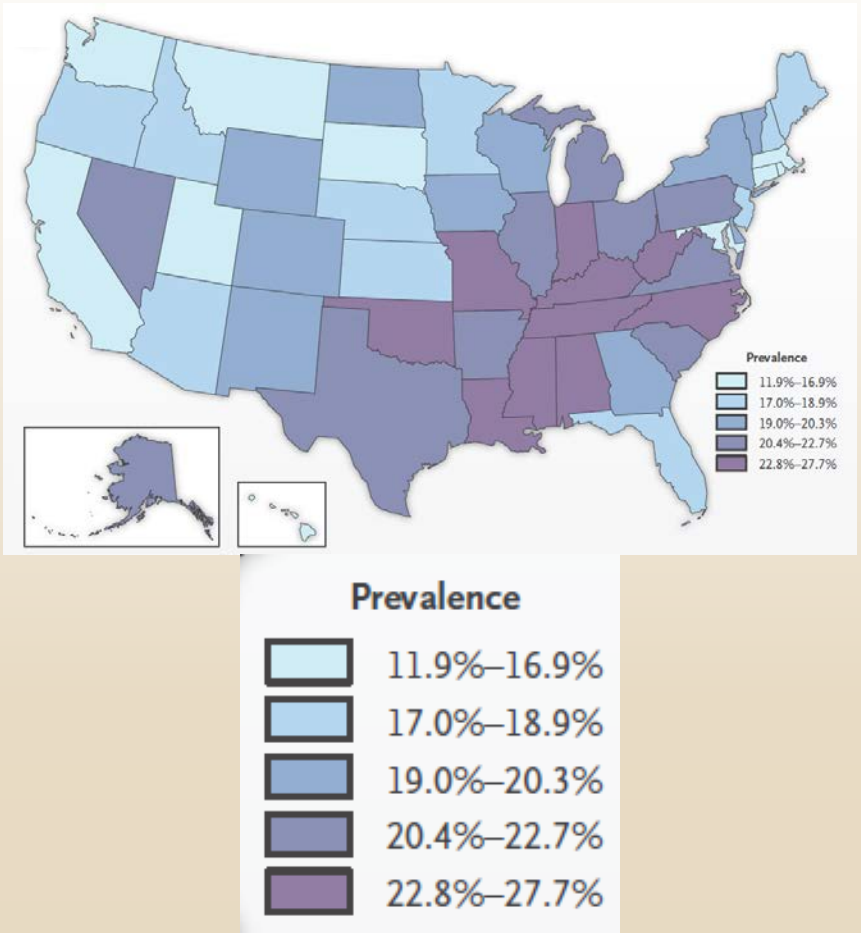
Combustible Tobacco Use – The Chief Danger

- Responsible for up to 98% of illness and death from tobacco use
- Specific policy and clinical implications

Fiore MC, Schroeder SA, Baker TB. Smoke, the Chief Killer — Strategies for Targeting Combustible Tobacco Use. NEJM. In Press.

Lung-Cancer Mortality among Male Americans, 2006–2010, and Smoking Prevalence among American Men 18 Years of Age or Older, 2009.



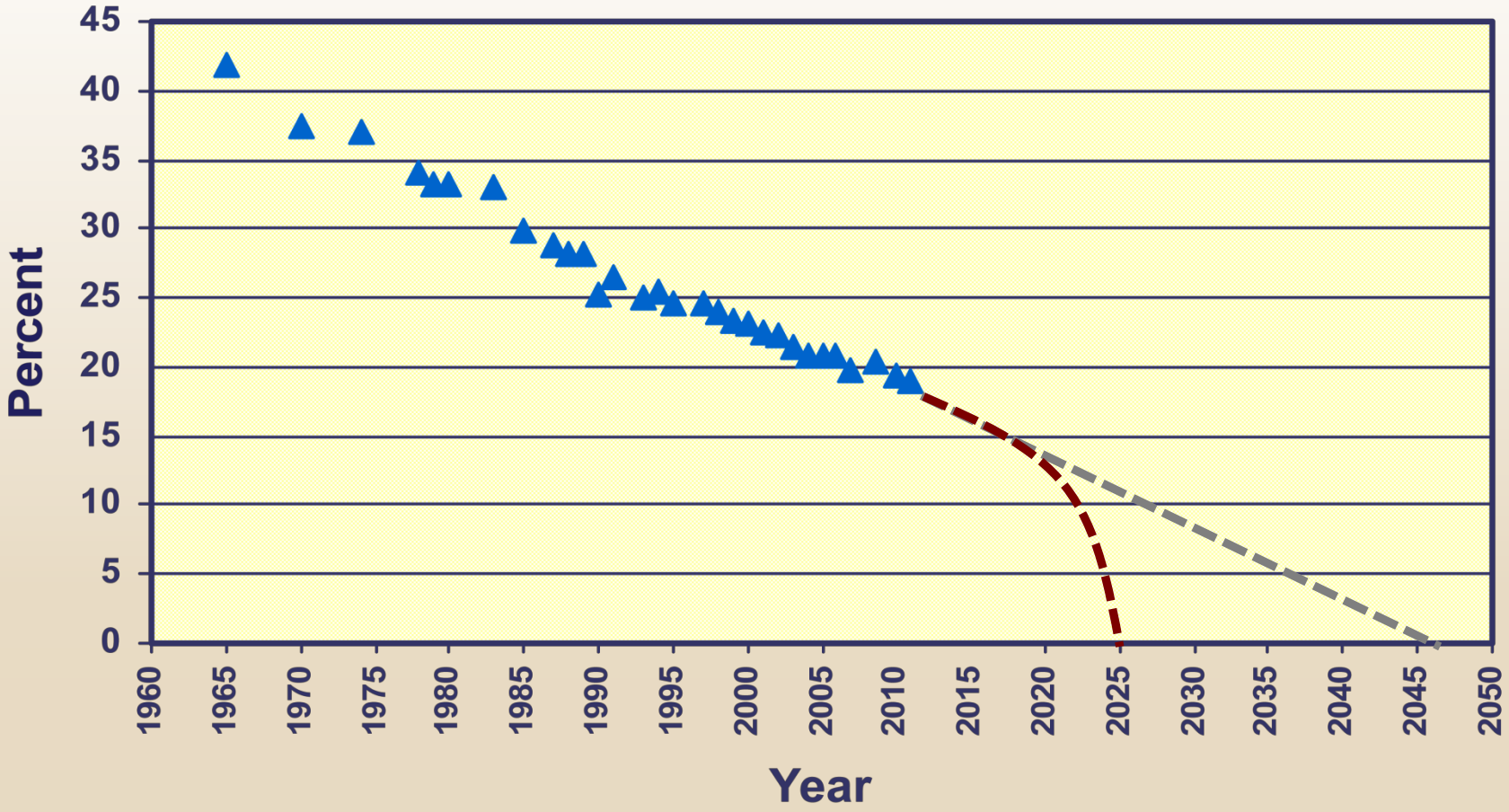


Fiore MC, Schroeder SA, Baker TB. Smoke, the Chief Killer – Strategies for Targeting Combustible Tobacco Use. NEJM. 2014;370:297-299.

E-Cigarettes – A Disruptive Technology?

- Potential Benefits:
  - a means of "***harms reduction***?"
- Potential Risks:
  1. Dual Use
  2. Gateway for youth
  3. Relapse among former successful quitters
  4. Unknown long term effects

Smoking Prevalence Among Adults 18 and Older, United States, 1965-2012, with Projections



National Health Interview Survey (NHIS)

www.ctri.wisc.edu