Evidence-Based Public Health:
Supporting the New York State
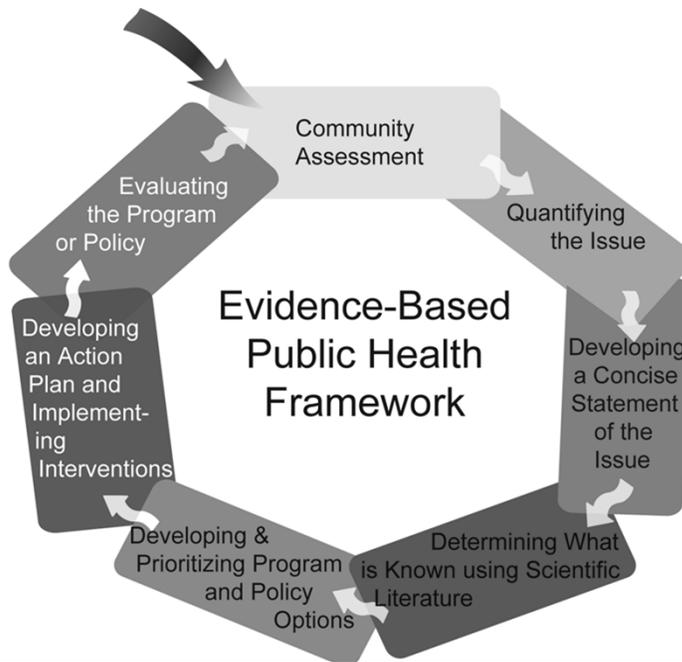**Prevention Agenda**

MODULE 4:
DEFINING THE PUBLIC HEALTH PROBLEM

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Learning Objectives

1. Understand the overall strategic planning process for setting priorities in public health.

2. Understand a criterion for the components of a sound problem statement.

3. Develop a concise written statement of the public health problem, issue or policy under consideration in a measurable manner.

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"If you don't know where you are going, you might wind up somewhere else."

--Yogi Berra

Planning For Your Future

Governmental public health leaders, like others in the public and private sector, are witnessing rapid change in their environment. They face uncertainty with respect to roles and resources.

- What might come of the changes?
- What could the future be like?

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Strategic Planning

A decision-making process used to analyze environmental challenges and opportunities, set goals, and design strategies to move to the organization's desired future.

(many aspects parallel EBPH)

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Why do strategic planning?

Change surrounds us every day:
- New diseases and treatments
- Population shifts
- Technology
- Social conditions
- Laws/rules/mandates

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Why do strategic planning?

How can we be effective in the face of all these changes?

Our challenge is to figure out where we want to go. (Then, how to get there!!)

Where are you going?

Alice: "Would you tell me, please, which way I ought to go from here?"

Cat: "That depends a great deal on where you want to get to."

Alice: "I don't much care where--"

Cat: "Then it doesn't matter which way you go."

Lewis Carroll
Alice in Wonderland

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What do we get from strategic planning?

- Good decision making
- More meaning in what we do
- Better teamwork
- Better use of resources
- Improved productivity and performance

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Evidence-Based Decision Making in Public Health Questions

1. Are we relying on sound, high-quality information to understand the external environment?

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Evidence-Based Decision Making in Public Health Questions

2. Are our objectives and strategies feasible and evidence-based?

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Evidence-Based Decision Making in Public Health Questions

3. How do we identify and measure *intermediate* results that will tell us we are making progress toward our goals and desired long-term health outcomes?
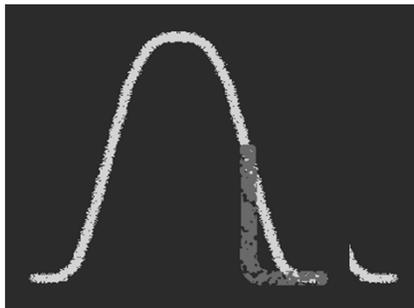
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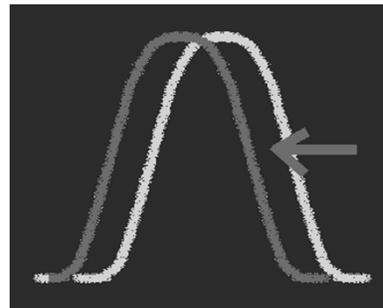# Definitions

- Health Intervention?

- Health Policy?

Definitions

- ## Health Intervention
  - A set of specified strategies to change the knowledge, perceptions, skills, and/or behavior of individuals or organizations with the goal of improving patients' or population outcomes
    - Population approaches
    - High risk approaches

- ## Health Policy
  - a laws, regulation, formal and informal rule and understanding that is adopted on a collective basis to guide individual and collective behavior

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Prevention Strategies (from Rose)
High Risk vs. Population

Truncate high risk end of exposure distribution (e.g. organize an obesity clinic). Targeted approach to disease prevention

Reduce a little risk in most people (e.g. reduce fat a little in fast-food outlets). Lifestyle change combined with an environmental/policy approach

Objective

- Develop a concise written statement of the public health problem, issue or policy under consideration
- Not always clear-cut & simple
  - Benefits of screening mammography
  - Effective methods of preventing obesity
  - How to prevent consequences of natural disasters
- Linking back to EBM
  - Asking answerable questions

Issue (or Problem) Statement

One should ask:

- How did the person who identified issue/problem state it?
- Should/could the problem be stated in the context of person/place/time?
- Is there a consensus among stakeholders that the problem is properly stated?

Issue Statement, cont'd

<u>Should have these attributes</u>:
- Stated as a question to be answered
- Lead to an analysis of root causes, including social causes and culture
- Lead to multiple discipline/agency involvement
- Be clear and concise in statement
- Be unbiased in what the answer is

Issue Statement , cont'd

<u>Types of problems</u>:
- Epidemiologic
  - What is the relationship of x to health condition y? (type one)
- Intervention
  - What is the best approach to decreasing risk factor x? (type two)
  - How do I implement the intervention (type three)
- Evaluation
  - Is program y effective? (type two)

Types of problems:

- Managerial
  - Why did *x* go wrong? (type three)
- Policy-related
  - What will be the impact of changing policy *z*? (type two)

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Components of An Issue Statement

1. Background/Epidemiologic Issue

2. Programmatic Questions
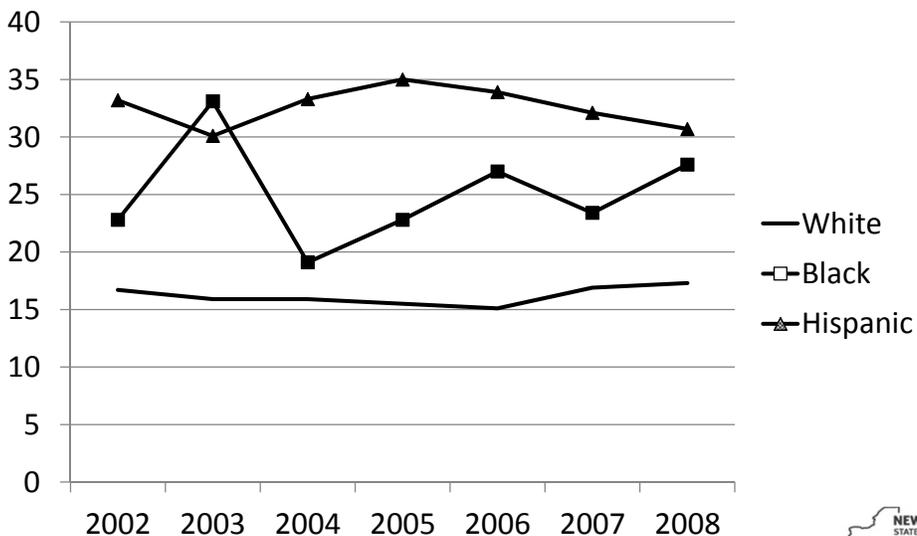
3. Solutions Being Considered

4. Potential Outcome(s)

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Examples—Background

- ## Background/Epidemiologic Issue
  - Often, person, place and time variables
  - Based on epidemiologic data, e.g., 23% of California adults are completely physically inactive.
  - Rates of activity have remained essentially constant over the past 5 years and are lowest among Hispanic populations.

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Rate of no-leisure time activity, California, by race/ethnicity

Legend: White, Black, Hispanic

Examples—Programmatic

- Intervention

  – How do we get the support for our new physical activity program?

  – Are there examples in the literature of effective programs to increase rates of physical activity among low income women?

Examples—Programmatic

- Evaluation

  – Is a particular intervention effective (e.g., a mass media campaign) in increasing physical activity rates?

  – What is the status of our mass media campaign?

Examples—Programmatic

- Programmatic Questions
Managerial

  – What are the structural, systems problems that allowed us to overspend our physical activity promotion budget?

  – Who's fault was it that we overspent our budget?

Examples—Programmatic

- Policy

  – Is there another crisis that we need to deal with by implementing a new policy?

  – How effective is the health policy that we implemented two years ago in making health promoting changes?

Sound Programmatic Questions

- Are answerable
- Rely on evidence for the answer
- Avoid political expediency
- If answered, will improve the delivery of a program or policy

Examples—Solutions

Solutions Being Considered:

- Program staff, policy makers, and advisory groups have proposed numerous solutions, including:

  1. Increased funding for primary care counseling services

  2. A mass media campaign to promote physical activity

  3. Increasing compliance by schools with that meet NYS Education Regulations for physical education among elementary or middle school children.

Examples—Outcomes

Potential Outcome(s)

- Rate of heart disease mortality
- Rate of breast cancer mortality
- Rate of breast cancer mortality among low- income women, or Black Women, or Hispanic women
- Rate of "regular" physical activity
- Rate of counseling for physical activity among primary care providers

Stakeholder Input

- Do you have important "stakeholders" who may or may not be "experts"?
  - general public
  - policy makers
- How might you gather information from these stakeholders?
  - Surveys
  - Qualitative methods

Keys in This Phase of Problem Definition

- Avoid early judgments
- Encourage creative thinking
- Make problem statements quantifiable
  - Early on, use data to frame the issue

Exercise

- Small Groups with 5-6 Each
  - A problem described by NY State Senator Nestle
  - Form groups to work in teams
  - Discuss and write-down, following worksheet guidance
    - Background/epidemiologic issue
    - Programmatic questions (intervention, evaluation, managerial, policy)
  - Avoid getting caught up in solutions and outcomes at this point