

A Shift to Prevention and Wellness –
Can We Do It?

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**DISCLOSURE OF RELEVANT
RELATIONSHIPS
WITH INDUSTRY**

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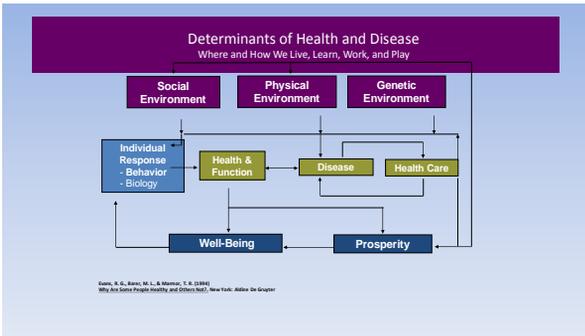
- I do not have any relevant relationships with industry.
- No relationship with commercial supporters
- No off-label discussion of drugs or devices
- Work supported by US Government (DHHS, DoD, CDC, NIOSH, FDA, USPHS)



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*The views expressed in this presentation
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Health Risk	Health Risk Criteria
Alcohol Use	More than 2 drinks / day
Blood Pressure	Systolic > 130 mmHg or Diastolic > 85 mmHg
Body Weight	Men BMI > 27.8 Women BMI > 27.3
Total Cholesterol	Greater than 230 mg/dL
Existing Medical Conditions	Heart, Cancer, Diabetes, Stroke
HDL	Less than 35 mg/dL
Sleep Days	More than 5 days last year
Life Satisfaction	Partly or Not Satisfied
Perception of Health	Fair or Poor
Physical Activity	Less than one time/week
Smoking	Current smoker
Stress	High

\$2.8 Trillion Spent on Health Care:
75% attributed to behaviors and lifestyle choices

"Size of her stomach, Doc. Also, do you I have to ignore your advice?"

What happens when we eat better, don't smoke, increase activity, and limit alcohol?

Disease	Reduction Compared to U.S.	Comment
Heart Disease	64%*-83%**	80% due to modifiable risk factors
Cancer	60%*	Approximates NCI estimates
Diabetes	91%**	No type 2 epidemic
All-cause Mortality	50%*	

*Kawachi et al and **Blum, *Stamper*, JAMA 2004;292:2493-2499

Our Role in Prescribing Health



"If we had a pill that conferred all the proven health benefits of exercise, physicians would prescribe it to every patient and our healthcare system would find a way to make sure every patient had access to this wonder drug."

(Exercise is Medicine)

*Robert E. Sallis, MD, FACS, FAAP

10 Great Public Health Achievements-US 1900-1999

- Vaccination
- Motor-vehicle safety
- Safer workplaces
- Control of infectious diseases
- Decline in deaths from heart disease and stroke
- Safer and healthier foods
- Healthier mothers and babies
- Family planning
- Fluoridation of water
- **Recognition of tobacco as a health hazard**

MMWR 1999 Apr 2;48(12):241-3.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention





Everest 1963

- "The smokers were horrified to discover that, instead of the expected 60,000 cigarettes, there were only 6,000; and everyone knows you can't climb a mountain on that little nicotine."
 - James Ullman, 3/13/63





Surgeon General
Luther Terry

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Surgeon General's Report on Smoking and Health

- Released in January 1964
- Identified smoking as a cause of lung cancer in men
- "Cigarette smoking is a health hazard of sufficient importance in the US to warrant appropriate remedial action."



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College of Health, Behavior & Society

January 11, 2014



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Health Effects of Tobacco Use

- Thirty two SG Reports on Smoking and Health released (1964-2014)
- Produced growing evidence of health effects from smoking and second hand smoke
 - Heart disease.
 - Chronic obstructive pulmonary disease.
 - Cancers.
 - Pregnancy complications.
 - Pediatric diseases.



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Key SG Reports 1964-2014

- 1980, 2001 – women and smoking
- 1986, 2006 – involuntary smoking
- 1988 – nicotine addiction
- 1989 – 25 years of progress
- 1994, 2012 – young people and tobacco use
- 1998 – racial and ethnic minorities
- 2010 – biology and behavioral basis
- 2014 – 50 years of progress

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50th Anniversary Surgeon General's Report on Smoking and Health



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50th Anniversary SGR

- Report released at the White House 1/17/2014
- 5 years, 85 authors, 120 reviewers, 983 pages
- Report covers three major topics:
 - Historical and trend information on tobacco use over last 50 years
 - New findings on health effects of smoking
 - Call to action—how we can end the continuing tobacco use epidemic

ENOUGH IS ENOUGH!!

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Major Points from the 50th Anniversary Report (1)

- Over **20 million premature deaths** since the first report
 - 480,000 annual deaths
- Remains single largest cause of preventable disease and death
- 8 million lives saved since 1964
- 45 million smokers (18%)
 - 3 million youth smoke
- Economic burden of \$289 billion
 - Direct costs \$130 billion (60% from public funds)

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Smoking Premature Deaths 1964-2014

Cause of death	Total
Cancers	6,587,000
Cardiovascular and metabolic	7,787,000
Pulmonary	3,804,000
Conditions related to pregnancy/birth	108,000
Fires	86,000
Cancers (secondhand smoke)	263,000
Coronary heart disease (secondhand smoke)	2,194,000
TOTAL	20, 830,000

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Major Points from the 50th Anniversary Report (2)

- Tobacco epidemic was initiated and sustained by the aggressive strategies of the tobacco industry which deliberately misled the public
 - Spend nearly **a million dollars an hour** to market their deadly and addictive products
 - Per capita spending -- \$27
 - Per capita state-spending on tobacco control -- <\$1.50
 - Engineered cigarette -- today we know that smokers have greater risk of developing lung cancer even though they smoke fewer cigarettes

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Major Points from the 50th Anniversary Report (3)

- **Cigarette smoking** has been determined to **cause diseases** in nearly all organs of the body, to damage overall health status, and to harm a growing fetus
 - Diabetes mellitus
 - Rheumatoid arthritis
 - Colon and rectal cancer (now 13 cancers and 1 in 3 cancer deaths!)
 - Erectile dysfunction
 - Macular degeneration
 - Cleft lip/palate, ADHD, brain development in fetus
 - 16 million suffer from at least one smoking-related chronic disease

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Major Points from the 50th Anniversary Report (4)

- Exposure to **secondhand tobacco smoke** caused cancer and preventable diseases; it adversely affects the health of infants and children
- Of the 20 million premature deaths since 1964
 - 2.5 million nonsmokers
 - 100,000 babies (SIDs, prematurity)
- Stroke a known consequence of secondhand smoke

STROKE AND SECONDHAND TOBACCO SMOKE
OF THE HEALTH REPORT

Major Points from the 50th Anniversary Report (5)

- Disease risks from **smoking by women** have risen sharply over the last 50 years
 - Women are now as likely to die from smoking as men
 - Women's lung cancer risk now the same as men
 - More women die from COPD than men
 - Smoking can cause ectopic pregnancy and reduce fertility

STROKE AND SECONDHAND TOBACCO SMOKE
OF THE HEALTH REPORT

Major Points from the 50th Anniversary Report (6)

- Cigarette smoking causes inflammation and impaired immune function, reducing the body's ability to fight off infection and disease
 - Increased risk of TB disease and death

STROKE AND SECONDHAND TOBACCO SMOKE
OF THE HEALTH REPORT

Major Points from the 50th Anniversary Report (7)

- Although cigarette smoking has declined significantly since 1964, very large disparities in tobacco use remain (vulnerable populations)
 - Race and ethnicity
 - Educational level
 - Socioeconomic status
 - Armed services
 - Regions of the US (Midwest and Southeast)
 - Sexual orientation
 - Mental illness

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Major Points from the 50th Anniversary Report (8)

- Comprehensive tobacco control programs and policies are effective
 - Need to use them and fund them
 - Full, forceful and sustained use of measures

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Proven tobacco control measures

- Year-round hard-hitting media campaigns
- Easy-to-access cessation treatments (ACA)
- 100% indoor smoke-free laws
- Excise taxes and pricing
- Tobacco-control programs funded at CDC recommended levels
- Full use of FDA's regulatory authority over tobacco products

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Major Points from the 50th Anniversary Report (9)

- The burden of death and disease from tobacco use in the United States is overwhelmingly caused by cigarettes and other combusted tobacco products; rapid elimination of their use will dramatically reduce this burden
 - Every day 3200 under-18 years of age smoke their first cigarette
 - Every day another 2100 youth and young adults become daily smokers
 - 90% of adults who smoke started smoking before 18
 - 98% **before age 26**
 - If current trends continue, 5.6 million kids (1 in 13) now alive will die prematurely from smoking-related diseases
- Our goal is to make the next generation tobacco free

STRENGTHENING TOBACCO REGULATION IN THE UNITED STATES
of the United States

Major Points from the 50th Anniversary Report (10)

- For 50 years Surgeon Generals' reports on smoking and health have provided a critical scientific foundation for public health action directed at reducing tobacco use and preventing tobacco-related disease and premature death

STRENGTHENING TOBACCO REGULATION IN THE UNITED STATES
of the United States

50 Years

- 1964 – 42% smoke
- 1966 – warning labels
- 1967 – public service announcements to counter tobacco ads
- 1969 – phase out of ads on TV and radio
- 1970 – 37% smoke
- 1970 – ban on ads on TV and radio and strengthened warning label

STRENGTHENING TOBACCO REGULATION IN THE UNITED STATES
of the United States

50 Years

- 1971 – last cigarette ad runs (Tonight Show)
- 1972 – SG Report discusses secondhand smoke
- 1973 – Arizona restricts smoking in some public places
- 1975 – no cigarette rations to troops
- 1980 – 33% smoke
- 1988 – California first tobacco tax for tobacco control programs

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50 Years

- 1990 – 26% smoke
- 1990 – domestic airlines smokefree
- 1990 – San Luis Obispo passes first smokefree restaurant law
- 1991 – NCI supports tobacco control programs in 17 states
- 1992 – EPA classifies secondhand smoke as carcinogen

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50 Years

- 1993 – White House smokefree
- 1994 – Mississippi files first lawsuit against US tobacco
- 1994 – Seven tobacco execs testify in Congress that nicotine is not addictive
- 1995 – California first statewide smokefree bar and restaurant law
- 1998 – 46 states and 4 tobacco companies sign Tobacco Master Settlement Agreement

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50 Years

- 1999 – DOJ files suit against industry for deceiving Americans
- 1999 – CDC launches tobacco control programs in 50 states
- 1999 – bans of outdoor and transit billboard ads
- 2000 – 23 % smokers
- 2003 -- WHO adopts first international tobacco control treaty
- 2006 – Federal court ruled US tobacco deceiving Americans (racketeering)

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50 Years

- 2009 – Tobacco Control Act and biggest federal excise tax
- 2010 – 19% smokers
- 2010 – half of US states have smokefree laws
- 2012 – CDC launches “Tips from Former Smokers” ad campaign
- 2014 – 18% smokers
- 2014 – FDA launches “The Real Cost” ad campaign
- 2014 – CDC releases Best Practices for Comprehensive Tobacco Control Programs

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NATIONAL PREVENTION STRATEGY



Vision

Working together to improve the health and quality of life for individuals, families, and communities by moving the nation from a focus on sickness and disease to one based on prevention and wellness.



Partners in Prevention

- Federal government
- State, tribal, local and territorial governments
- Businesses and employers
- Health care systems, insurers, clinicians
- Education (early learning centers, schools)
- Community and faith-based organizations
- Individuals and families
- Roles – policy maker, purchase, employer, funder, data collector and researcher, health care provider, communicator and educator

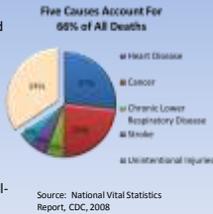


NATIONAL PREVENTION STRATEGY



NPS PRIORITIES

- Tobacco Free Living
- Preventing Drug Abuse and Excessive Alcohol Use
- Healthy Eating
- Active Living
- Injury and Violence Free Living
- Reproductive and Sexual Health
- Mental and Emotional Well-being



NATIONAL PREVENTION COUNCIL ACTION PLAN

- Released as part of the National Prevention Council's 2012 Annual Status Report
- Implements the National Prevention Strategy at the federal level
- Highlights over 200 federal actions from the 17 federal departments
- Includes shared commitments aimed at accelerating health improvements



NATIONAL PREVENTION COUNCIL COMMITMENTS

1. Identify opportunities to consider prevention and health within its departments and encourage partners to do so voluntarily as appropriate.
2. Increase tobacco free environments within its departments and encourage partners to do so voluntarily as appropriate.
3. Increase access to healthy, affordable food within departments and encourage partners to do so voluntarily as appropriate.





The Three Buckets of Prevention

- Traditional clinical prevention
 - Increase the use of evidence-based services
- Innovative clinical prevention
 - Provide services outside the clinical settings
- Total population or community-wide prevention
 - Implement interventions that reach whole populations

John Auerbach, J Public Health Management Practice 2016

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THE 6|18 INITIATIVE

Accelerating Evidence into Action

SIX WAYS TO SPEND DOLLARS FOR HEALTHIER PEOPLE

1. TOBACCO: Reduce tobacco use
 2. ALCOHOL: Reduce alcohol consumption
 3. OBESITY: Increase physical activity
 4. MENTAL HEALTH: Increase mental health services
 5. PHYSICAL ACTIVITY: Increase physical activity
 6. ORAL HEALTH: Increase oral health services

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10 Great Public Health Achievements-US 2000-2019
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- Elimination of tobacco as a health hazard

MMWR 2019 Apr 2;48(12):241-3.???

Division of Field Epidemiology
of the Health System
