Dermatology

in the Public Health Model —

The National Prevention Strategy

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DISCLOSURE OF CONFLICTS OF INTEREST

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- I do not have any relevant financial relationships with any commercial interests
- No off-label discussion of drugs or devices
- Work supported by US Government (DHHS, PHS, FDA, CDC/NIOSH)
How does dermatology fit into the public health model?
Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity
Public Health

- The science and art of preventing disease, prolonging life and promoting health through the organized efforts and informed choices of society, organizations, public and private, communities and individuals.
  - CEA Winslow, 1920
Public Health

- Deals with preventive rather than curative aspects of health
- Deals with population-level, rather than individual-level health issues
Causal Pathway of Disease or Disability

- Environment (pre-exposure)
- Hazard/agent
- Behavior/risk factor
- Exposure
- Pre-symptomatic phase
- Apparent disease
- Death
Mellisa [redacted], 35, a Bullitt Avenue resident, worries about the effect on her unborn child from the sound of jackhammers.
Public Health Model

Surveillance: What is the problem?

Risk Factor Identification: What is the cause?

Intervention Evaluation: What works?

Implementation: How do you do it?
Core Public Health Functions

- **Assessment and monitoring of the health of communities and populations at risk**
  - identify health problems and priorities - surveillance

- **The formulation of public policies**
  - designed to solve identified local and national health problems and priorities

- **Assure that all populations have access to appropriate and cost-effective care**
  - including health promotion and disease prevention services
  - evaluation of the effectiveness of that care
Public Health Surveillance

- Ongoing, systematic collection, analysis, and interpretation of health-related data
- Essential to the planning, implementation, and evaluation of public health practice
- Closely integrated with the timely dissemination of these data to those responsible for prevention and control
Uses of Public Health Surveillance

- Estimate magnitude of the problem
- Determine geographic distribution of illness
- Portray the natural history of a disease
- Detect epidemics/define a problem
- Generate hypotheses, stimulate research
- Evaluate control measures
- Monitor changes in infectious agents
- Detect changes in health practices
- Facilitate planning
Melanoma of the Skin 2013

- 76,690 estimated new cases (59% males)
  - 5th most common cancer in males (5%)
  - 7th most common in females (4%)
- 9,480 deaths
  - 66% males

CA Cancer J Clin 63:11-30
Melanoma of the Skin
Incidence Rates US 1999-2007

National Program of Cancer Registries and SEER
Melanoma of the Skin
Incidence Rates per 100,000 by State 2007

8.6-16.7

16.8-19.2

19.3-22.1

22.2-28.1
Information Loop of Public Health Surveillance

Summaries, Interpretations, Recommendations

Public
Health Care Providers
Health Agencies
Analysis

Reporting
Core Public Health Functions

- Assessment and monitoring of the health of communities and populations at risk
  - identify health problems and priorities - surveillance

- The formulation of public policies
  - designed to solve identified local and national health problems and priorities

- Assure that all populations have access to appropriate and cost-effective care
  - including health promotion and disease prevention services
  - evaluation of the effectiveness of that care
Use policies, research agendas, and recommendations to attain public health goals.
The International Agency for Research on Cancer (IARC)

- Group 1: Carcinogenic to humans
  - Ultraviolet (UV) radiation, including UVA, UVB, and UVC rays
  - Ultraviolet-emitting tanning devices
FDA issues modifications to requirements for sunscreen labeling (June 2011)

“Broad spectrum” and “If used as directed with other sun protection measures… reduces the risk of skin cancer and early skin aging, as well as helps prevent sunburn”

- Meets UVA sun protection standards and has a UVB SPF of 15 or higher
“Broad spectrum” with SPFs 2-14 must display a warning that the product has not been shown to help prevent skin cancer or early skin aging.

Terms “waterproof”, “sweatproof”, “sunblock” not allowed.

“Water resistance” may be claimed if the duration of effect (40 or 80 mins) is specified.
Regulatory Public Health

- FDA Advisory Committee meeting (March 2010)
  - Seek independent, professional expertise and advice on regulatory issues related to tanning devices
  - Consideration of revising requirements for tanning beds including strengthening warning labels to make consumers more aware of the risks
Regulatory Public Health

- April 8, 2011 -- United Kingdom’s Sunbeds (Regulation) Act bans use of UV tanning devices for those under 18
- October 9, 2011 – California bans use of UV tanning devices for those under
- Texas ban under age 16.5
- Howard County, MD ban under 18
Healthy People
www.healthypeople.gov

- Developed in 1979 by the Department of Health and Human Services
- Science-based, 10 year national objectives
- For promoting health and preventing disease
- Includes a vision, mission, goals, focus areas, criteria, objectives and action plans for achieving the targets
Healthy People 2020

- Launched Dec 2010
- 600 objectives, 1300 measures
- Each objective has a reliable data source, a baseline measure, and a target for specific improvements

www.healthypeople.gov/HP2020
Healthy People 2020 -- Cancer

- Reduce the melanoma cancer death rate
  - Target: 2.4 deaths per 100,000 (10%)
  - Source: National Vital Statistics System, CDC, NCHS

- Increase the proportion of persons who participate in behaviors that reduce their exposure to harmful ultraviolet (UV) irradiation and avoid sunburn
  - Source: Youth Risk Behavior Surveillance Survey National Health Interview Survey (CDC),

www.healthypeople.gov/HP2020
Healthy People 2020 -- Cancer

- Reduce the proportion of adolescents in grades 9-12 who report sunburn (developmental)
- Reduce the proportion of adults aged 18 years and older who report sunburn (developmental)
- Reduce the proportion of adolescents in grades 9-12 who report using artificial sources of UV light for tanning (Target 14%, Current 15.6%)
- Reduce the proportion of adults aged 18 and older who report using artificial sources of UV light for tanning (Target 13.7%, Current 15.2%)

www.healthypeople.gov/HP2020
Healthy People 2020 -- Cancer

- Increase the proportion of adolescents in grades 9-12 who follow protective measures that may reduce the risk of skin cancer (Target 11.2%, Current 9.3%)

- Increase the proportion of adults aged 18 years and older who follow protective measures that may reduce the risk of skin cancer (Target 80.1%, Current 72.8%)

www.healthypeople.gov/HP2020
Sun safety or skin cancer prevention

- In 2006, 72.4% of schools (grades 1-12) provided school health education in sun safety or skin cancer prevention to promote personal health and wellness
- Target: 79.6%
- Source: School Health Policies and Programs Study (CDC)
Healthy People 2020 Implementation Framework

- MAP-IT
  - Mobilize -- partnerships
  - Assess -- needs and assets
  - Plan -- clear objectives and concrete steps
  - Implement -- workplan, POC, communication plan
  - Track -- evaluate and track progress

- Using Healthy People to make the case for funding

www.healthypeople.gov/HP2020
Unique opportunities for prevention
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.
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PREVENTION ADVISORY GROUP

- 22 non-federal members
- Statutory Role:
  - Develop policy and program recommendations
  - Advise National Prevention Council on prevention and health promotion practices
NATIONAL PREVENTION STRATEGY

- Extensive stakeholder and public input
- Aligns and focuses prevention and health promotion efforts with existing evidence base
- Supports national plans
NATIONAL PREVENTION STRATEGY

Increase the number of Americans who are healthy at every stage of life.

Healthy & Safe Community Environments

Clinical & Community Preventive Services

Tobacco Free Living

Preventing Drug Abuse and Excessive Alcohol Use

Reproductive and Sexual Health

Mental and Emotional Well-being

Healthy Eating

Active Living

Empowered People

Elimination of Health Disparities
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

Five Causes Account For 66% of All Deaths

- Heart Disease: 34%
- Cancer: 27%
- Chronic Lower Respiratory Disease: 23%
- Stroke: 5%
- Unintentional Injuries: 5%

NATIONAL PREVENTION COUNCIL ACTION PLAN

• Implements the National Prevention Strategy
• Released as part of the National Prevention Council’s 2012 Annual Status Report
• Highlights over 200 federal actions from the 17 federal departments
• Includes shared commitments aimed at accelerating health improvements
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.
What’s Next

- Execute and coordinate NPS actions across Council agencies
- Encourage partners to create and execute their own NPS action plans
- Monitor and track progress
- Share successes!
Thank you.

For more information go to:

www.surgeongeneral.gov/nationalpreventioncouncil

Contact the National Prevention Council at:

prevention.council@hhs.gov