CPH Study Session Webinars

Social and Behavioral Sciences

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Social and Behavioral Sciences in Public Health

- A multidisciplinary approach to the promotion of health and prevention of disease through

  ○ Enhanced understanding of the behavioral and social determinants of health

  ○ Theoretically-driven, evidence-based strategies for health promotion and disease prevention

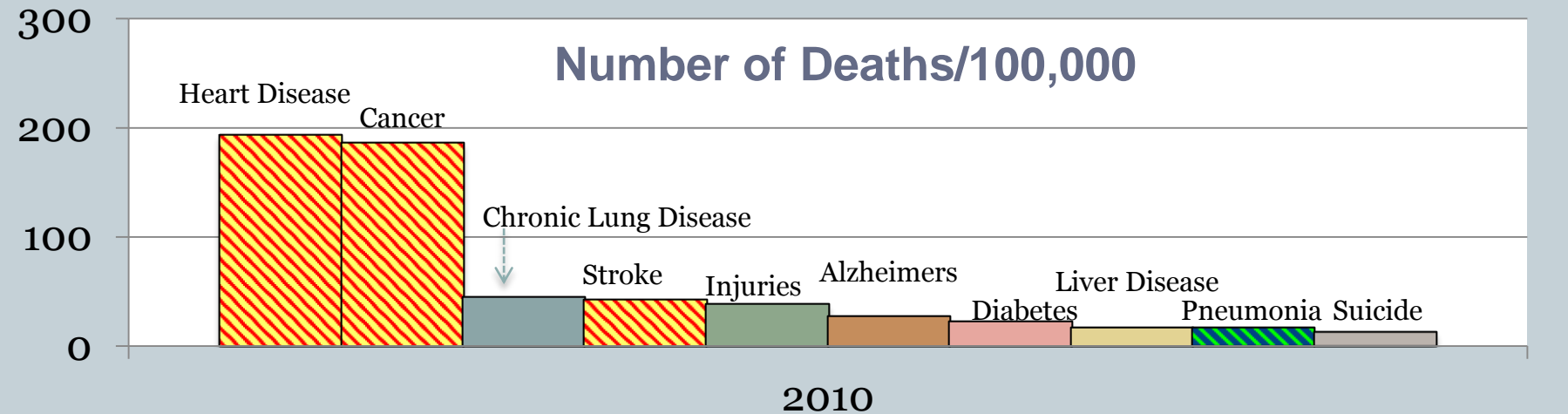 ○ Systematic models for program planning and evaluation
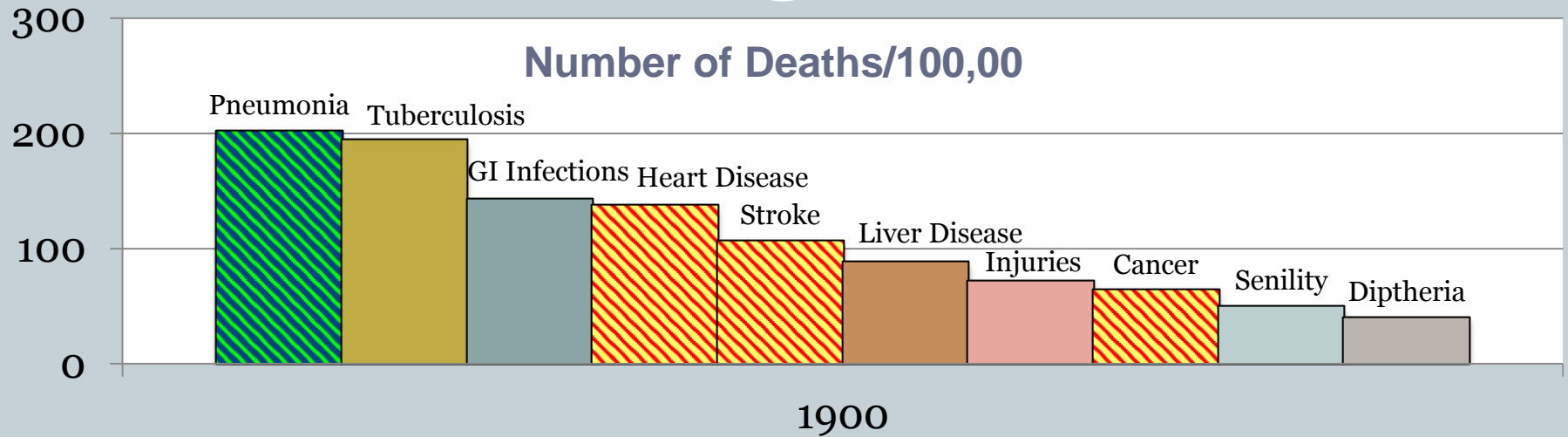
Topics

Part I

1. Pattern Of Disease

2. The Social Ecological Model

3. Theories Of Change

4. Health Promotion And Disease Prevention

Part II

5. Ethical Issues In Planning & Evaluation

6. Planning Models

7. Evaluation Methods

8. Scaling Up Programs And Sustainability

Changing Pattern of Disease, US, 1900 vs. 2010

Number of Deaths/100,00

1900: Pneumonia, Tuberculosis, GI Infections, Heart Disease, Stroke, Liver Disease, Injuries, Cancer, Senility, Diptheria

Number of Deaths/100,000

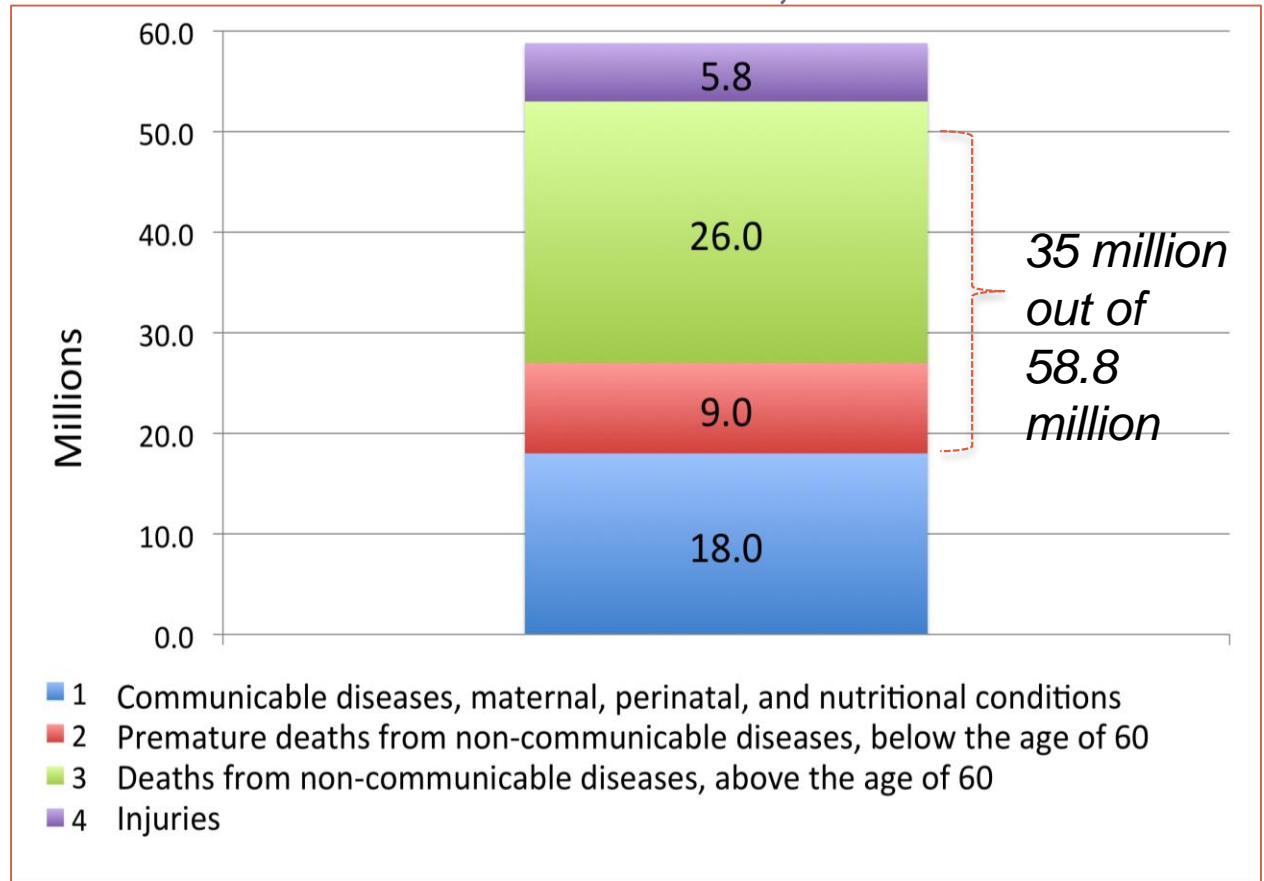2010: Heart Disease, Cancer, Chronic Lung Disease, Stroke, Injuries, Alzheimers, Diabetes, Liver Disease, Pneumonia, Suicide

Global Mortality Pattern

Chronic disease accounts for 60% of deaths worldwide

(35 out of 58.8 million)

Number of Deaths, Worldwide

35 million out of 58.8 million

- ■ 1 Communicable diseases, maternal, perinatal, and nutritional conditions
- ■ 2 Premature deaths from non-communicable diseases, below the age of 60
- ■ 3 Deaths from non-communicable diseases, above the age of 60
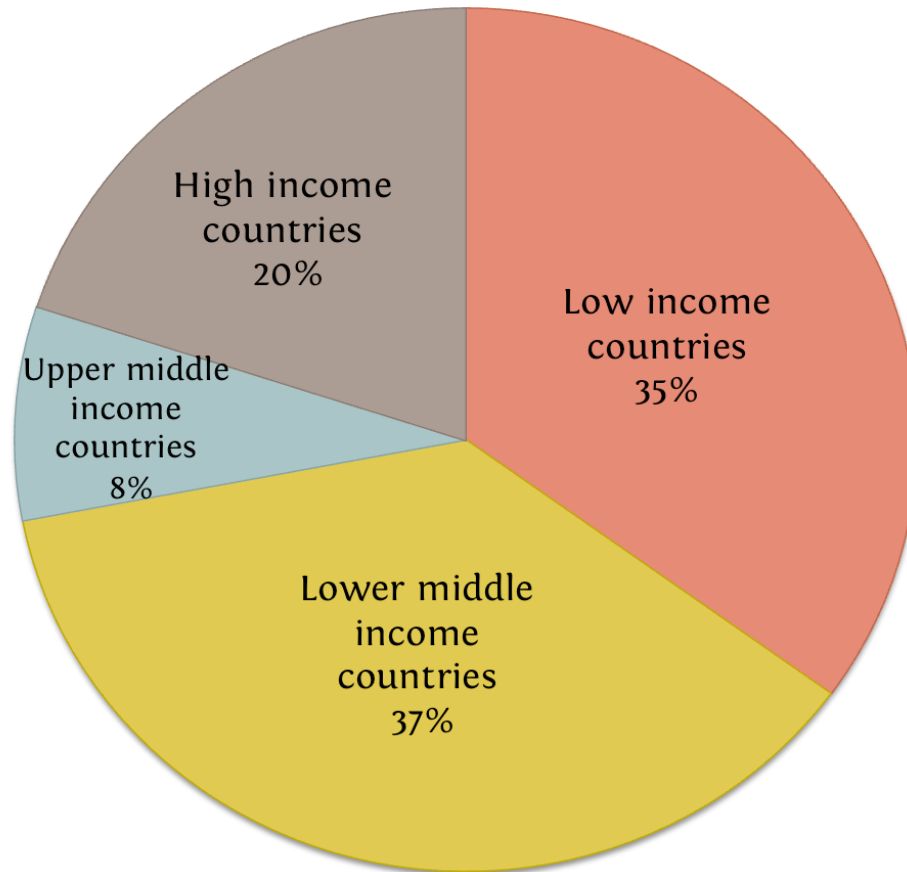- ■ 4 Injuries

Leading Causes of Death Worldwide

Cardiovascular Diseases and Cancer are the two leading causes of death.

Pie chart: Leading Causes of Death Worldwide
- Cardiovascular Diseases 30%
- Communicable Diseases, Maternal Conditions, and Nutritional Deficiencies 30%
- Cancer 13%
- Injuries 9%
- Other Chronic Diseases; 9%
- Chronic Respiratory Diseases 7%
- Diabetes 2%

2 leading causes of death

Chronic Disease Deaths By Income Group

The majority of worldwide chronic disease deaths occur in low and lower middle income countries

High income countries 20%

Low income countries 35%

Upper middle income countries 8%

Lower middle income countries 37%

World Bank Income Groups

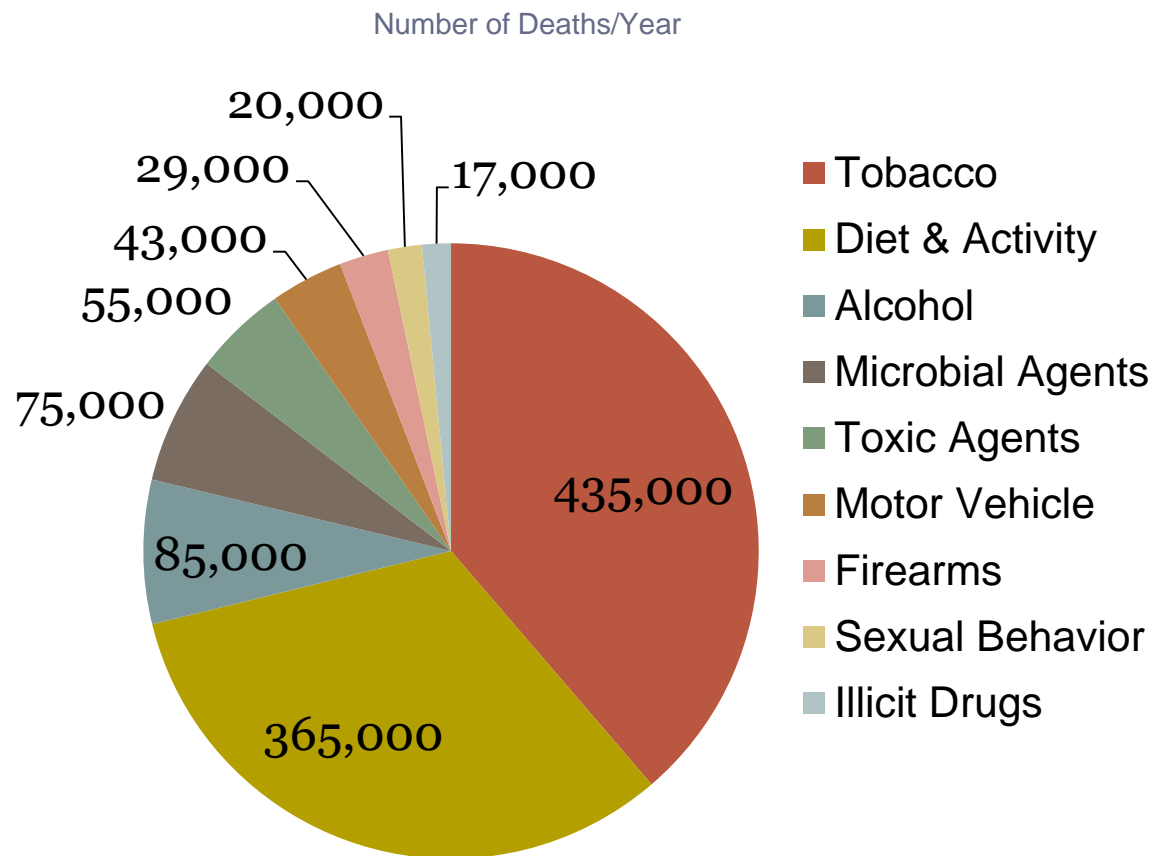Low=<$1025 GNI/capita

Lower Middle = $1,026 - $4,035 GNI/capita

Upper Middle=$4,036-$12,475 GNI/capita

High=>$12,476 GNI/capita

Behavioral Risk Factors & Preventable Death

Behavioral risk factors, including tobacco use, poor diet & physical inactivity, and excess alcohol consumption are the major determinants of early preventable death.
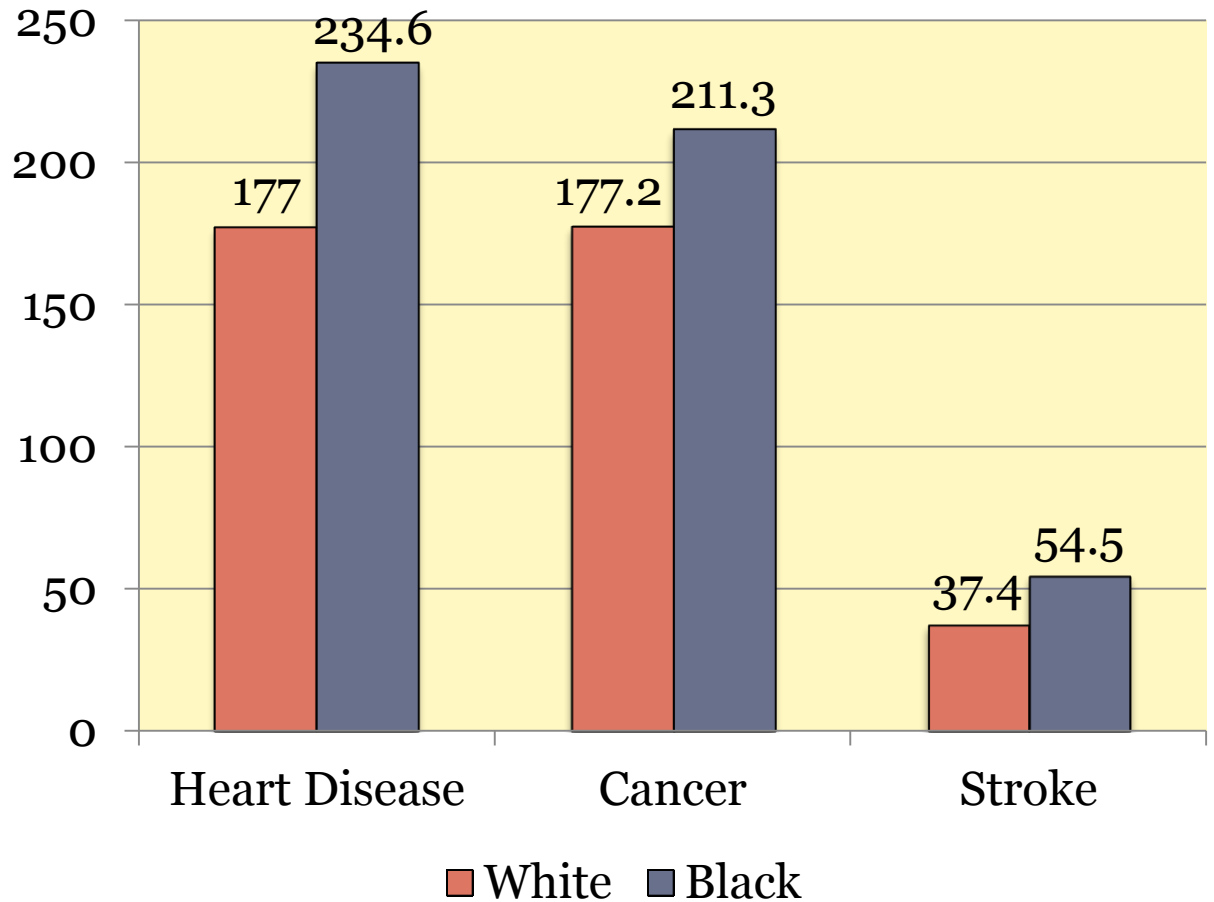
Mokdad, 2004

Actual Causes of US Deaths

Number of Deaths/Year

Pie chart legend:
- Tobacco — 435,000
- Diet & Activity — 365,000
- Alcohol — 85,000
- Microbial Agents — 75,000
- Toxic Agents — 55,000
- Motor Vehicle — 43,000
- Firearms — 29,000
- Sexual Behavior — 20,000
- Illicit Drugs — 17,000

Health Disparities

Poorer health outcomes for groups experiencing discrimination or exclusion because of gender, age, race/ethnicity, education/ income, geographic location, disability, or sexual orientation
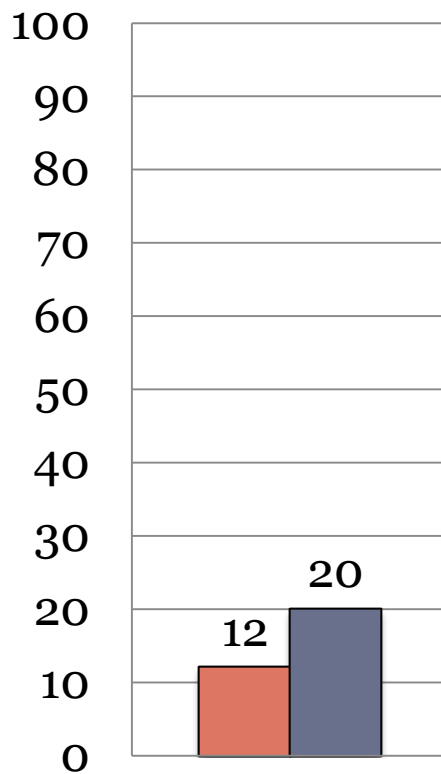
US Deaths/100,000

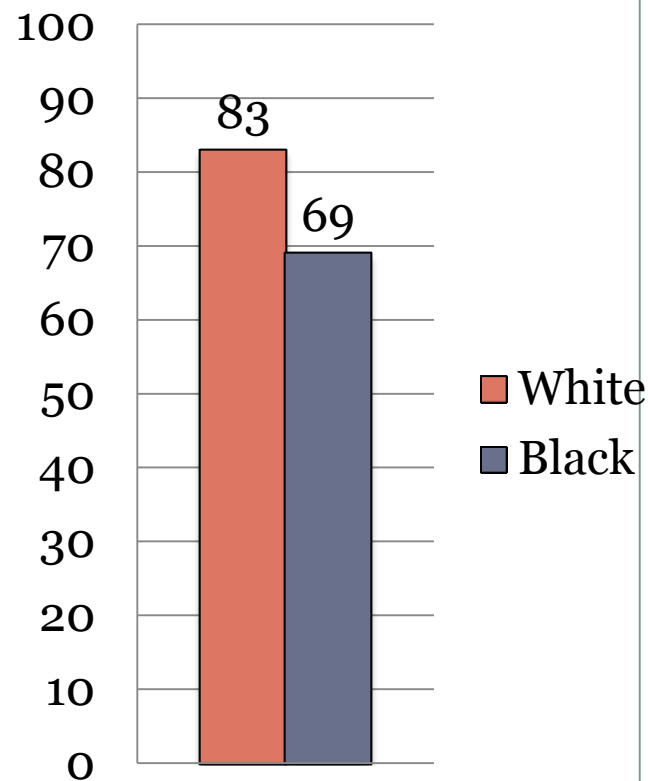|	Heart Disease	Cancer	Stroke
White	177	177.2	37.4
Black	234.6	211.3	54.5

Health Inequities

When disparities are due to systematic injustices, such as segregation and unequal treatment.

Inequities present not only as differential health status, but differential access to needed medical procedures and access to quality medical care.

Diagnosis

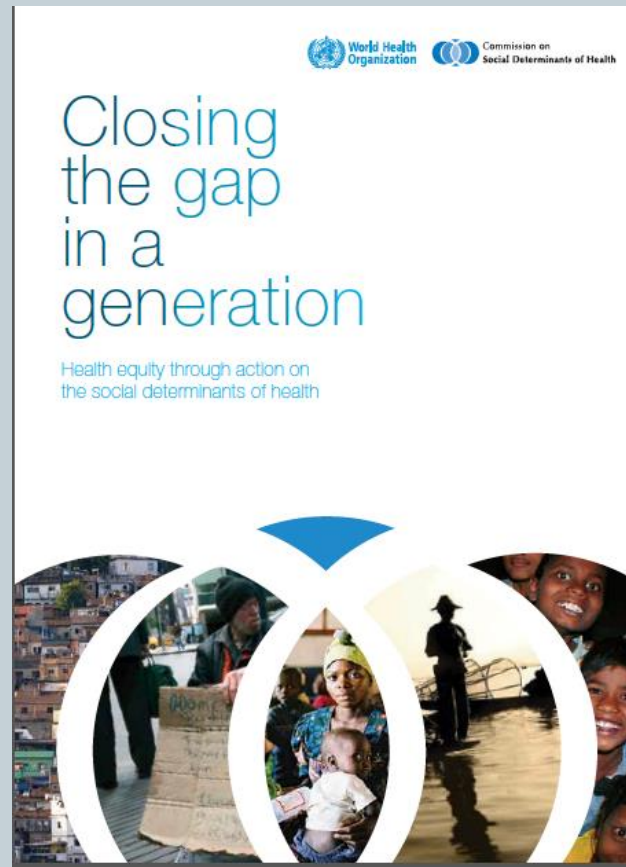% Abnormal mammogram follow-up time longer than 60 days

White: 12
Black: 20

Treatment

% Start treatment within 30 days

White: 83
Black: 69

Legend: White, Black

CDC, National Program of Cancer Registries

Key Strategies to Reduce Disparities

1. Increased access to services for all through financing mechanisms, organizational changes, and removal of legal and transportation barriers

2. Culturally and linguistically competent programs

3. Improved patient-provider communication

4. Programs to eliminate provider discrimination

5. Increased minority representation among the health care workforce.

Ten Commandments of Heart Health

1. Thou shall not postpone or neglect actions necessary for improving your health (taking prescribed medications missing medical appointments)

2. Thou shall not make unto thee any high-fat gravies or other foods that clog up your blood vessels

3. Thou shall not take thy health status for granted. Take time every day for devotion, rest, and self-care

4. Remember to check your ABC's (hemoglobin A1C, Blood pressure & Cholesterol) annually and be open and honest with your healthcare provider about what is happening

5. Honor thy body and mind with 5 servings of fruits and vegetables and positive thoughts daily, that thy days may be long upon the land which The Lord Thy God giveth thee

6. Thou shall not overeat — especially foods high in salt, sugar, and saturated fats

7. Thou shall drink 6 – 8 glasses of water daily and avoid sodas or soft drinks

8. Thou shall not have lab tests, x-rays, or other studies without being informed of the results

9. Thou shall not smoke or inhale second-hand smoke

10. Thou shall exercise thy body at least 30 minutes every day and learn to say "No" to prevent overload

REACH 2010: At the Heart of New Orleans

REACH for health online at:
www.BlackWomensHealth.ORG
www.medlineplus.gov

Copyright © 2003
REACH 2010 Coalition

Resource

http://www.who.int/social_determinants/thecommission/finalreport/en/index.html

Launch Poll Questions 1&2

Question #1

Which of the following statements is false?

a. Mortality rates from chronic diseases have increased in the last 100 years

b. In 1900, the leading causes of death were infectious diseases

c. In 2010, the leading causes of death were infectious diseases

d. Mortality from infectious diseases declined between 1990 and 2010

Question #2

Which of the following is not an example of a health disparity:

a. African Americans have the highest mortality rate of any racial or ethnic group for all cancers combined

b. People with lower socioeconomic status (SES) have disproportionately higher cancer death rates than those with higher SES

c. Hispanic women are as likely to have stomach cancer as non-Hispanic white women

d. Kidney cancer incidence and mortality rates are twice as high in men as in women

Social Ecological Model
A Framework of Determinants That Promotes Action

1. Multiple factors influence health behavior

2. Influences interact across levels

3. Multi-level interventions are the most effective

4. Most powerful when behavior specific

Policy level influences are macro-level factors such as religious or cultural belief systems, societal norms, economic or social policies, and national, state, and local laws.

Community level influences include relationships among organizations, informal community networks, and community norms.

Organizational level influences are rules, regulations and policies and norms of institutions such as schools and workplaces.

Interpersonal level influences include role modeling, social support, and social norms through relationships with families, friends, and peers.

Individual level influences include biology, knowledge, attitudes, beliefs, self-efficacy, and skills

Case Example

- Tobacco use is most preventable cause of chronic illness and premature death in the world.

- Although overall rate of cigarette smoking has decreased over time, smoking rates remaining high among racial and ethnic minorities, individuals who have not graduated from high school, and individuals living in poverty.

- Existing tobacco prevention and control strategies appear to have limited reach to racial and ethnic low-income groups.

- A broader understanding of tobacco use may help guide the next stage of intervention

A SOCIAL ECOLOGICAL MODEL OF TOBACCO USE AMONG YOUNG LOW-INCOME MEN ATTENDING EMPLOYMENT TRAINING CENTERS	
Level of Influence	Determinants
Individual	• Nicotine addiction • Social position – race, social class (SES, education), and ethnicity • Tobacco-related health beliefs – severity, susceptibility, self-efficacy, and response efficacy • Psychological factors – depression, anxiety, and future time perspective • Comorbid substance use – alcohol and marijuana use
Interpersonal	• Family influence – family member tobacco use, perceived family approval for tobacco use, receipt of tobacco or money to purchase tobacco from family members, and availability of place to smoke at home • Peer influence –peer tobacco use, perceived peer approval for tobacco use, and receipt of tobacco from peers • Stressors – racism (prejudice, discrimination, oppression), trauma (witnessing/ experiencing violence, sexual abuse, motor vehicle accidents), family conflict, and arrest/probation • Coping strategies – reliance on avoidance-oriented strategies (denial or minimization)
Organizational	• Employment training center – staff tobacco use, limited enforcement of tobacco restrictions, and social advantages of smoking breaks
Community	• Structural disadvantage –material wealth disadvantage, employment opportunities disadvantage, educational opportunities disadvantage, political influence disadvantage, racial segregation • Easy access to tobacco, alcohol, and other drugs • Perceived community norms around tobacco use, alcohol use, and other drug use • Cultural beliefs about tobacco use • Limited enforcement of tobacco and alcohol laws and regulations • Community violence
Societal Level	• Tobacco taxes • Tobacco prices • Racism

Theories of Change

Individual Level

- Health Belief Model
- Theory of Planned Behavior
- Transtheoretical Model

Interpersonal Level

- Social Cognitive Theory
- Social Support/Social Network Theory
- Stress and Coping
- Social Influence

Organization & Community Level

- Organizational Change Theory
- Community Organization Theory
- Communication Theory
- Diffusion of Innovation

Theories of Change Focusing on Factors Within Individuals

- Used to understand and change individual health behaviors.

- Focus on factors within the individual that influence health behavior, including beliefs, attitudes, and readiness to change.
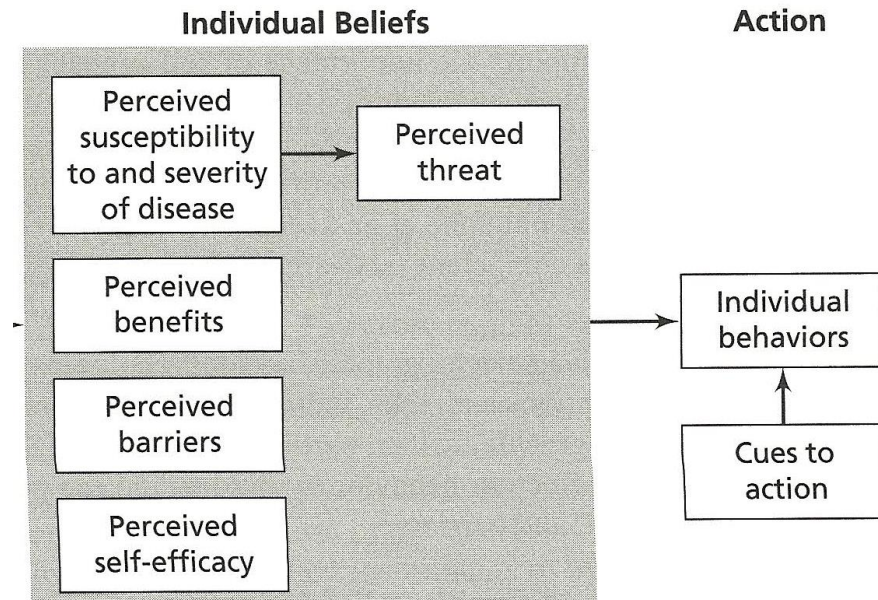
The Health Belief Model

Focus

Individual beliefs as determinants of behavior

Basic Premise

Health behavior is determined by perception of the threat of a health problem, appraisal of the recommended behavior to prevent problem, and cues to action.

Individual Beliefs   **Action**

Perceived susceptibility to and severity of disease → Perceived threat

Perceived benefits

Perceived barriers

Perceived self-efficacy

→ Individual behaviors ← Cues to action

Major constructs include:
1. *Perceived Susceptibility*, belief about the chances of experiencing a risk of getting a condition or disease
2. *Perceived Severity*, belief about how serious a condition and its related consequences are
3. *Perceived Benefits*, belief in the efficacy of the advised action to reduce the risk of seriousness of impact
4. *Perceived Barriers*, belief about the tangible and psychological costs of the advised action
5. *Cues to Action*, strategies to activate an individual's readiness to perform the advised action
6. *Self-efficacy*, confidence in one's ability to perform the advised action
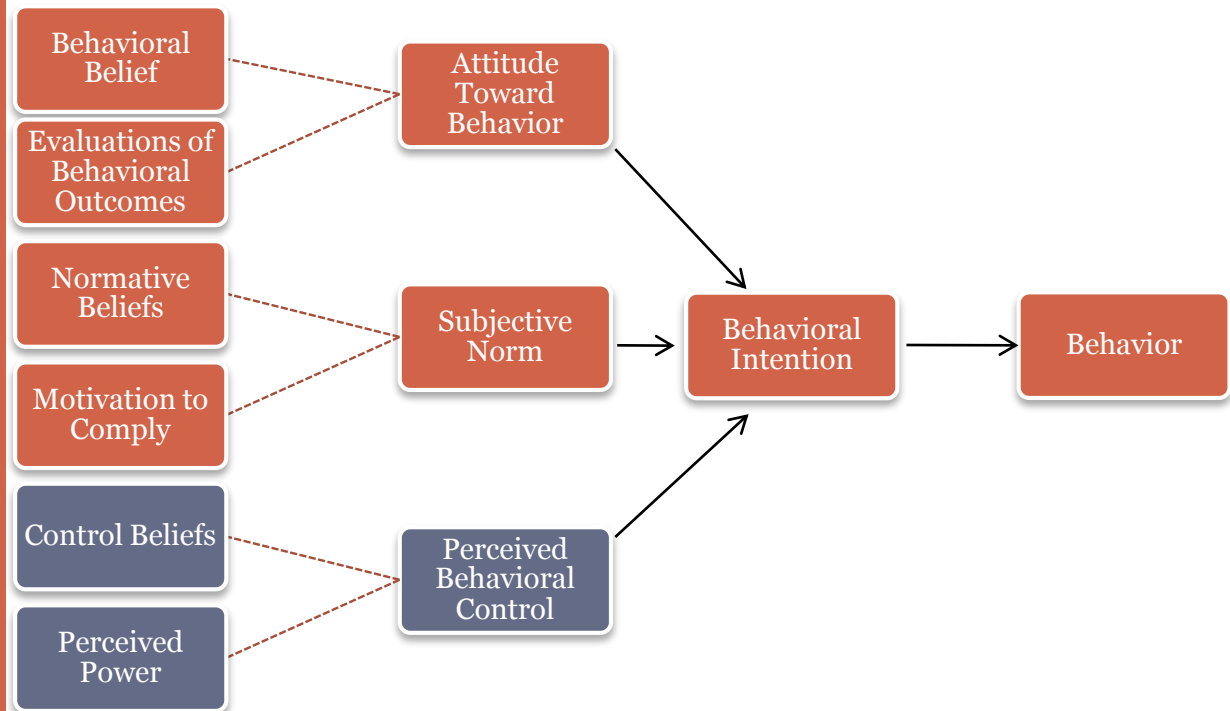
Model from Glanz et al., *Health Behavior and Health Education*, p. 49

Theory of Reasoned Action

Focus
Individual attitudes as determinants of behavior.

Basic Premise
Behavioral intentions are the best predictors of behavior, and behavioral intentions are directly influenced by the attitude about performing the behavior and the belief whether important others approve or disapprove

| Behavioral Belief |
| Evaluations of Behavioral Outcomes |
| Attitude Toward Behavior |
| Normative Beliefs |
| Motivation to Comply |
| Subjective Norm |
| Control Beliefs |
| Perceived Power |
| Perceived Behavioral Control |
| Behavioral Intention |
| Behavior |

Major constructs include:
1. *Behavioral Intention*, the intent to enact the behavior
2. *Attitude*, the evaluation of the behavior
3. *Subjective Norm*, the perceived expectation to perform the behavior from others:

The Theory of Planned Behavior expands TRA by adding a construct of Percei*ved Behavioral Control* over performance of the behavior
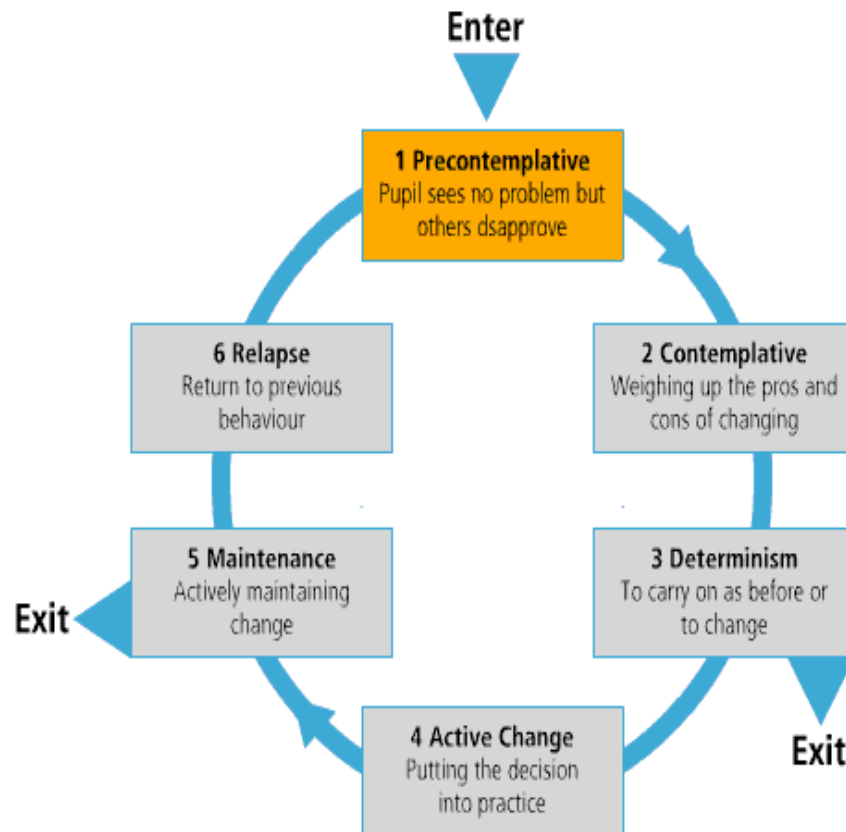
Trans-Theoretical Model

Focus

Individual readiness to change as a determinant of behavior

Basic Premise

Behavior change is a process, individuals differ in their readiness to change, and intervention strategies must be tailored for each stage of readiness to change

Moving successfully through the stages requires *Decisional Balance*, weighing the benefits of changing versus the costs of changing, and *Self-efficacy*, the perceived ability to engage in healthy behavior.

Model from facilitatingchange.org.uk

Theories of Change Focusing on Relationships

- Used to understand and change interpersonal interactions related to health behaviors and health status.

- Focus on factors in the individual's social relationships that influence health, including learning processes, relationships between individuals, and coping strategies.

Interpersonal Theories

Social Cognitive Theory

- Focus: Learning processes as a determinant of health

- Basic Premise: Individuals learn both from their own experiences and vicariously, by watching the behaviors and the attendant behavioral consequences of others. A key feature of this theory is reciprocal determinism, in which behavior, interpersonal factors, and environmental events interact as determinants of each other

Interpersonal Theories

Social Support/Social Network Theory

- Focus: Relationships between individuals and how the nature of these relationships influences beliefs and behaviors.

Interpersonal Theories

Stress and Coping Theory

- Focus: Coping strategies as determinants of health.

- Basic Premise: Stressful experiences are constructed as person-environmental transactions, where the impact of an external stressor is mediated by the individual's appraisal of the stressor and the psychological, social, and cultural resources at his/her disposal.

Interpersonal Theories

Social Influence Theory

- Social influence is a process directed at behavior change through communication as part of formal (doctor-patient) and informal (parent-child) interpersonal relationships.

- Behavior change may occur from interactions with others who are similar, others who are esteemed/ valued, and others who are considered expert.

Theories of Change Focusing on Organizations and Communities

- Used to understand and change the role organizations and communities play in supporting or inhibiting behavior change.

- Focus on factors in organizations and communities that influence health, including organizational policies and practices; community organization and community building; production and exchange of information; and widespread dissemination of innovations.

Organizational & Community Change Theories

Organizational Change Theory

- Focus: Organizational policies & practices as determinants of health.

- Basic Premises:
  - Stage approach - organizations go through a set of stages as they engage in a change process, including:
    - awareness of a problem
    - initiating action to solve the problem
    - implementing changes
    - institutionalizing changes
  - Development approach - factors related to organizational functioning must be identified and changed.

Organizational & Community Change Theories

Community Organization Theory

- Focus: Community organization and community building as determinants of health

- Basic Premise: Community groups identify problems, mobilize resources, and design and implement strategies to reach common goals.

Organizational & Community Change Theories

Communication Theory

- Focus: Production and exchange of information as a determinant of health.

- Basic Premise: Uses media and communications to provide information, influence behavior change, and influence what individuals are concerned about.

Organizational & Community Change Theories

Diffusion of Innovation Theory

- Focus: Widespread dissemination of successful innovations as a determinant of health.

- Basic Premise: Process of dissemination includes the development of the innovation, the process to communicate about the innovation, the "uptake" of the innovation by the target population, the regular use of the innovation, and a focus on sustainability and institutionalization of the behavior.
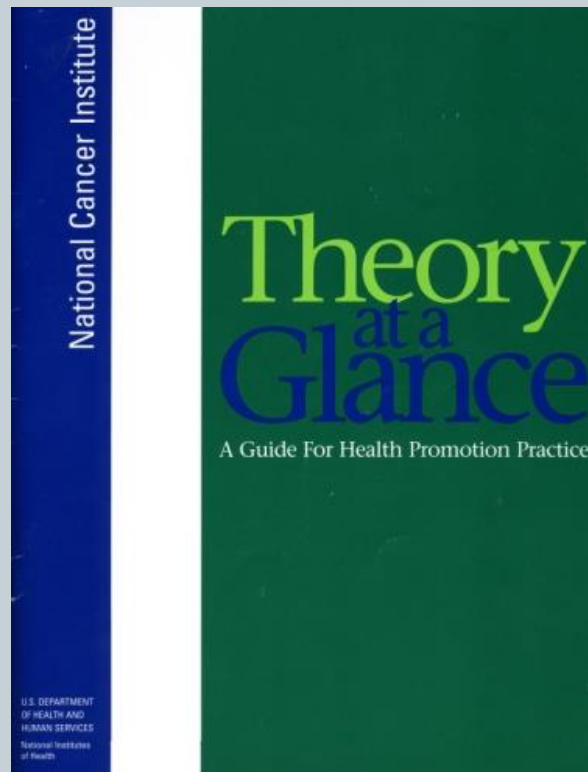
Diffusion of Innovation: Extender Activity #1

- Commercial marketing takes advantage of influential early adopters by providing free products to popular movie stars so that they can be seen using the product (and tweet about it) and tip the popularity scale.
- How might PH practitioners take advantage of this idea?
- Who might be an early adopter of health promotion innovations?
- Think locally as well as globally.

Extender Activity #2

- In the next several weeks, try identifying the constructs from theories of change that are the foundation for programs you are working on or familiar with.

Resource for Theories of Change

http://sbccimplementationkits.org/demandrmnch/ikitresources/theory-at-a-glance-a-guide-for-health-promotion-practice-second-edition/
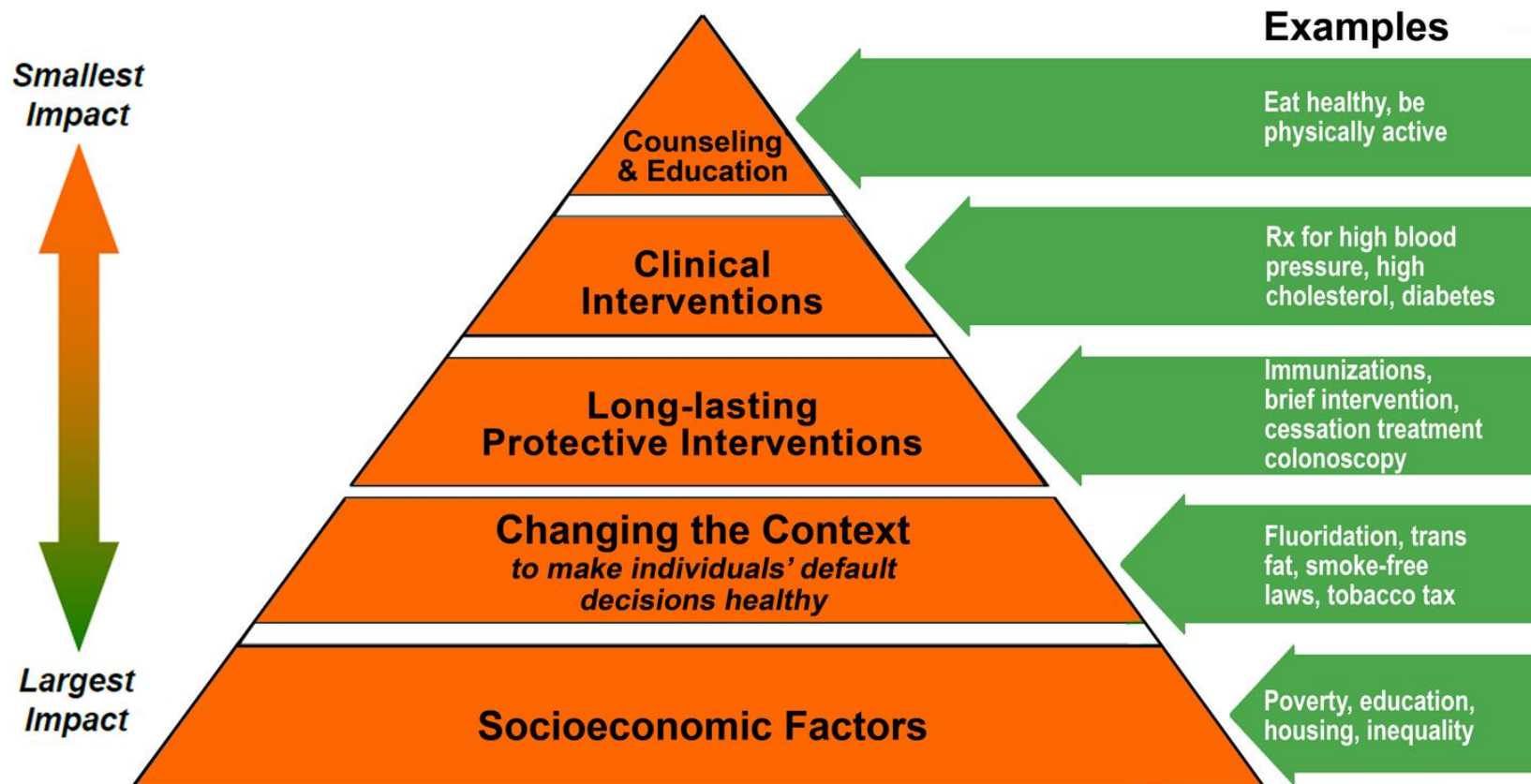
Health Promotion and Disease Prevention

- **Health Promotion** - *"the process of enabling people to increase control over their health and its determinants, and Health promotion activities focus on changing individual knowledge, attitudes, and skills, as well as enacting laws, policies, and regulations that address air and water quality, housing, food supply, income, and working conditions"*

- **Prevention** - *"approaches and activities aimed at reducing the likelihood that a disease or disorder will affect an individual, interrupting or slowing the progress of the disorder, or reducing disability"*

Definitions from WHO

CDC Framework for Public Health Action

CDC Health Impact Pyramid
Factors that Affect Health

Examples

Smallest Impact

Counseling & Education — Eat healthy, be physically active

Clinical Interventions — Rx for high blood pressure, high cholesterol, diabetes

Long-lasting Protective Interventions — Immunizations, brief intervention, cessation treatment colonoscopy

Changing the Context *to make individuals' default decisions healthy* — Fluoridation, trans fat, smoke-free laws, tobacco tax

Socioeconomic Factors — Poverty, education, housing, inequality

Largest Impact

Check the Tarrant County Public Health Web site to learn more.
http://health.tarrantcounty.com

CDC

Prevention Based on the Disease Continuum

Prevention Services | **Clinical Services**

<u>Primary Prevention Strategies</u> are delivered prior to disease onset in order to prevent disease occurrence.

Examples: air bags, immunizations, safe drinking water and food system, adequate diet and physical activity, sunscreen and protective clothing, workplace safety regulations

<u>Secondary Prevention Strategies</u> are delivered at the earliest stages of disease to identify and detect disease and provide prompt treatment.

Examples: screening for cancers, heart disease, diabetes, lead exposure, TB, HIV, mental illness, and substance abuse.

<u>Tertiary Prevention Strategies</u> are delivered when person already has a disease to limit disability and complications, and reduce severity or progression of disease.

Examples: retinal exams for diabetic retinopathy, stroke and post- heart attack rehabilitation programs, cancer survival programs, hospice programs that ensure dignity and reduce suffering in terminal conditions.

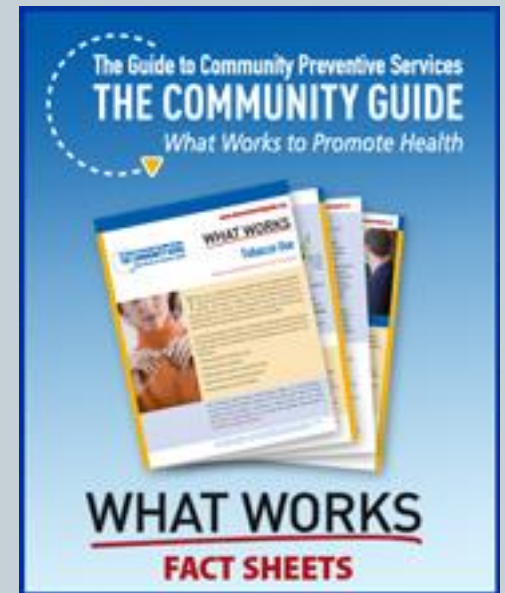# Prevention Activities Targeted to Different Groups in the Population

- **Universal Interventions** - designed for reception by all segments of the population

- **Selected Interventions** - directed towards populations characterized by epidemiologically established risk factors

- **Indicated Interventions** - strategies designed to reverse, in specific individuals, an already initiated pathogenic sequence

Evidence-based Prevention Programs and Policies

- The Task Force on Community Preventive Services is an independent group of public health and prevention experts appointed by the Director of CDC.

- The Task Force produces the Community Guide, which assesses interventions, and includes recommendations about evidence-based interventions to improve public health.

http://www.thecommunityguide.org/index.html

Evidence-based Strategies for Major Risk Factors

Avoid smoking
- Smoking cessation programs
- School-based prevention curricula
- Minor access laws
- Cigarette excise taxes
- Smoke free environments

Physical activity
- Moderate amounts of low intensity physical activity
- Accessible stairwells and sidewalks
- Safe neighborhoods
- Affordable facilities for exercise

Healthy diet
- Include more fruits/ vegetables
- Increase grains/ fiber-rich foods
- Decrease total fat/ saturated fat
- Decrease salt and sugar
- Restaurants encourage healthy eating habits
- Food manufacturers lower fat content of processed food

Control alcohol misuse
- Alcohol reduction programs
- School-based prevention curricula
- Minor access laws
- Alcohol taxes
- Supervision in alcohol risk work environments

Community Health Practice

- **Identification of Stakeholders** - Program sponsor, decision makers, organizations, and individuals that will be affected by the program.

- **Community Mobilization**. A collective effort by groups and community members to increase awareness about a problem and advocate for change.

- **Community Assessment.** Basic information for community needs assessment and surveillance includes morbidity and mortality data from the National Vital Statistics System; behavioral factors from the Behavioral Risk Factor Surveillance System; and social, economic, and environmental indicators from the Directory of Social Determinants of Health at the local level. The process of mapping community assets Identifies community capacity for addressing community needs

http://www.cdc.gov/dhdsp/docs/data_set_directory.pdf

- **Community-based Participatory Research**. (CBPR) is a collaborative approach to research that equitably involves all stakeholders in the process of defining the problem, identifying and implementing solutions, and evaluating outcomes

Launch Poll Questions 3-5

Question #3

From the CDC Health Impact Pyramid, colonoscopies and immunizations are examples of:

a. Counseling and education factors

b. Clinical interventions

c. Long-lasting protective interventions

d. Changing the context

Question #4

Dietary counseling for people at risk of colorectal cancer is an example of:

a. Primary prevention

b. Secondary prevention

c. Tertiary prevention

d. Treatment

Question #5

Screening for HCV infection of patients with a history of injection drug use is an example of:

a. Primary prevention

b. Secondary prevention

c. Tertiary prevention

d. Treatment

10 minute break

Topics

Part I

1. Pattern Of Disease

2. The Social Ecological Model

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4. Health Promotion And Disease Prevention

Part II

5. Ethical Issues In Planning & Evaluation

6. Planning Models

7. Evaluation Methods

8. Scaling Up Programs And Sustainability

Timeline of Major Ethical Developments Leading to the Belmont Report

1932   Tuskegee Syphilis Study

1939   Nazi experiments

1946   Nuremberg Trial, resulting in the Nuremberg Code

1948   United Nations adopts Universal Declaration of Human Rights

1963   Willowbrook Study(hepatitis research on mentally retarded children)

1964   Declaration of Helsinki

1972   Public exposure of Tuskegee syphilis study

1974   First federal protections for human research participants

1979   Belmont Report promoting three principles for research

Tuskegee Syphilis Study

In 1932 the American Government promised 600 men --- all residents of Macon County Alabama, all poor, all African-American --- free treatment for "Bad Blood", a euphemism for syphilis.

◆ 600 low-income African American males were recruited by government health workers and monitored for 40 years.

◆ Throughout the 40 year study, the men were never told of the experiment

Tuskegee Syphilis Study

- The study continued for decades after effective treatment became available.

- When subjects were diagnosed as having syphilis by other physicians, researchers intervened to prevent treatment

Buxtun

- In 1966, Peter Buxtun, a United States Public Health Service venereal disease investigator in San Francisco, sent a letter to the director of the Division of Venereal Diseases which expressed concerns about the morality of the experiment

"The excuses and justifications that might have been offered in 1932 are no longer relevant. Today it would be morally unethical to begin such a study with such a group"

Syphilis Patients Died Untreated
Jean Heller

July 25, 1972 AP. For 40 years, the U.S. Public Health Service has conducted a study in which human guinea pigs, not given proper treatment, have died of syphilis and its side effects.

- Early in 1972, Buxtun complained of the study to Edith Lederer, an international affairs reporter with the Associated Press in San Francisco. On July 25, 1972, the story appeared in the *Washington Star* by Associated Press reporter Jean Heller

- A class-action suit against the federal government was settled out of court for $10 million in 1974.

- That same year the U.S. Congress passed the National Research Act, requiring institutional review boards to approve all studies involving human subjects.

- In 1997 President Bill Clinton issued a formal apology for the study

The Belmont Report

- The U.S. Congress passed the National Research Act in 1974, creating the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research.

- The goal of the Commission was to identify the basic ethical principles guiding the conduct of research with human subjects.

- The Belmont Report includes the boundaries between practice and research, basic ethical principles (respect for persons, beneficence, and justice) informed consent, assessment of risks and benefits, and selection of subjects.

Want to Learn More?

- Deception and Research: The Stanford Prison Experiment http://www.prisonexp.org/

- Responsible Conduct in Research: http://www.youtube.com/watch?v=wIBjGV3OB0o

Launch Poll Question 6

Question #6

Which of the following is NOT an ethical principle outlined in the Belmont Report:

a. Justice

b. Respect for persons

c. Universality

d. Beneficence

Priority Public Health Issues

CDC's Winnable Battles

1. Healthcare-associated infections
2. HIV
3. Motor vehicle injuries
4. Obesity, nutrition, physical activity, and food safety
5. Teen pregnancy
6. Tobacco

DHHS Major Priority Areas for Health Disparities

1. Infant mortality
2. Cancer screening and management
3. Cardiovascular disease
4. Diabetes
5. HIV / AIDS
6. Immunizations

Healthy People National Health Objectives

- DHHS has developed science-based national public health objectives every 10 years, as part of the Healthy People Initiative.

- The goal of Healthy People is to increase quality and years of life and eliminate health disparities by providing a framework of public health priorities, measurable objectives and benchmarks, which can be used to guide local health planning and to aid in monitoring progress over time.

Watch a short video ☑ to see how Healthy People 2020 is inspiring action across the Nation.

https://www.youtube.com/watch?v=qAx8nyaeT9g

PRECEDE-PROCEED

The initial PRECEDE component has four phases:

1. *Social Diagnosis:* asking the community what it wants and needs to improve community health and quality of life, resulting in identification of a community health outcome;

2. *Epidemiological Diagnosis*: identifying the health behaviors, interpersonal factors, organizational factors, and community factors that influence the community-identified outcome, determining which risk factors are most significant and malleable, and developing program objectives;

3. *Educational and Organizational Diagnosis:* identifying the predisposing, enabling, and reinforcing factors that may facilitate or impede changing the factors identified during Phase 2;

4. Administrative and Policy Diagnosis: identifying and modifying internal administrative issues and policies and external policies as needed to generate the funding and other resources for the intervention.

Results from Phases 3 & 4 lead to the intervention plan
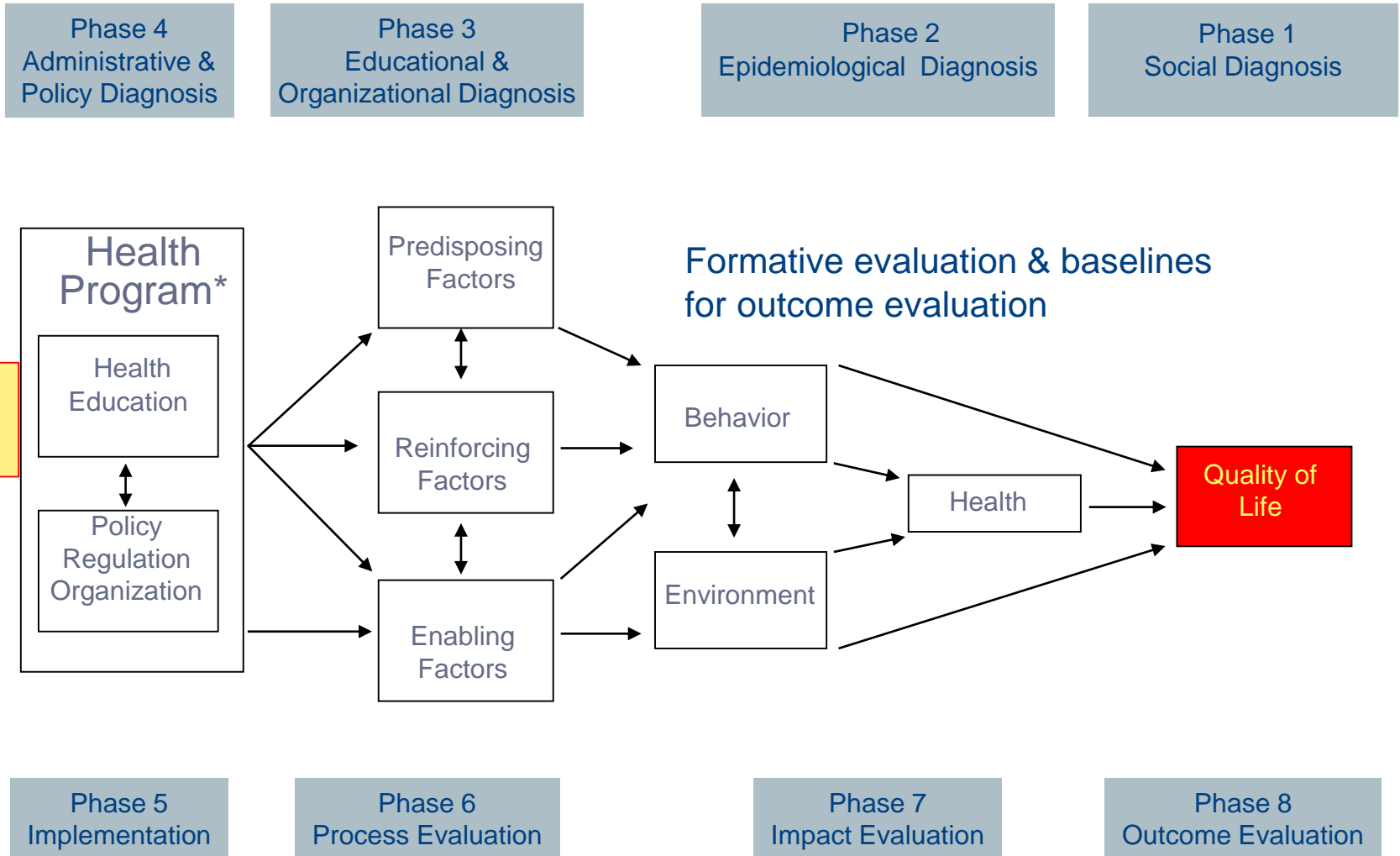
PRECEDE-PROCEED

The PROCEED component adds on an additional four phases

5. *Implementation:* starting up and conducting the intervention;

6. *Process Evaluation*: a determination whether the intervention is proceeding as planned, with adjustments as needed;

7. *Impact Evaluation*: a determination whether the intervention is changing the planned risk factors, with adjustments as needed;

8. Outcome Evaluation: a determination whether the intervention is producing the outcome identified in Phase 1, with adjustments as needed.

More information about the 8-phase precede-proceed model: http://ctb.ku.edu/en/tablecontents/sub_section_main_1008.aspx

PRECEDE-PROCEED Framework

Social Marketing

Social Marketing applies the principles of marketing to planning interventions at individual, interpersonal, organizational, community, and societal levels.

The goal is to influence "consumers" to "buy" a behavior change or health-related product/technology.

Social marketing campaigns are built around the "four Ps"

1. *Product,* the behavior, program, technology
2. *Price,* the cost of adoption
3. *Place,* where the product available or promoted
4. *Promotion,* how to promote the first three "Ps" through persuasive strategies.

Other Planning Models

- Assessment Protocol for Excellence in Public Health (APEXPH)

- Multi-Level Approach to Community Health (MATCH)

- Planned Approach to Community Health (PATCH)

- Mobilizing Action through Planning and Partnerships (MAPP)

Common Elements Among Planning Models

Planning models have the following features in common:

(1) Community involvement and mobilization

(2) Needs assessment at community and organizational levels

(3) Selection of specific target audiences

(4) Development of specific, measurable, attainable and time-bound objectives and their indicators

(5) Action plan development and implementation

(6) Evaluation of program processes and outcomes

(7) Institutionalization

Launch Poll Questions 7&8

Question #7

In what phase of Precede are you assessing the community's wants and needs to improve health?

a. Social Diagnosis

b. Epidemiological Diagnosis

c. Educational and Organizational Diagnosis

d. Administrative and Policy Diagnosis

Question #8

In what phase of Proceed are you measuring the extent to which the intervention is progressing as you planned?

a. Implementation

b. Process Evaluation

c. Impact Evaluation

d. Outcome Evaluation

Program Evaluation

- Systematic process using both qualitative and quantitative methods to answer questions about:
  - Nature and Magnitude of the Problem
  - Processes
  - Outcomes
  - Efficiency
- Helps to orient public health efforts towards outcomes
- Encourages the use of scientific evidence to guide decisions about public health programs and policies

Nature and Magnitude of the Problem

Needs Assessment Purpose	Needs Assessment Methods
• Investigates the extent of the problem, consequences of the problem, and subgroups of people or places affected by the problem.	• Key Informant interviews • Community Forum • Agency records • Community Indicators from public datasets • Community Surveys

Process Evaluation

Process Evaluation Purpose	Indicators
• Investigates the fidelity of program implementation and investigates outputs	• what program activities are delivered • who delivers program activities • when and where activities are delivered • number of people served

Outcome Evaluation

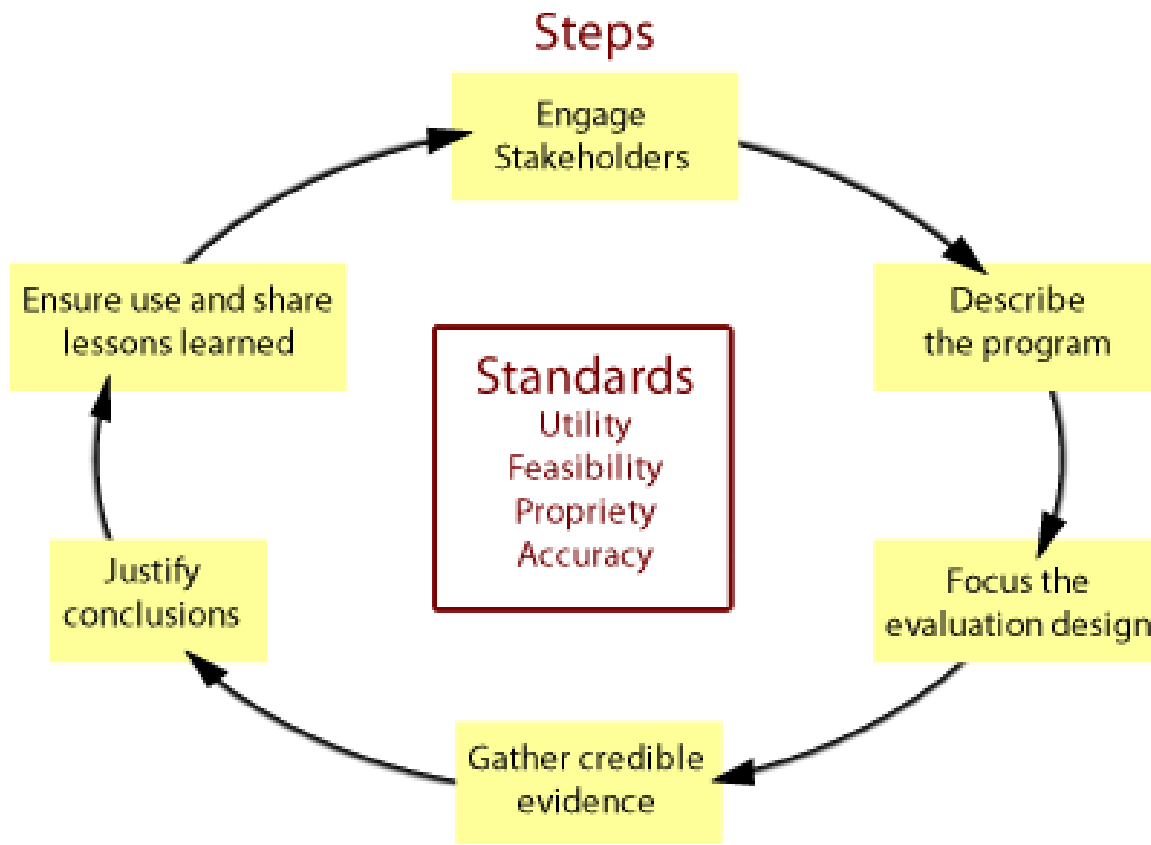| Outcome Evaluation Purpose	Examples of Different Outcomes
• Investigates the effect of the program on short-term outcomes, intermediate outcomes, and long-term outcomes.	• *Short-term Outcomes -* increased knowledge, improved attitudes and beliefs, and increased skills • *Intermediate Outcomes -* behavior change • *Long-term Outcomes -* decreased rates of disease, disability, death, or disparity

Efficiency Evaluation

- Compares the incremental cost of the program to its effects (cost-effectiveness analysis) or to monetized effects (cost-benefit analysis).

- May also investigate several competing programs to determine whether alternative, less costly programs achieve the same results as more expensive programs.

CDC Framework for Program Evaluation in Public Health

- Systematic method for evaluation

- Promotes a participatory approach

- Focuses on using evaluation findings

1. Engage Stakeholders

- Engaging stakeholders in development of the evaluation plan, conduct of the evaluation, and use of evaluation results.

- Stakeholders include funders, program management and leadership, grantees, program partners, the evaluation team, those served or affected by the program, and users of the evaluation.

2. Describe the Program

- Developing a logic model to guide the evaluation.
  - The model includes inputs, activities within each program component, and a trajectory of client outcomes detectable immediately following intervention (short-term outcomes), at follow-up (intermediate outcomes), and after a sustained period of program implementation (long-term outcomes).

- Case studies may also be used to provide descriptive data about the program.

Logic Model

- ## Resources (Inputs)
  - What resources are available to conduct the program activities?
- ## Activities
  - What are program staff doing to accomplish program objectives?
- ## Outputs
  - What are the direct and immediate results of program activities (materials produced, services delivered, etc.)?
- ## Outcomes
  - What are the intended effects of the program activities?

Resources → Activities → Outputs ⇒ Outcomes

3. Focus the Evaluation Design

- Different evaluation questions are relevant for different stages of a program
  - implementation fidelity questions paramount at program initiation
  - short-term outcome questions important once fidelity is assured
  - long-term outcome questions appropriate once the program has documented short-term and intermediate-term effects.

- Stakeholders should be involved in developing evaluation questions at each stage of the program.

4. Gather Credible Evidence

- While existing data should be used whenever possible, evaluation tools should be developed as needed, and piloted prior to use in the evaluation.

5. Justify Conclusions

- Both quantitative and qualitative data analysis methods may be used to analyze implementation fidelity, program processes, and program outcomes.

6. Ensure Use and Share Lessons Learned

- A communication and dissemination plan for the evaluation should include
  - internal communication strategies
  - strategies for communicating with stakeholders
  - program and provider dissemination
  - scientific dissemination
  - policy-relevant dissemination
  - public access dissemination

The RE-AIM Model encourages translating an effective program to practice

1. Reach of the program

2. Effectiveness of the program

3. Adoption by large number of diverse settings

4. Implementation with fidelity

5. Maintenance through institutionalization or by becoming part of organizational policies and practices

RE-AIM

Dissemination & Scaling Up

Dissemination is the targeted distribution of information and intervention materials to a specific public health or clinical practice audience

Scaling up refers to increasing a program's impact while maintaining quality

Four Categories of Scale-up

- <u>Quantitative:</u> Increasing the numbers of clients reached by a program.
  - Addition of new target audience
  - Expansion into new geographic area
  - Adoption and use of programs novel materials and approaches by others
  - Within this category, diffusion of innovations theory may be of use
- <u>Functional:</u> Expanding program breadth.
  - Increasing the number and type of technical areas addressed by a program

Four Categories of Scale-up

- <u>Political:</u> Refers to the ability to address national-level barriers to effective program services
  - Advocating for and/or developing efficient processes
  - Advocating for and/or developing clear policies and guidelines
  - Standardizing materials and techniques for education + training
- <u>Organizational:</u> improving one's own or another organization's ability to continue to support an initiative in an effective and sustainable manner
  - Diversifying and/or stabilizing funding base
  - Increasing use of effective financial schemes
  - Developing strategic alliances to increase resources
  - Building technical and management capacity of collaborating agency in order to sustain efforts

Strategies for Ensuring Program Sustainability

- Build community and organizational capacity in management, advocacy, fundraising, training, etc.
- Utilize simple, user-friendly materials and tools
- Involve community members in every step of the program
- Develop, implement, and institutionalize cost-recovery mechanisms
- Develop, implement and institutionalize quality assurance and self assessment tools
- Build on pre-existing structures
- Develop program leaders and "champions"
- Encourage cross-community learning

Launch Poll Questions 9 and 10

Question #9

Which of the following defines dissemination?

a. The process of expanding program breadth

b. The targeted distribution of information and intervention materials to a specific public health or clinical practice audience

c. The process to grow the numbers of clients reached by a program.

d. The process to increase a program's impact while maintaining quality

Question #10

Which of the following is not a category of scaling-up?

a. Quantitative

b. Qualitative

c. Functional

d. Organizational