



Healthy People 2020 and Application to Pharmacy Education

2010 AACP Annual Meeting (Seattle, Washington)
Session of the AACP Public Health SIG

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Session Objectives

- Discuss the history and purpose of the U.S. DHHS Healthy People objectives/goals
- Describe the goals, objectives and action plans of Healthy People 2020, particularly goals that can be related to the pharmacy profession
- Describe the evolving role of pharmacists in public health and sensitize academic pharmacy stakeholders to their role in Healthy People 2020
- Identify scholarship opportunities for academic pharmacy based on Healthy People 2020
- Detail the benefits and challenges of inclusion of public health within the pharmacy curriculum, with a specific focus on Healthy People 2020
- Discuss methods for incorporation of Healthy People 2020 into didactic and experiential courses within the pharmacy curriculum

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Healthy People 2020

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Assistant Surgeon General
Regional Health Administrator
US DHHS Region X



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What is Healthy People?

- **National agenda** that communicates a **vision** and **overarching goals**, supported by **topic areas** and **specific objectives** for improving the population's health and achieving health equity.

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Healthy People 2010: Strengths and Challenges

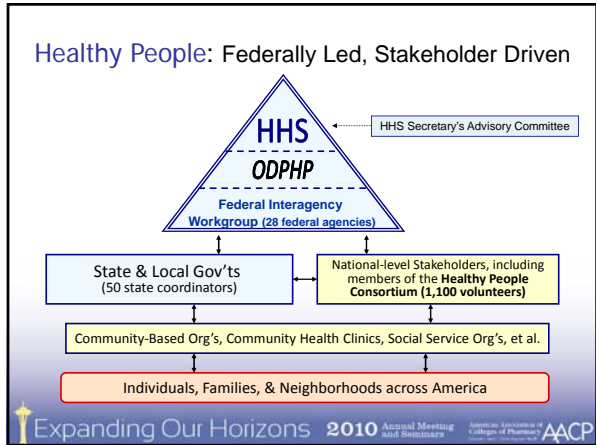


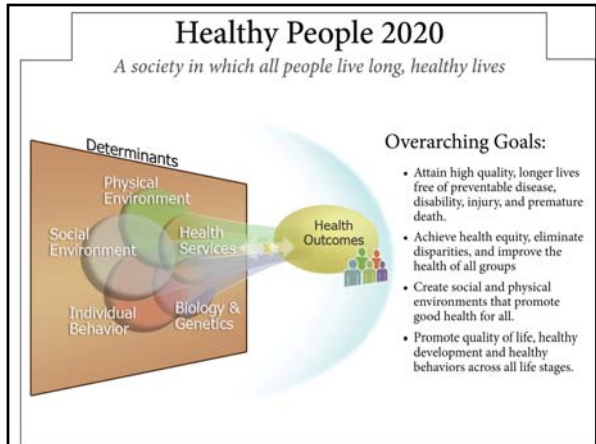
<p>Strengths</p> <ul style="list-style-type: none"> • Collaboration and consensus • Wide array of diverse users • Public access to data via internet • Science- and evidence-based • Data-driven • Measurable objectives, targets 	<p>Challenges</p> <ul style="list-style-type: none"> • Encyclopedic approach versus targeted effort • Integration of target-setting across all areas • Data source funding and development • Implementation plan • Technical assistance
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Healthy People 2020: Framework

Mission: Healthy People 2020 strives to:

- Identify nationwide health improvement priorities;
- Increase public awareness and understanding of the determinants of health, disease, and disability and the opportunities for progress;
- Provide measurable objectives and goals that are applicable at the national, state, and local levels;
- Engage multiple sectors to take actions to strengthen policies and improve practices that are driven by the best available evidence and knowledge;
- Identify critical research, evaluation, and data collection needs.



Areas new to Healthy People 2020

- Life stages—Adolescent Health, Early and Middle Childhood, Older Adults
- Blood disorders and Blood Safety
- Dementia, including Alzheimer's Disease
- Genomics
- Global Health
- Healthcare Associated Infections
- Preparedness
- Quality of Life and Wellbeing
- Social Determinants of Health



Healthy People 2020 Online

Vision: Create an engaging, user-centered Web site that gives new and existing users of Healthy People a platform to learn, collaborate, plan, and implement strategies to reach the 2020 objectives.



Healthy People 2020: Looking Ahead

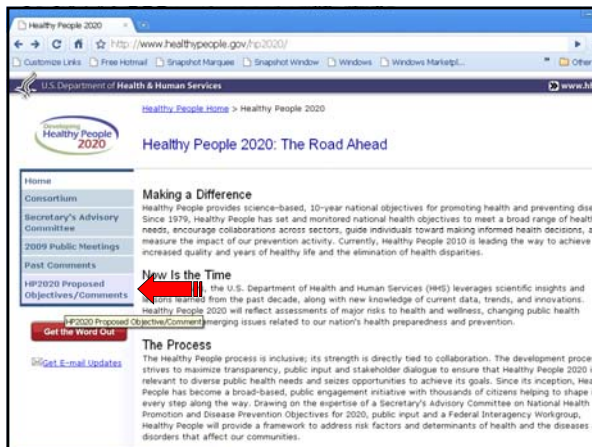
- Web-based interactive resource to expand reach and usability www.healthypeople.gov
- Dynamic system to accommodate changing health needs and priorities
- “Health in All Policies” approach
- Integration of social and physical environment determinants of health across multiple disciplines and sectors



Goals relevant to Pharmacy Profession

- Pharmacy-relevant items throughout currently proposed objectives
- Too many to list
- Still a work in progress
- To check it out for yourself: <http://www.healthypeople.gov/hp2020/>





Objectives

- Describe the evolving role of pharmacists in public health and sensitize academic pharmacy stakeholders to their role in Healthy People 2020.
- Identify scholarship opportunities for academic pharmacy based on Healthy People 2020.

Back to the Future: **John Snow's 1854 map of London plots cholera deaths & water pumps**




One of the first applications of public health for disease prevention and control

- Cholera - contagious disease caused by a toxin that reproduces in the human body and which is found in the vomit and feces of those infected.
- Snow believed that water polluted with the toxin transmitted the toxin.
- Others believed that diseases were transmitted through inhalation of bad air.

What did he do?


- He documented that cholera was **much more frequent** among clients of the one company (Broad Street pump), which drew its water from the lower Thames, which was contaminated with London sewage
- Convinced officials to **remove** the handle from the pump.



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The 20th Century's Ten Great Public Health Achievements in the United States

Top 10 Achievements in Public Health

		1. Vaccination
		2. Motor vehicle safety
		3. Safer workplaces
		4. Control of infectious diseases
		5. Decline in deaths from coronary heart disease and stroke
		6. Safe and healthful foods
		7. Healthier mothers and babies
		8. Family planning
		9. Fluoridation of drinking water
		10. Recognition of tobacco use as a health hazard

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What is Public Health?

- An interdisciplinary effort that addresses the physical, mental and environmental **health** concerns of communities and populations.
- Its focus is on prevention of injury and disease in **populations** rather than centering on a single individual.
- **Mission:** promoting physical and mental health and preventing disease, injury, and disability

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What Does Public Health Do?

- Prevents epidemics and the spread of disease
- Protects against environmental hazards
- Prevents injuries
- Promotes and encourages healthy behaviors
- Responds to disasters and assists communities in recovery
- Assures the quality and accessibility of health services



Core Public Health Functions

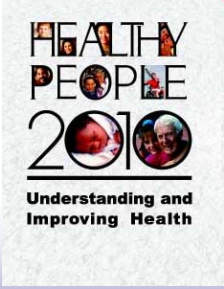


Core Public Health Discipline Areas

- Biostatistics
- Environmental Health Sciences
- Epidemiology
- Health Policy Management
- Social and Behavioral Sciences

Scope of Public Health has Evolved

- Global health
- Emergency preparedness & response
- Climate change
- Health and the built-environment
- Genetics
- Nutrition
- Greater emphasis on health disparities



Pharmacist Involvement in Healthy People 2010
Victoria J. Babic and John Babic

Objectives To review opportunities through which pharmacists can help the United States address its public health goals as outlined in Healthy People 2010. A review is provided for the federal government that reviews the scope of Healthy People 2010 in the context of the 21st century. Reviewed Healthy People 2010 objectives and goals for 10 leading health indicators that address the scope of public health, and non-pharmacist and pharmacist roles are then further delineated into 20 focus areas, many of them with associated goals for the U.S. Public health goals for the 21st century are presented. Opportunities for pharmacist involvement are identified. Roles for pharmacists in public health are discussed. The authors discuss the role of pharmacists in public health, including the potential of patient engagement and promotion of specialized services that focus on such areas as hypertension, diabetes, asthma, patient education, smoking cessation, or general medicine management. Pharmacists can build their efforts in these and other areas by collaborating with physicians and other appropriate professionals, identifying target patients who have obtained services at the pharmacy, conducting activities in the neighborhood that pharmacy professionals can do, assessing, planning, and monitoring an activity of interest, and monitoring efforts for sustained long periods. Conclusion The message of Healthy People 2010 is that the health of the individual is linked to the health of the community, and hence the health of the nation. Pharmacists, recognized as part of the most accessible health care providers in the community, can define their considerable strengths toward using Healthy People 2010 as a guide to expand their role and address and reduce their patients'.

Keywords: Healthy People 2010; public health; disease prevention; disease screening; pharmacist practice; pharmacist roles; patient education services.

J Am Pharm Assoc. 2010;50:40-46.

Healthy People 2020 Lot's of Opportunities - Examples

- Reduce emergency department visits for common, preventable adverse events from medications.
- Reduce the non-medical use of prescription drugs
- Increase the safe and effective treatment of pain
- Reduce the number of antibiotic courses prescribed for the common cold

Immunization Programs

- Seasonal influenza vaccines
- H1N1 influenza vaccines
- Other vaccine preventable illnesses
- Travel Vaccines www.cdc.gov/

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Reproductive Health Services

- Providing emergency contraception through Collaborative Drug Therapy Agreements

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Emergency Preparedness & Response

- Planning and Policy
- Detection and Reporting of Events
- Communication
- Emergency Response
- Personal Preparedness

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Prevention & Control of Diseases and Injuries

- Screening programs
 - Cholesterol, diabetes, osteoporosis
- Patient education campaigns
- Poison prevention
- Smoking cessation
- Preventing and reporting adverse drug reactions

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**Chronic Diseases:
The Leading Cause of Death and Illness in King County**

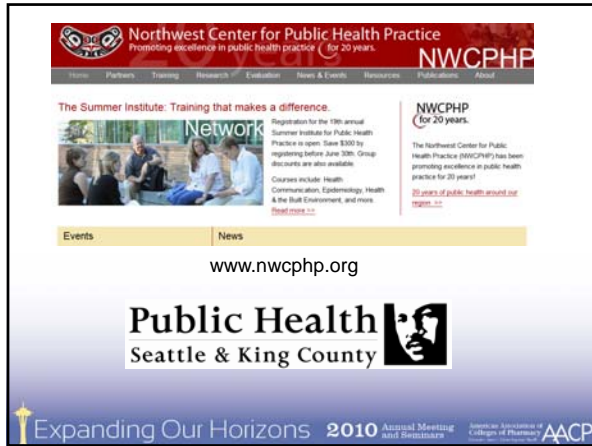
- Common chronic diseases include:
 - Cancer
 - Heart disease
 - Stroke
 - Chronic lung diseases (e.g. asthma, COPD)
 - Diabetes
- 21,000 hospitalizations / \$531 million in 2004
- Cancer, heart disease and stroke alone: 56% of all deaths

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Opportunities for Scholarship


- Make yourself and your trainees useful to your public health agency:
 - Service
 - Planning, exercises, leadership
 - Research
 - Needs assessments, evaluations, effectiveness
 - Training
 - Graduate students, PharmDs, Post-doctoral

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Examples: Manuscripts

- Evaluation of a Mass Dispensing Functional Exercise in a Cities Readiness Initiative Setting. Am J Health-Systems Pharmacy. 2007;64:285-93.
- Building community partnerships through a pandemic influenza exercise series in King County, WA. Public Health Reports. 2010;125:488-93.



Examples: Grants

- Northwest Preparedness and Emergency Response Research Center.
- Development of Collaborative Drug Therapy Agreements for the Distribution and Dispensing of Antiviral Drugs
- A Novel Integrated Multi-source Surveillance System for Tracking Health Disparities
- Cities Readiness Initiative and Pandemic Influenza Preparedness Support
- Healthcare Facilities Partnership Award
- Bioterrorism Curriculum Development Program



Public Health Agencies

- Local Public Health
 - 2,864 **local** public health authorities in the US
 - Few employ pharmacists, but all need this linkage
- State Health Departments
Centers for Disease Control & Prevention
Other Parts of DHHS

Pharmacy & Public Health

- By 2015, pharmacists will provide patient-centered and population-based care, manage resources to improve therapeutic outcomes, and promote health improvement, wellness, and disease prevention.

Joint Commission of Pharmacy Practitioners
Future Vision of Pharmacy Practice

Jack E. Fincham, Ph.D.

Professor of Pharmacy Practice and Administration
UMKC School of Pharmacy
Adjunct Professor of Health Policy and Management
University of Georgia College of Public Health

Objectives

- Detail the benefits and challenges of inclusion of public health within the pharmacy curriculum, with a specific focus on Healthy People 2020
- Discuss methods for incorporation of Healthy People 2020 into didactic and experiential courses within the pharmacy curriculum

How to incorporate into already crowded curricula?

- Always difficult to add to curriculum.
- ACPE provides little public health component guidance.
- The benefit lies in the far reaching influence of HP 2020 objectives.
- For example, the HP 2010 objectives were to be addressed in all federally funded grants/contracts in the past.
- Transition to individual coursework, research, APPE and IPPE, and collective actions should be seamless.

How to incorporate into already crowded curricula?

- IPPE and APPE segments
 - Include HP 2020 objectives in information provided to preceptors
 - Allow HP 2020 objectives to be part of training and orientation programs for preceptors.
 - Stress the importance of addressing the pertinent objectives as necessary
 - Include in student evaluations of clerkship segments

Our individual responses

- Incorporate HP 2020 segments into our curricula
 - Public health oriented coursework
 - Incorporate within ESAS coursework
 - Present within basic science coursework
 - Medicinal Chemistry
 - Pharmaceutics
 - Pharmacology
- IPPEs and APPEs
- Student outreach and community service

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Topic Areas within HP 2020 (proposed)

- A total of 37 objectives, one of which deals with tobacco use
- A focus on decreasing tobacco use and increasing smoking cessation activities.

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Among other retained objectives from HP 2010

- [TU HP2020-5: Reduce tobacco use by adults.](#)
- [TU HP2020-6: Reduce tobacco use by adolescents.](#)
- [TU HP2020-7: Reduce the initiation of tobacco use among children, adolescents, and young adults.](#)
- [TU HP2020-8: Increase smoking cessation attempts by adult smokers.](#) [TU HP2020-9: Increase smoking cessation attempts by adolescent smokers.](#)

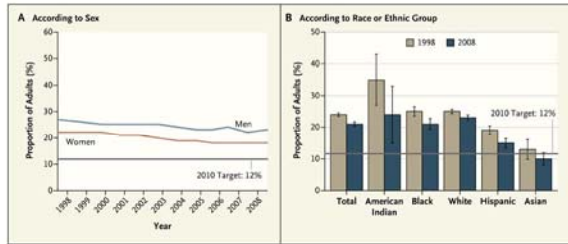
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Tobacco and pharmacy

- 70% of pharmacies in the US are within chain, food market, or mass merchandise based outlets.¹
- Virtually all of these outlets sell tobacco products.¹
- There is a need for our schools and colleges and academia to take a stand.¹

Fincham, *AJPE*, 72(3): Article 57

Smoking rates, US, 1998-2008



Source: HK Koh, A 2020 Vision for Healthy People, *NEJM*, 2010, 362:1653-1656

Our collective responses

- Place our students in clerkship sites who do not market and sell tobacco products.¹
- Have this as a discussion topic for Deans' Advisory Council meetings.¹
- "Butt Out" of tobacco related interactions with our sponsors and supporters.¹

¹Fincham, *AJPE*, 72(3): Article 57

Incorporation into curricula (nursing)

“Increased instructional efforts concerning the clinical treatment of tobacco dependence are critical for achieving a nationwide reduction in tobacco use prevalence.”

Source: Tobacco dependence curricula in U.S. baccalaureate and graduate nursing education, *Nursing Outlook*, 52 (2): April 2004.

Community Service and Outreach Efforts

- “Faculty members, faculty advisors, and administrators can support the vision, mission, and overarching goals of the National Health Promotion and Disease Prevention Objectives 2020 by mentoring and working with students and student organizations in these areas as they develop community outreach activities.”

Nemire & Brazeau, *American Journal of Pharmaceutical Education* 2009; 73 (4) Article 67.