

# SAVING LIVES IN THE U.S. AND ACROSS THE GLOBE THROUGH PREVENTION, TOBACCO CESSATION AND SCREENING

*Cheryl G. Heaton, Dr.P.H.  
President and CEO, Legacy*

Lung Cancer Workshop  
Bethesda, Maryland  
May 2, 2013

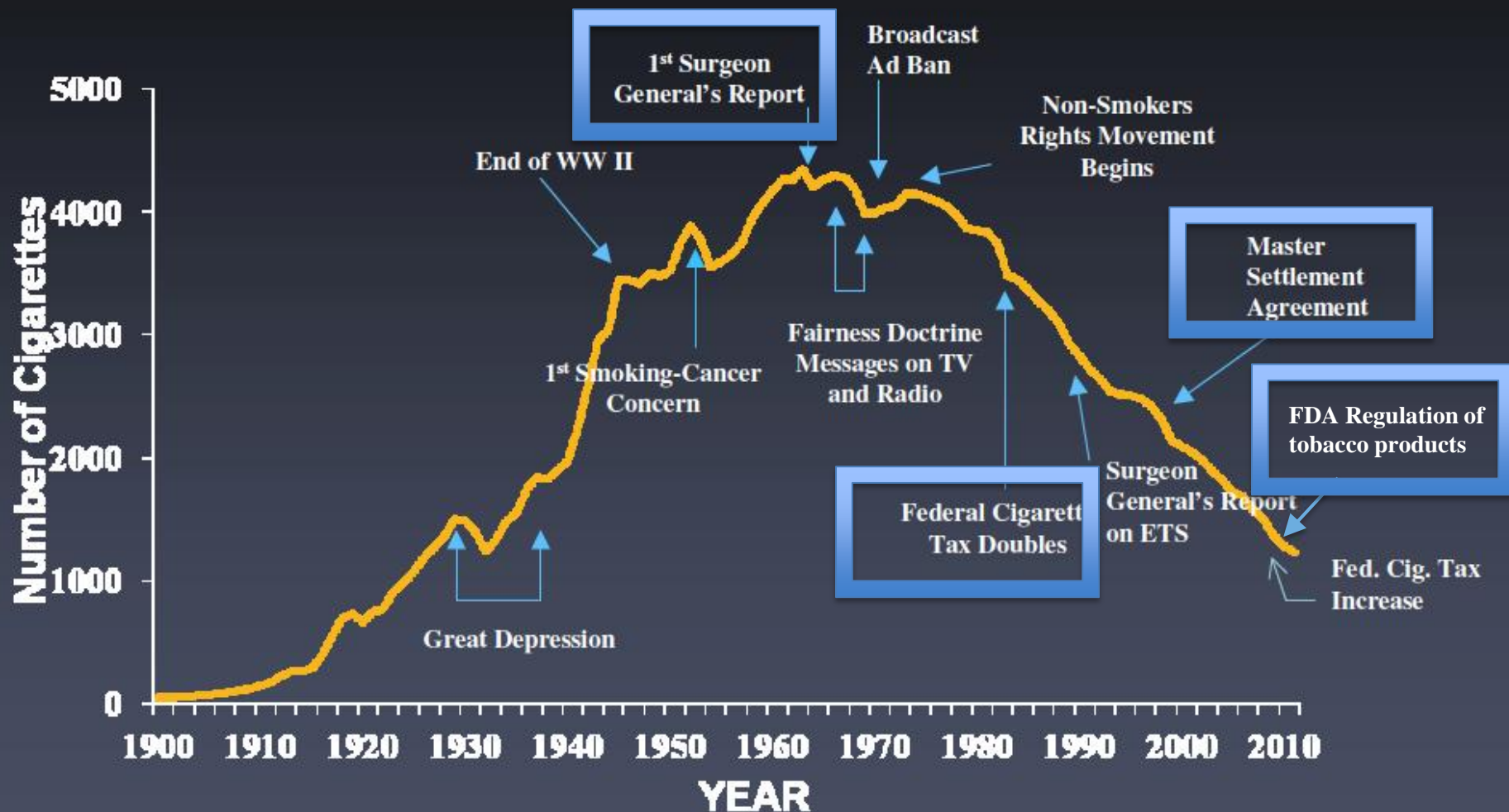


# WHAT WILL BE COVERED

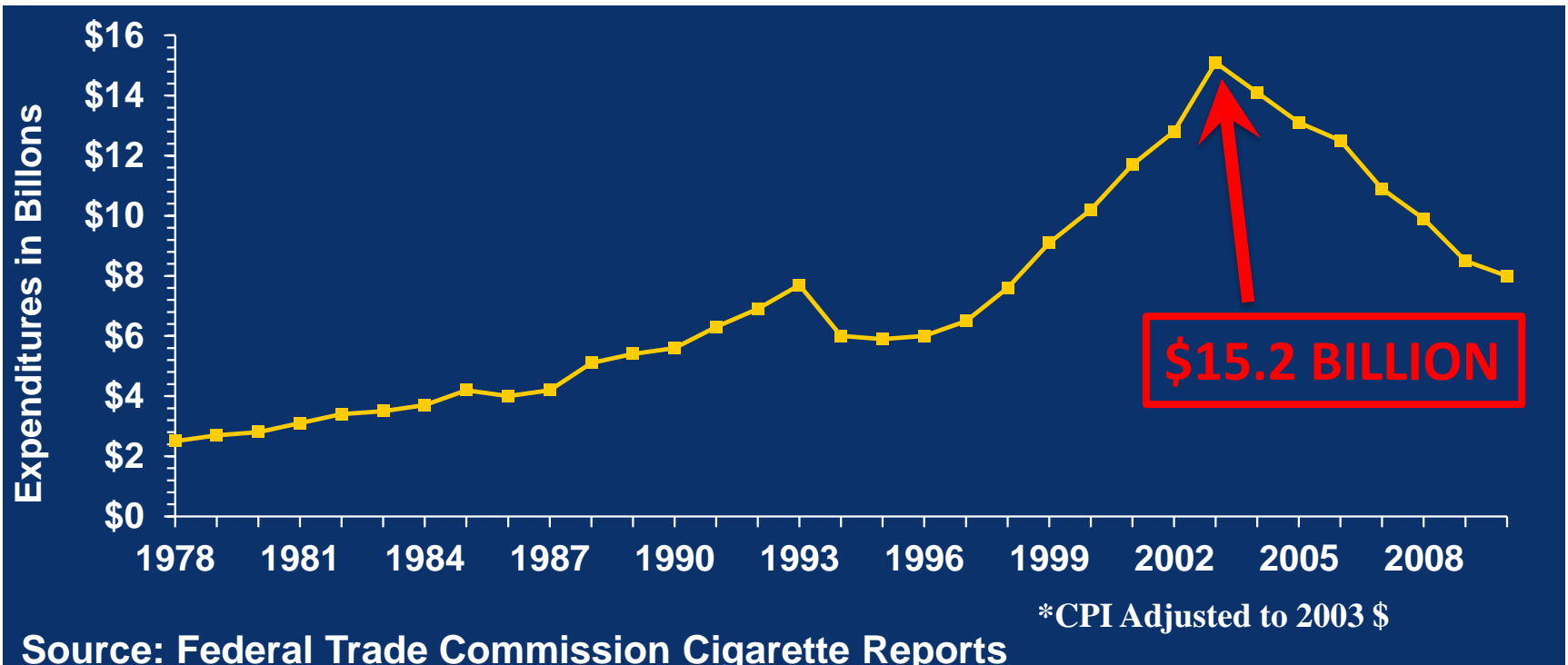
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- The scope of the US and global tobacco epidemic
- Current policy approached to address it
- The rates of lung cancer globally
- The challenges associated with expanding LC screening in developed and LMIC's

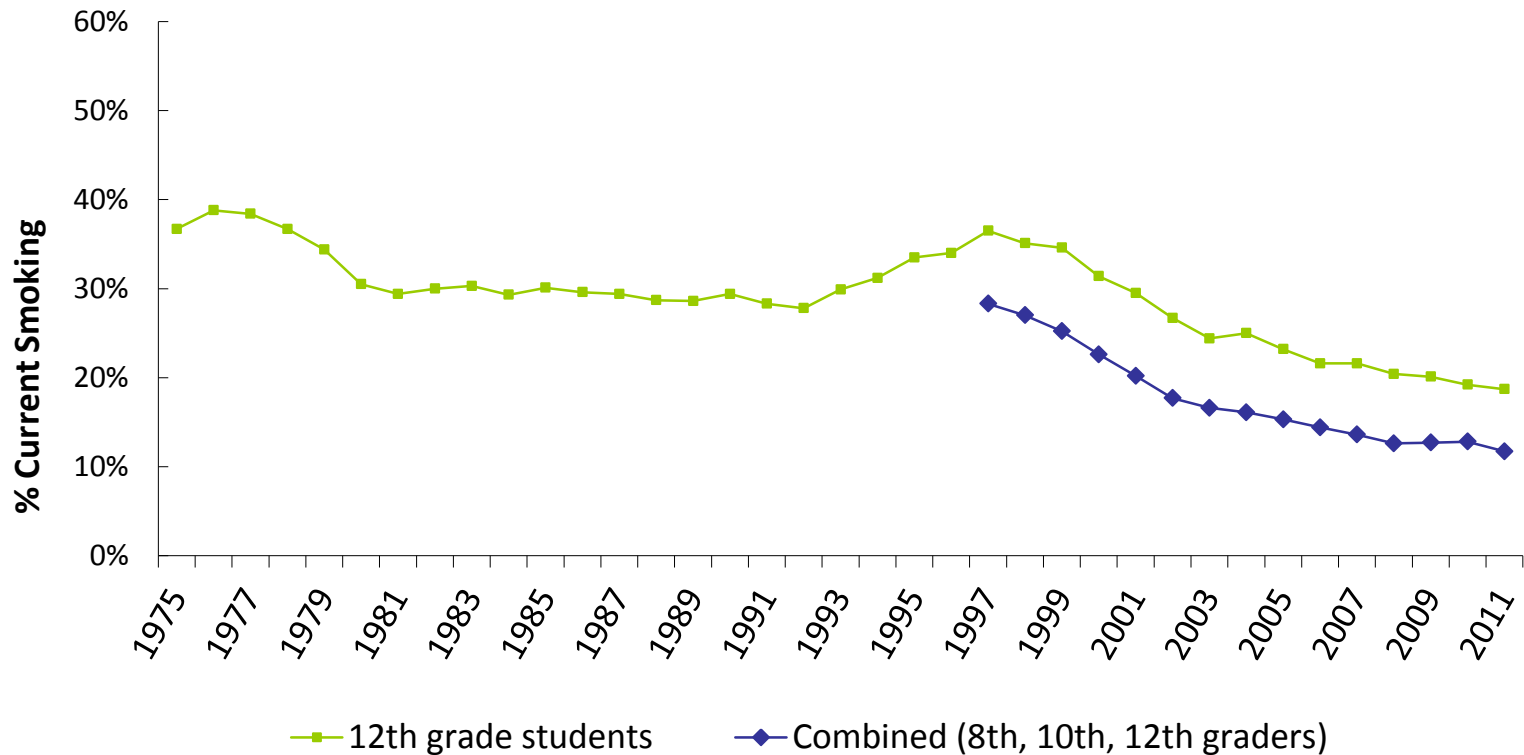
# Adult per capita cigarette consumption, U.S., 1900-2011



# Tobacco Advertising And Promotional Expenditures\*.1978 To 2010

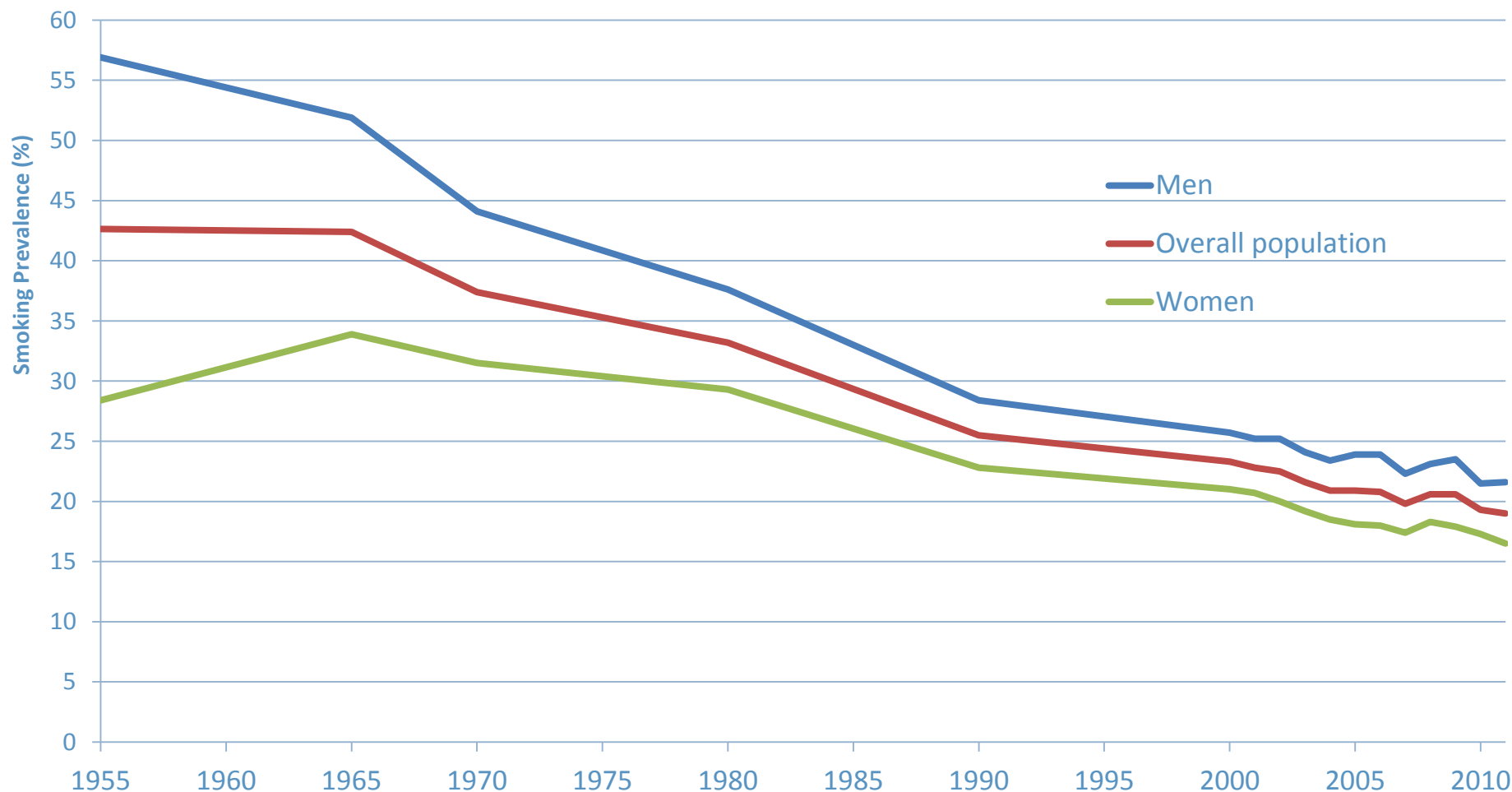


# Youth Smoking Trend (U.S.) 1975-2011



Source: Monitoring the Future Survey, United States, 1975-2011

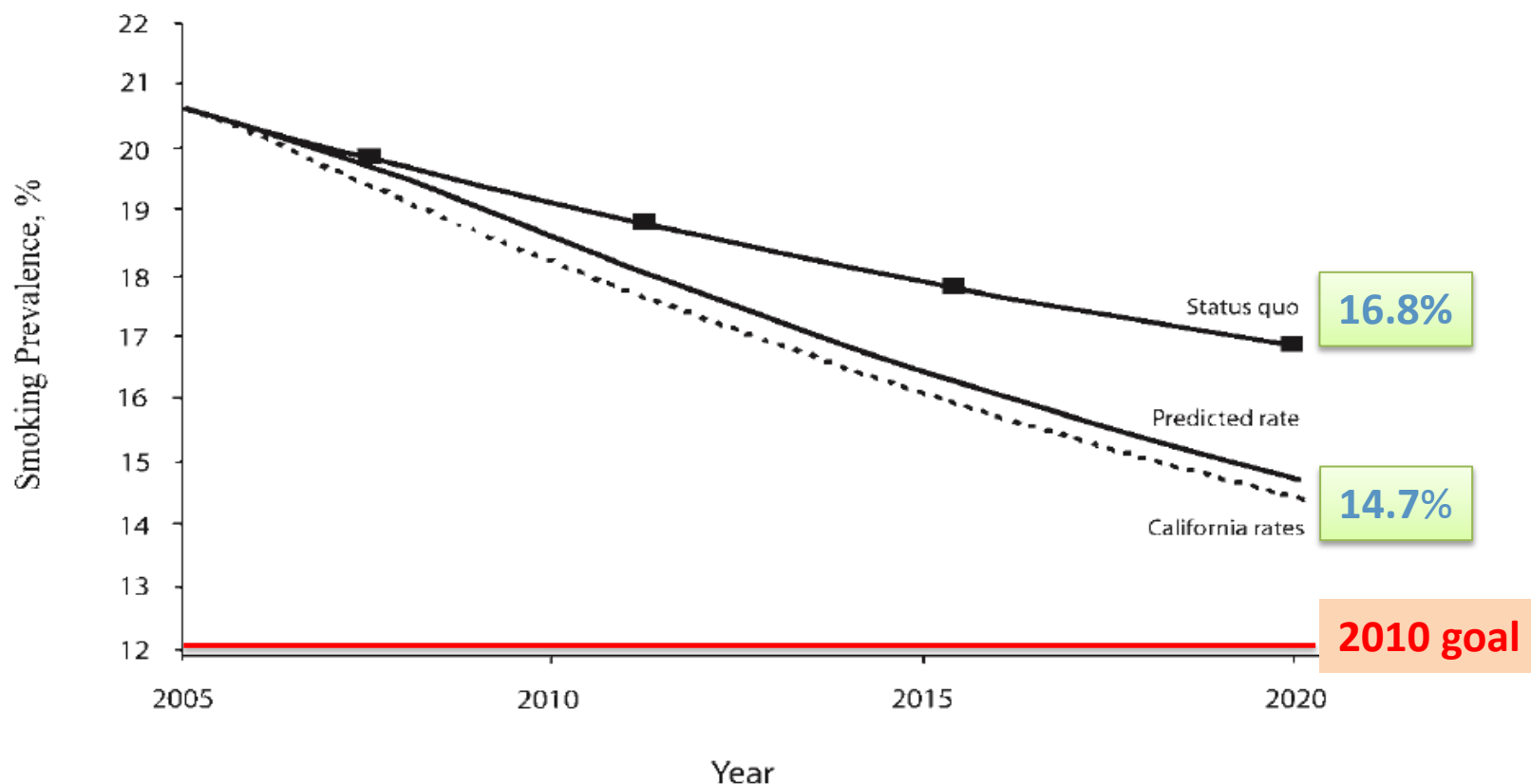
# Smoking Prevalence among US Adults (≥18 yrs) 1955-2011



Source: 1955 Current Population Survey; various National Health Interview Surveys from 1965-2011, National Center for Health Statistics"

# Setting a Challenging Yet Realistic Smoking Prevalence Target for Healthy People 2020: Learning From the California Experience.

Mendez, D, Warner, KE. *Am J Public Health*. 2008;98:556–559.



Note. The bottom 2 lines depict corresponding scenarios assuming that the United States as a whole achieves California's 2005 rates (20% initiation rate and 3.33% cessation rate). The dotted line reflects the assumption that such rates are attained instantaneously (in 2006), whereas the solid line reflects the more plausible scenario that such rates will be achieved gradually (by 2010). The status quo initiation rate is 25% and the cessation rate is 2.59%.

**FIGURE 2—Projections of US adult smoking prevalence rates under status quo scenario and California rate scenarios: 2005–2020.**



# Impact Of Smoke-free Air & Tax Policy

RWJF *Retrospective Series*

## The Impact of Tax and Smoke-Free Air Policy Changes

*Authors*

Frank J. Chaloupka  
David Levy  
Jidong Huang


*April 2011*

*Tob Control* 2012;**21**:154-161 doi:10.1136/tobaccocontrol-2011-050417

### Reviews

### Smoke-free air policies: past, present and future

Andrew Hyland<sup>1</sup>, Joaquin Barnoya<sup>2,3</sup>, Juan E Corral<sup>2</sup>

 Author Affiliations

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Dr Andrew Hyland, Department of Health Behavior, Roswell Park Cancer Institute, Elm and Carlton Streets, Buffalo, New York 14263, USA; [andrew.hyland@roswellpark.org](mailto:andrew.hyland@roswellpark.org)

Received 20 June 2011

Accepted 14 December 2011

*Tob Control*, 2012 Mar;**21**(2):172-80. doi: 10.1136/tobaccocontrol-2011-050417.

### Tobacco taxes as a tobacco control strategy.

Chaloupka FJ, Yurekli A, Fong GT.

University of Illinois, Chicago, IL 60608, USA. [fjc@uic.edu](mailto:fjc@uic.edu)

### Erratum in

*Tob Control*. 2012 May;**21**(3):329.

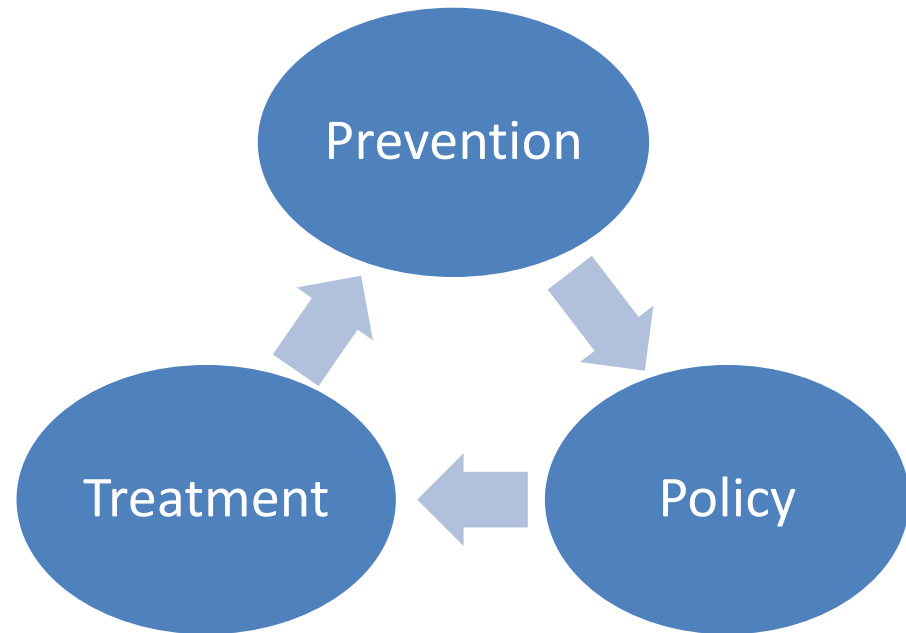
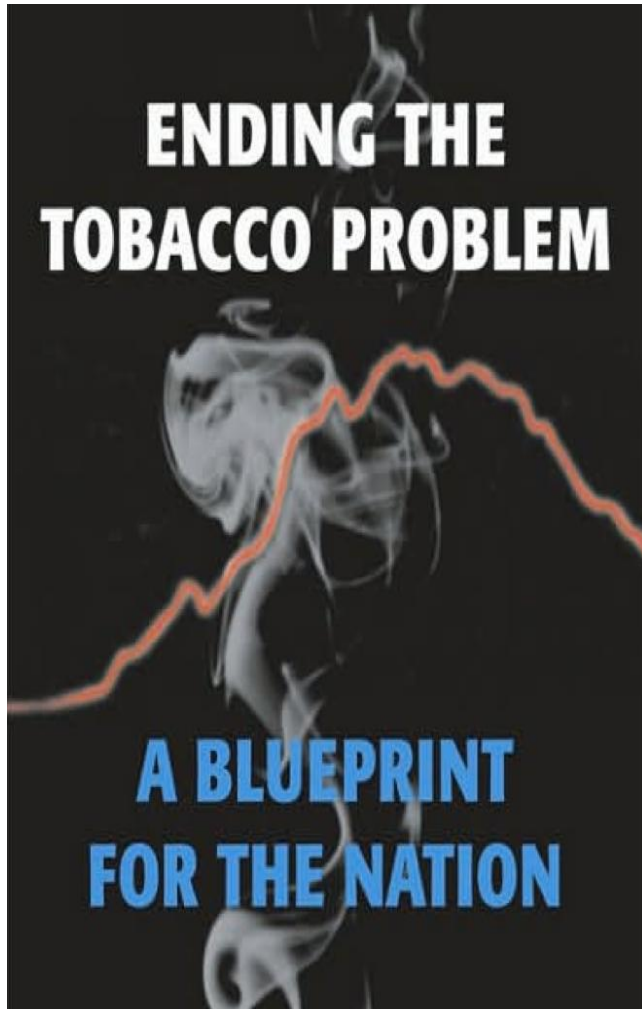
### Abstract

**BACKGROUND:** Increases in tobacco taxes are widely regarded as a and its consequences.



# Ending The Tobacco Problem: System Integration

*Institute Of Medicine: 2007*



Impact = Reach x Efficacy of the Intervention

**Abrams D.** *Comprehensive Smoking Cessation: Systems Integration to Save Lives and Money.* In: Bonnie, Stratton, Wallace, eds. *Ending the Tobacco Problem: A Blueprint for the Nation.* Washington, DC: The National Academies Press 2007. p. A1-A50

# EXPANDING REACH: Quitlines, Web, OTC NRT...digital Media ..



Arch Intern Med. 2011 Jan 10;171(1):46-53. doi: 10.1001/archinternmed.2010.451.

## **A randomized trial of Internet and telephone treatment for smoking cessation.**

Graham AL, Cobb NK, Papandonatos GD, Moreno JL, Kang H, Tinkelman DG, Bock BC, Niaura RS, Abrams DB.

Schroeder Institute for Tobacco Research and Policy Studies, American Legacy Foundation, Washington, DC 20036, USA.  
agraham@americanlegacy.org

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JOURNAL OF MEDICAL INTERNET RESEARCH



Original Paper

## **Engagement Promotes Abstinence in a Web-based Cessation Intervention: Cohort Study**

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Amanda Richardson<sup>1,2</sup>, MS, PhD; Amanda L Graham<sup>3,4</sup>, PhD; Nathan Cobb<sup>3,4</sup>, MD; Haijun Xiao<sup>1</sup>, MS; Aaron Mushro<sup>5</sup>, MS, MBA; David Abrams<sup>2,3,4</sup>, PhD; Donna Vallone<sup>1,2</sup>, MPH, PhD

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# TOBACCO DISPARITIES: THE UNDERSTUDIED AND THE UNDERSERVED

## TReND

Tobacco Research Network on Disparities

[Home](#)[About TReND](#)[Fast facts](#)[Research](#)[Policies and practice](#)[Resources](#)

Connect with us: [Twitter](#) [Facebook](#)

[Welcome](#)[Latest research](#)[Policies and practice news](#)

Photo: WHO

*"Tobacco is a powerful and pervasive cause of health disparities."*

Equity, social determinants and

## Tobacco is the most preventable cause of death in the world today.

Why do more than 80% of the world's tobacco-related deaths and chronic diseases occur in **low- and middle-income countries**?

Why do most deaths attributable to second-hand tobacco smoke occur among **children & women**?

Why are tobacco's harmful effects concentrated among groups who are **the most vulnerable**?

TReND publishes Research to Reduce Global Tobacco Inequalities, a special supplement to Cancer Causes and Control, in March 2012.

[Read more...](#)

The Tobacco Research Network on Disparities (TReND) was created by the **National Cancer Institute** and the **Legacy Foundation** to help

# TOBACCO CESSATION IN THE AFFORDABLE CARE ACT

## Tobacco Cessation Treatment: What Is Covered?

The U.S. healthcare system is complex, and therefore so is coverage available to help smokers quit. Below is information on what the biggest health insurance programs cover for tobacco cessation, and how the Affordable Care Act (ACA) changes coverage.



### Medicare

- Covers people over the age of 65
- Covers nicotine nasal spray, nicotine inhaler, bupropion and varenicline, as well as individual counseling, for 2 quit attempts per year
- The ACA adds
  - Prevention and wellness visit with member's doctor
  - Is closing the Medicare Part D "donut hole," making medications more affordable

33.3 percent of Medicaid enrollees smoke—that is more than 50 percent higher than the total population!

### Medicaid

- Covers low-income children and parents (eligibility varies by state)
- Covers comprehensive tobacco cessation treatment for pregnant women. Coverage for all other adults varies by state
- The ACA adds
  - Requirement for coverage of pregnant women in 2010
  - Expands eligibility to all low-income adults in 2014
  - Requires coverage of tobacco cessation medications in all states in 2014

# Where We Must Go

- ❖ **LOOK BEYOND OUR BORDERS:** Are we as passionate as the global initiatives to end polio, measles, malaria, and HIV? Do we have the political will to do this?
- ❖ **CONSIDER AN ENDGAME:** A deliberate, planned strategy to end tobacco use; eliminate the preventable disease burden, death, and the financial cost across localities, nations, and the globe...

# The Washington Post

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## Tobacco Could Kill 1 Billion by 2100

By EDITH M. LEDERER. The Associated Press

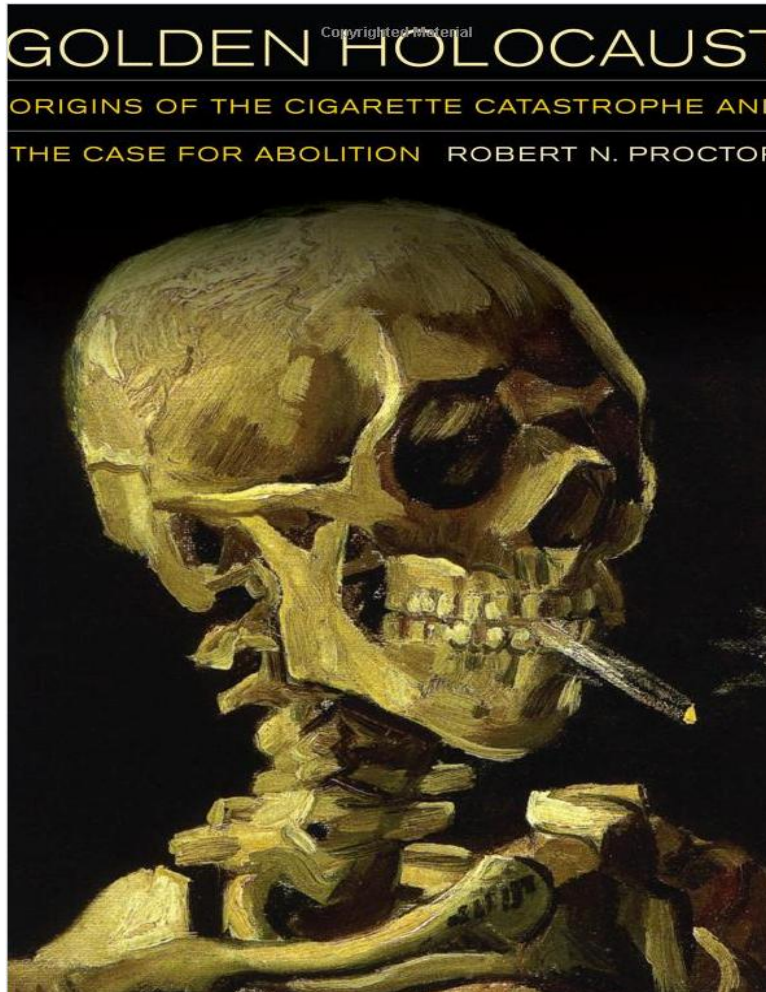
Thursday, February 7, 2008; 11:52 PM

NEW YORK -- The World Health Organization warned in a new report Thursday that the "tobacco epidemic" is growing and could claim 1 billion lives by the end of the century unless governments dramatically step up efforts to curb smoking. World Health Organization Director-General Dr. Margaret Chan, right, speaks about the mpower box as New York Mayor Michael Bloomberg listens during a press conference announcing WHO's Report on the Global Tobacco Epidemic 2008 Thursday, Feb. 7, 2008 in New York. The **mpower** box is a symbol of the package being offered by the WHO in its effort.....



# End Game Strategies

## Robert Proctor: Golden Holocaust



- ❖ Abolition of cigarettes (e.g. New Zealand proposal, sinking lid)
- ❖ Reduction/elimination of combustible tobacco use and/or nicotine
- ❖ Provide only “clean” recreational nicotine products (pharmaceutical grade, clean nicotine delivery systems), or even in “safer” non-combustible forms (snus, smokeless and dissolvables):
- ❖ Need to consider banning combustible tobacco to avoid dual use.
- ❖ FDA role in new noncombustible products



# CESSATION AND EARLY DETECTION

## Smoking Cessation Following CT Screening for Early Detection of Lung Cancer<sup>1</sup>

Jamie S. Ostroff, Ph.D.,<sup>\*,2</sup> Natasha Buckshee, M.D.,<sup>†</sup> Carol A. Mancuso, M.D.,<sup>‡</sup>  
David F. Yankelevitz, M.D.,<sup>†</sup> and Claudia I. Henschke, Ph.D., M.D.<sup>†</sup>

*\*Memorial Sloan-Kettering Cancer Center, New York, New York 10021; †Department of Radiology and Department of Medicine, Weill Medical College of Cornell University, New York, New York; and ‡Hospital for Special Surgery, New York, New York*

Published online October 24, 2001

# CESSATION AND EARLY DETECTION

*Methods.* Individuals ( $n = 134$ ) who reported active smoking at the time of enrollment in our Early Lung Cancer Action Program (ELCAP) completed a brief, follow-up telephone interview assessing any changes in smoking patterns following lung cancer screening. Using logistic regression, we estimated the probability of decreasing or quitting smoking using each enrollee's background information and computed tomography (CT) scan results.

# CESSATION AND EARLY DETECTION

*Conclusions.* Our analyses suggest that low-dose helical CT scanning may serve as a strong catalyst for smoking cessation and that delivery of effective smoking cessation interventions along with CT scanning represents a potential opportunity to increase the overall cancer prevention benefit of lung cancer screening. © 2001 American Health Foundation and Elsevier Science

# CHANGE IN SMOKING STATUS AFTER SPIRAL CHEST COMPUTED TOMOGRAPHY SCAN SCREENING

LISA SANDERSON COX, PH.D. MATTHEW M.  
CLARK, PH.D. JAMES R. JETT, M.D. CHRISTI  
A. PATTEN, PH.D. DARRELL R. SCHROEDER,  
M.S. LIZA M. NIRELLI, B.S. STEPHEN J.  
SWENSEN, M.D. RICHARD D. HURT, M.D. -  
*2003*

# BACKGROUND

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Cancer screening may provide a “teachable moment” for the reduction of high-risk behaviors. The current study evaluated smoking behavior changes in current and former smokers after low-dose, fast spiral chest computed tomography scan (CT) screening for lung carcinoma.

# METHODS

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The study was comprised of 901 current smokers and 574 former smokers who participated in a low-dose, fast spiral chest CT scan screening study for lung carcinoma. Demographic, pulmonary function, screening recommendations, and smoking history variables were evaluated as predictors of self-reported point prevalence smoking abstinence 1 year after screening.

# RESULTS

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Of the current smokers at baseline, 14% reported smoking abstinence at follow-up. Older age and poorer lung function were associated with smoking abstinence. Ninety percent of former smokers reported smoking abstinence at a 1-year of follow-up. A longer duration of smoking abstinence at baseline was found to be predictive of abstinence in this group.



# CONCLUSIONS

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The 14% smoking abstinence rate was higher than would be expected for spontaneous rates of smoking cessation. Therefore, screening may provide a teachable moment for smokers. Low-dose, fast spiral chest CT scan screening recommendations were not found to be associated with smoking behavior change in either group. Further research is needed to evaluate the potential avenues through which lung carcinoma screening can be used as an opportunity for providing effective nicotine interventions. ***Cancer*** 2003;98:2495–501.

*© 2003 American Cancer Society.*

# LUNG CANCER SCREENING AS A TEACHABLE MOMENT FOR SMOKING CESSATION

Kathryn L. Taylor <sup>a,\*</sup>, Lisa Sanderson Cox <sup>b</sup>, Nicole Zincke <sup>a,1</sup>,  
Larina Mehta <sup>a,b</sup>, Colleen McGuire <sup>a</sup>, Edward Gelmann <sup>a</sup>

<sup>a</sup> *Lombardi Comprehensive Cancer Center, Georgetown  
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States*

Received 1 November 2006; accepted 19 November 2006

## ...CONTINUED...

At the 1-month follow-up of the NLST sample, participants became more ready to stop smoking ( $p < .05$ ). Screening result did not moderate this finding. In the LSS sample, among younger participants ( $\leq 64$ ), an abnormal screening result was significantly associated with becoming more ready to stop smoking, whereas a normal result was associated with becoming less ready to stop smoking ( $p = .02$ ).

# COST-EFFECTIVENESS OF COMPUTED TOMOGRAPHY SCREENING FOR LUNG CANCER IN THE UNITED STATES

*PAMELA M. MCMAHON, PHD,\*† CHUNG YIN KONG, PHD,\*† COLLEEN BOUZAN, MS,\* MILTON C. WEINSTEIN, PHD,‡ LAUREN E. CIPRIANO, BSC, BA,\*1 ANGELA C. TRAMONTANO, MPH,\* BRUCE E. JOHNSON, MD,‡ JANE C. WEEKS, MD, MS,‡# G. SCOTT GAZELLE, MD, MPH, PHD\*† 2011*

# RESULTS

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Annual screening of current and former smokers aged 50 to 74 years costs between \$126,000 and \$169,000/QALY (minimum 20 pack-years of smoking) or \$110,000 and \$166,000/QALY (40 pack-year minimum), when compared with no screening and assuming background quit rates. Screening was beneficial but had a higher cost per QALY when the model included radiation-induced lung cancers. If screen participation doubled background quit rates, the cost of annual screening (at age 50 years, 20 pack-year minimum) was below \$75,000/QALY. If screen participation halved background quit rates, benefits from screening were nearly erased. If screening had no effect on quit rates, annual screening costs more but provided fewer QALYs than annual cessation therapies. Annual combined screening/cessation therapy programs at age 50 years costs \$130,500 to \$159,700/QALY, when compared with annual stand-alone cessation.

# CONCLUSIONS

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The cost-effectiveness of computed tomography screening will likely be strongly linked to achievable smoking cessation rates. Trials and further modeling should explore the consequences of relationships between smoking behaviors and screen participation.

# COMPUTED TOMOGRAPHY SCREENING FOR LUNG CANCER: HAS IT FINALLY ARRIVED? IMPLICATIONS OF THE NATIONAL LUNG SCREENING TRIAL

*Denise R. Aberle, Fereidoun Abtin, and Kathleen Brown -  
2013*



## ...CONTINUED...

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The National Lung Screening Trial (NLST) has provided compelling evidence of the efficacy of lung cancer screening using low-dose helical computed tomography (LDCT) to reduce lung cancer mortality. The NLST randomized 53,454 older current or former heavy smokers to receive LDCT or chest radiography (CXR) for three annual screens. Participants were observed for a median of 6.5 years for outcomes. Vital status was available in more than 95% of participants. LDCT was positive in 24.2% of screens, compared with 6.9% of CXRs; more than 95% of all positive LDCT screens were not associated with lung cancer.

## ...CONTINUED...

LDCT detected more than twice the number of early-stage lung cancers and resulted in a stage shift from advanced to early-stage disease. Complications of LDCT screening were minimal. Lung cancer–specific mortality was reduced by 20% relative to CXR; all-cause mortality was reduced by 6.7%. The major harms of LDCT are radiation exposure, high false-positive rates, and the potential for overdiagnosis. This review discusses the risks and benefits of LDCT screening as well as an approach to LDCT implementation that incorporates systematic screening practice with smoking cessation programs and offers opportunities for better determination of appropriate risk cohorts for screening and for better diagnostic prediction of lung cancer in the setting of screen-detected nodules. The challenges of implementation are considered for screening programs, for primary care clinicians, and across socioeconomic strata. Considerations for future research to complement imaging-based screening to reduce the burden of lung cancer are discussed.

*J Clin Oncol 31:1002-1008. © 2013 by American Society of Clinical Oncology*

# THE CASE FOR LUNG CANCER SCREENING - NOW

## HUFFPOST HEALTHY LIVING

### THE BLOG

Featuring fresh takes and real-time analysis from  
HuffPost's signature lineup of contributors



Laurie Fenton  
Ambrose, James  
L. Mulshine, M.D.  
and Cheryl G.  
Heulton, Dr.P.H.

### The Case for Lung Cancer Screening -- Now

Posted: 04/11/2013 3:57 pm

You would think that if there were a way to reduce cancer deaths by thousands of lives a year, it would be implemented immediately. But apparently not -- if it is lung cancer.

More than two years ago the largest (53,000 people), most expensive (\$250,000,000) cancer screening trial in National Cancer Institute's (NCI) history conclusively proved that diagnosing lung cancer early in a high risk population can change the disease from a primarily lethal cancer to a curable one. The trial compared chest X-rays to CT scans in three screening rounds with an automatic cutoff as soon as there was a 20 percent difference in death rates.

This threshold was reached earlier than anticipated -- and the trial was halted sooner than expected. Other studies and modeling analyses since then have shown that with more screening rounds and longer follow-up the actual benefit of CT screening could be as high as 64 percent.

This scientific breakthrough is a game changer, as it could save more lives than any screening method or drug developed to date for any cancer. Since lung cancer causes more deaths a year (160,340) than breast (39,920), prostate (28,170) and colon cancer (51,690) combined, even a 20 percent drop in its mortality rate, would be the largest drop in cancer history.

In addition to this breakthrough, imaging technology can already detect early heart and lung disease at the same time and is continuing to advance rapidly. Add to this ongoing refinements in risk assessment and diagnostic protocols, as well as new less-invasive surgical techniques since the trial and it becomes clear: Lung cancer screening has the potential to bring about one of the most significant, cost-effective and life-saving advances in public health ever.

This should be a slam dunk -- one would think.

But instead of a positive response and a commitment to accelerating the process for responsible implementation for those at risk, negativity and obfuscation have ruled the day. Dire warnings are raised about speculative radiation risks and over-diagnoses even though the facts dispute them. Recent papers have shown that false positives, a problem inherent to all screening methods, can be lower in lung cancer screening than in other cancer screening methods with the application of thoughtful protocols that are already in use today.

Lurking behind all these negative and inaccurate attacks are the blame and stigma long attached to lung cancer. The message being subliminally conveyed to the increasingly cost-conscious public is that public health resources would be "wasted" on those who "did it to themselves."

*Huffington Post*  
Healthy Living Blog  
April 11, 2013

## A GAME CHANGER

- Lung cancer screening is a scientific breakthrough, a *game changer*, and could save more lives than any screening method or drug developed for any cancer.

# LUNG CANCER: THE #1 CANCER KILLER

- At 160,340 lives lost annually, lung cancer causes more deaths than:

- Breast Cancer (39,920)
- Prostate Cancer (28,170)
- Colon Cancer 51,690

***...combined...***

# GLOBOCAN 2008

## CANCER FACT SHEET

Incidence: [men](#)  
 Mortality: [men](#)  
 Incidence: [women](#)  
 Mortality: [women](#)

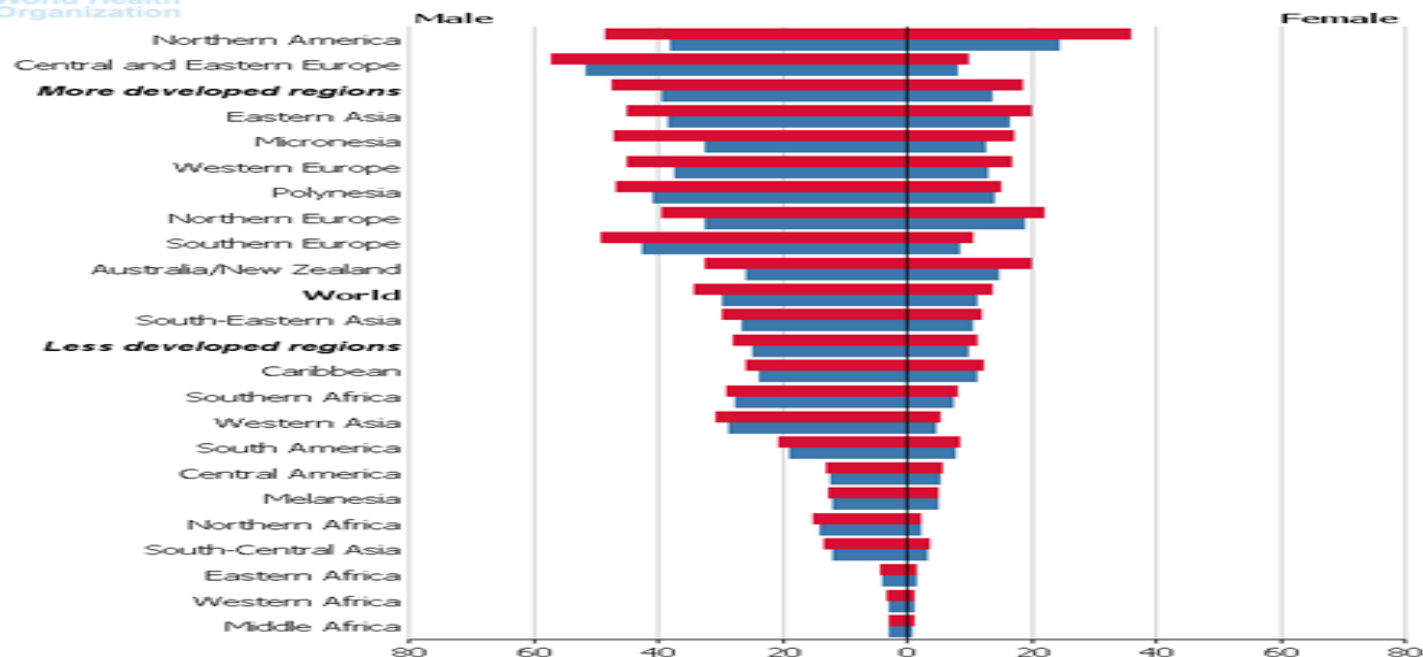
## Lung Cancer Incidence and Mortality Worldwide in 2008 Summary

Estimated numbers (thousands)	Men		Women		Both sexes	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
World	1092	948	515	427	1607	1375
More developed regions	479	410	243	188	722	598
Less developed regions	612	538	272	239	884	777
WHO Africa region (AFRO)	12	11	4	4	16	15
WHO Americas region (PAHO)	172	144	134	101	306	245
WHO East Mediterranean region (EMRO)	21	19	5	4	26	23
WHO Europe region (EURO)	310	276	107	91	417	367
WHO South-East Asia region (SEARO)	108	97	42	37	150	134
WHO Western Pacific region (WPRO)	465	397	222	187	687	584
IARC membership (22 countries)	469	399	237	182	706	581
United States of America	114	90	100	71	214	161
China	351	304	170	148	521	452
India	47	41	11	10	58	51
European Union (EU-27)	206	182	82	71	288	253

International Agency for Research on Cancer



World Health Organization



GLOBOCAN 2008 (IARC)
























































































































































































Estimated age-standardised rates (World) per 100,000

Incidence  
Mortality

# LUNG CANCERS

Death Rate Per 100,000  
Age Standardized

HIGH LOW  
Death Rate Per 100,000

Rank	Country	Rate	Rank	Country	Rate	Rank	Country	Rate
	HUNGARY	51.4		TIMOR-LESTE	19.6		COSTA RICA	6.9
	SERBIA/MONTEN	42.4		SOUTH AFRICA	19.6		NICARAGUA	6.9
	MALDIVES	42.1		ISRAEL	19.5		SAINT VINCENT	6.9
	POLAND	41.9		NEPAL	19.4		OMAN	6.8
	ARMENIA	39.3		BAHRAIN	19.1		IRAN	6.7
	DENMARK	39.2		MALTA	18.9		SOLOMON ISL.	6.7
	NETHERLANDS	36.6		LEBANON	18.3		TAJIKISTAN	6.6
	CROATIA	35.7		MYANMAR	18.3		INDIA	6.5
	UNITED STATES	35.4		GEORGIA	18.1		BOLIVIA	6.5
	CUBA	33.8		MALAYSIA	17.9		EL SALVADOR	6.2
	CANADA	33.7		TUNISIA	17.7		FIJI	6.1
	CHINA	33.5		THAILAND	17.2		BARBADOS	6.1
	BELGIUM	32.7		CAMBODIA	16.4		SYRIA	6.0
	CZECH REPUBLIC	31.6		JAMAICA	16.2		EGYPT	6.0
	SLOVENIA	31.6		TUVALU	15.6		SAUDI ARABIA	5.4
	GREECE	31.2		PHILIPPINES	15.5		ST. KITTS	5.4
	ALBANIA	31.0		PARAGUAY	15.3		KIRIBATI	4.9
	UNITED KINGDOM	31.0		VENEZUELA	15.2		GUYANA	4.8
	ESTONIA	30.1		KYRGYZSTAN	15.2		GUINEA	4.6
	NORTH KOREA	30.0		SEYCHELLES	15.1		ZIMBABWE	4.3
	ICELAND	29.9		LIBYA	15.0		SIERRA LEONE	3.9
	LUXEMBOURG	29.6		CYPRUS	14.5		LIBERIA	3.8
	FRANCE	29.6		CHILE	14.2		MICRONESIA	3.7
	ROMANIA	29.5		AZERBAIJAN	14.2		SAMOA	3.7
	BRUNEI	29.5		BRAZIL	14.0		COTE D IVOIRE	3.6
	IRELAND	28.3		MOROCCO	13.6		NAMIBIA	3.5
	BULGARIA	27.8		MARSHALL ISL.	13.6		GABON	3.2
	NORWAY	27.7		GRENADA	13.2		BURKINA FASO	3.2
	SLOVAKIA	27.5		COLOMBIA	12.9		GHANA	3.1
	SINGAPORE	27.5		BELIZE	12.7		SWAZILAND	3.1
	SOUTH KOREA	27.3		PALAU	12.6		KENYA	3.0
	LATVIA	27.1		MAURITIUS	12.6		GAMBIA	2.8
	URUGUAY	26.8		DOMINICAN REP	12.1		LESOTHO	2.8
	SPAIN	26.5		PANAMA	12.0		YEMEN	2.6
	GERMANY	26.0		NIUE	11.8		UGANDA	2.6
	TURKEY	25.9		TURKMENISTAN	11.4		GUINEA-BISSAU	2.5
	LITHUANIA	25.8		SURINAME	11.3		BOTSWANA	2.5
	KAZAKHSTAN	25.7		TONGA	11.1		SENEGAL	2.5
	YUGOSLAVIA	25.7		QATAR	11.0		TOGO	2.4
	ITALY	25.5		VANUATU	11.0		ANGOLA	2.3
	SAN MARINO	25.1		DOMINICA	10.9		MAURITANIA	2.3
	MONACO	25.1		ALGERIA	10.6		SOMALIA	2.2
	RUSSIA	25.0		JORDAN	10.0		BENIN	2.2
	VIET NAM	24.7		SAINT LUCIA	10.0		MOZAMBIQUE	2.2
	AUSTRIA	24.4		MADAGASCAR	9.9		BURUNDI	2.0
	NEW ZEALAND	24.3		BAHAMAS	9.7		CONGO	2.0
	BELARUS	24.1		TRINIDAD/TOB.	9.6		REP OF CONGO	1.9
	BOSNIA/HERZEG	23.7		BHUTAN	9.6		ETHIOPIA	1.9
	AUSTRALIA	23.0		ECUADOR	9.5		ERITREA	1.9
	SWITZERLAND	22.6		HONDURAS	8.9		COMOROS	1.9
	ARGENTINA	21.8		IRAQ	8.9		SUDAN	1.8
	ANDORRA	21.6		MEXICO	8.6		CENTRAL AFRICA	1.8
	JAPAN	21.3		COOK ISLANDS	8.5		RWANDA	1.8
	MOLDOVA	21.2		KUWAIT	8.4		MALI	1.8
	SAO TOME	21.2		ANTIGUA/BAR.	8.3		DJIBOUTI	1.7
	MONGOLIA	21.2		HAITI	8.0		ZAMBIA	1.7
	LAOS	21.0		PAKISTAN	7.8		CAMEROON	1.7
	INDONESIA	20.5		UZBEKISTAN	7.7		TANZANIA	1.6
	BANGLADESH	20.3		ARAB EMIRATES	7.4		EQU. GUINEA	1.5
	SWEDEN	20.3		NEW GUINEA	7.4		CHAD	1.5
	UKRAINE	20.2		PERU	7.3		NIGERIA	1.4
	NAURU	19.9		AFGHANISTAN	7.2		CAPE VERDE	1.2
	FINLAND	19.7		SRI LANKA	7.2		NIGER	0.8
	PORTUGAL	19.6		GUATEMALA	7.1		MALAWI	0.7



## LUNG CANCER STIGMA RESULTS IN:

- Continued Loss of Lives
- Under-funding of Research
- Burdens for Patients and Families
- High but Ignored Impact on Veterans, African American Men

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EARLY DETECTION IS CRITICAL

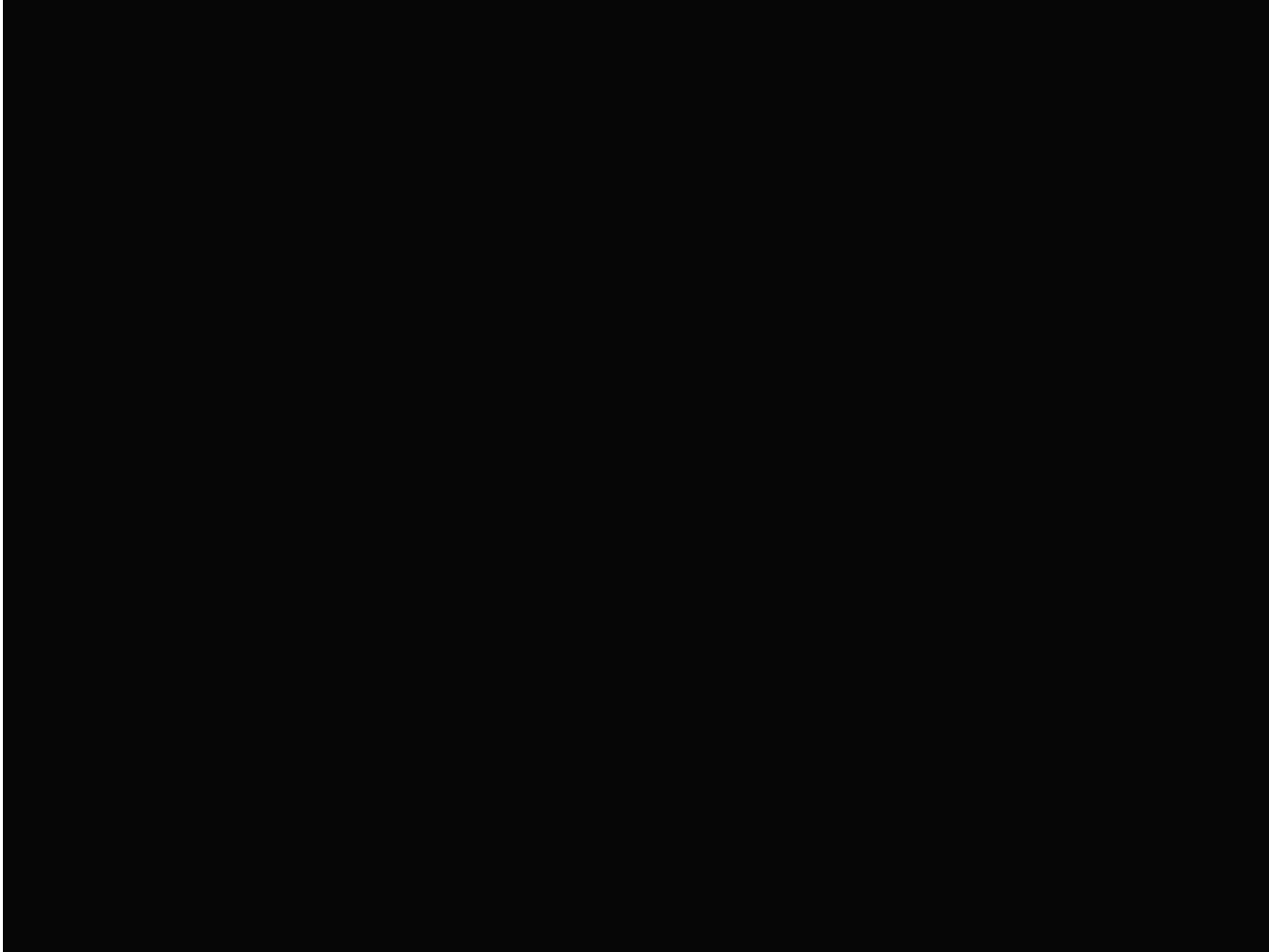
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# National Framework for Excellence in Lung Cancer Screening and Continuum of Care

# Thank You

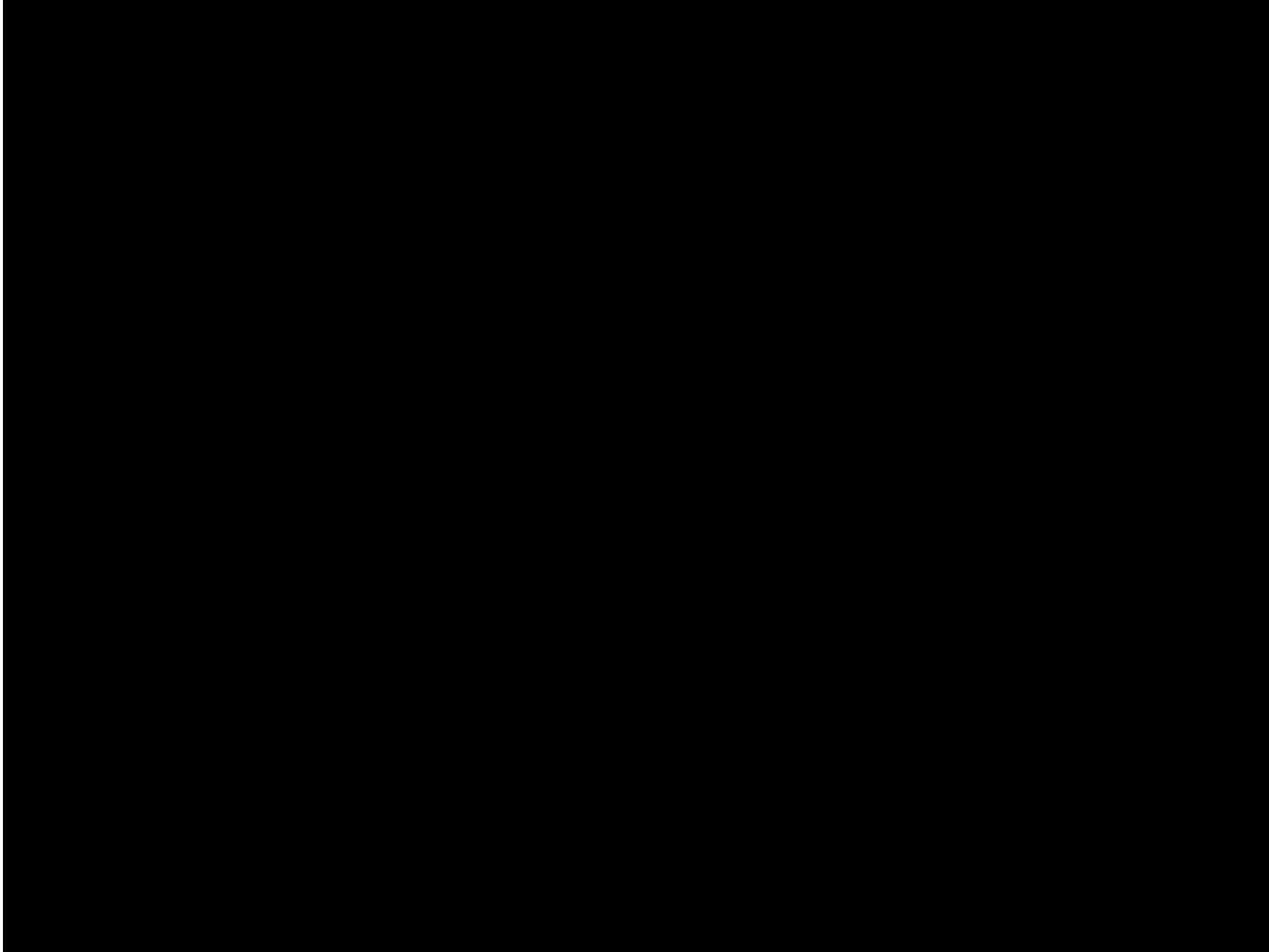
[chealton@legacyforhealth.org](mailto:chealton@legacyforhealth.org)

1200



# SCUM

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# SHARDS O' GLASS

