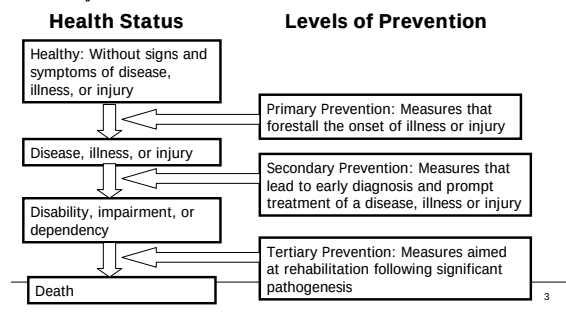

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Ecological Approach

- The reciprocal, virtually inseparable, relationship of behavior and its environment
- Health is a product of the interdependence of the individual on subsystems of the ecosystem.
- To improve health, the ecosystem must offer:
 - economic and social conditions conducive to health
 - Information
 - Life skills
 - Healthful options
 - Support for behavior change/modification

4



Ecological Approach

- Lessons for use:
 - Unanticipated effects
 - Small systems changes can have unintended changes in the larger system.
 - Reciprocal determinism
 - Environment has huge impact on behavior and changes in the environment will change behavior

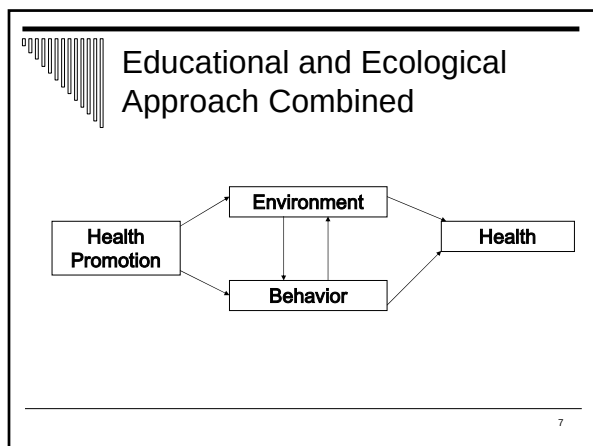
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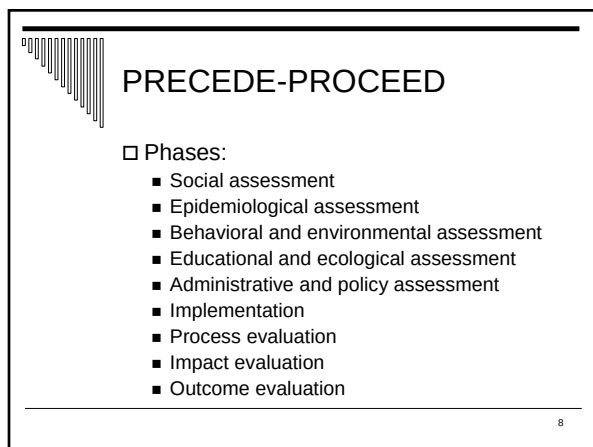


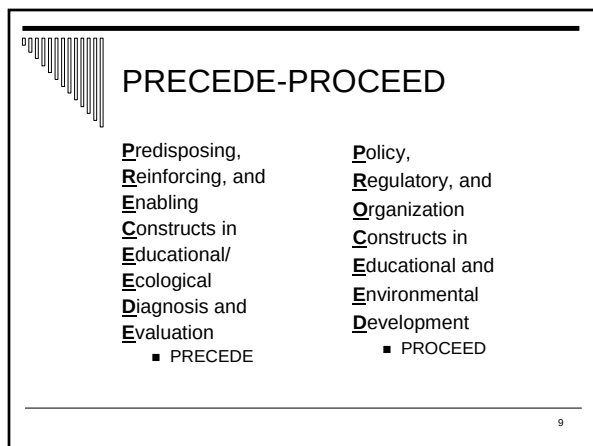
Ecological Approach

- Lessons for use:
 - Environmental specificity
 - The same person will behave differently in different environments.
 - Multilevel and multisectoral intervention
 - The need to intervene on as many levels/sections as possible and feasible to affect change.

6





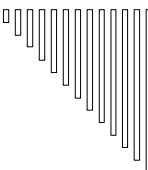




PRECEDE-PROCEED

- Takes a more *ecological* approach to health promotion and education.
- Begins by focusing on the end/outcomes, then encourages looking at why before the intervention is developed

10



Social Assessment



Social Assessment

- Phase I of PRECDE-PROCEED
- “the application, through broad participation, of multiple sources of information designed to expand the understanding of people regarding their own quality of life and aspirations for the common good”

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Quality of Life

- “the perception of individuals or groups that their needs are being satisfied and that they are not being denied opportunities to pursue happiness and fulfillment.”

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Social Assessment

- Helps:
 - Identify and interpret the social conditions and perceptions shared at the community or organizational level
 - Make the connection between those conditions/perceptions and health promotion strategies

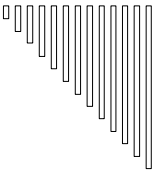
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Participation

- Essential in social assessment.
- Also important in the overall planning process.
- Community needs to be viewed as and be partners with health professionals.

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Epidemiological Assessment



Epidemiological Assessment

- To determine for a given target population which health problems, measured objectively, pose the greatest threat to health and quality of life.



Epidemiology

- The study of the distribution and determinants of health-related conditions or events in defined populations and the application of this study to control health problems
 - What is the problem?
 - Who has the problem?
 - Why do those with the problem have it?



Reviewing Epidemiological Data

□ Functions:

- To establish the relative importance of various health problems in the target population as a whole and in population subgroups.
- To provide a basis for setting program priorities among the various health problems and subgroups.
- To help allocate responsibilities among collaborating professionals, agencies, or departments.

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Indicators of Health Status

□ Mortality

- Death

□ Morbidity

- Disease or injury

□ Disability

- Dysfunction

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Rates

□ Incidence

- New cases of the disease within a certain period
- Hard to find for chronic diseases

□ Prevalence

- Total number of continuing or surviving cases or people with the disease at a particular point in time
- Reflects both incidence and the duration of the disease.

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Setting Priorities

□ Questions to ask:

- Which problem has the greatest impact in terms of death, disease, days lost from work, rehabilitation costs, disability, family disorganization, and cost to communities, agencies, for damage repair or loss and cost recovery?
- Are certain subpopulations at special risk?
- Which problems are most susceptible to intervention?

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Setting Priorities

□ Questions to ask:

- Which problem is not being addressed by other agencies in the community?
- Which problem, when appropriately addressed, has the greatest potential for an attractive yield—in improved health status, economic savings, or other benefits?
- Are any of the health problems highly ranked as a regional or national priority?

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Program Plans

□ Plan should have:

- Progress in meeting objectives which can be measured
- Individual objectives based on relevant, reasonably accurate data
- Objectives that are in harmony across topics as well as across levels

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Program Goals

- Are considered to be more general than objectives
- Achievement of each of the more specific and intermediate objectives will contribute to the achievement of the more general goals.

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Program Goals Example

- The survival rate of mothers, infants, and children will be raised through the optimal growth and development of children.

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What Are Objectives?

- More precise than goals
- Small steps that if completed will achieve the program goal
 - They define success
- Convert assessment data/community problems into program direction
- Blueprint for program replication

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Criteria for Developing Objectives

- ☐ Can the objective be realized during the life of a program?
- ☐ Does your organization have enough resources to achieve the objective?
- ☐ Are the objectives consistent with the organization's mission?

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Criteria for Developing Objectives

- ☐ Do the objectives violate the rights of those involved?
- ☐ Are the objectives culturally appropriate to the target population?

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Elements of Effective Objectives

- ☐ **Specific**
 - Does the objective clearly specify what will be accomplished and by how much?
- ☐ **Measurable**
 - Is the objective measurable?
- ☐ **Appropriate**
 - Does the objective make sense in terms of what the program is trying to do?

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Elements of Effective Objectives

- ☐ **R**ealistic
 - Given the resources and experience, is the objective achievable?
- ☐ **T**ime-based
 - By when will the objective be achieved?
- ☐ Is the objective **SMART**?

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Good Verbs = Good Objectives

<u>Less Precise</u>	<u>Precise</u>
☐ Realize	☐ Identify
☐ Enjoy	☐ Illustrate
☐ Believe	☐ Apply
☐ Desire	☐ Develop
☐ Experience	☐ Supports
☐ Appreciate	☐ Accepts

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Formula for Creating an Objective

By _____ + _____ + _____ + _____
time condition population verb

By December 30, 2003, 80% of the youth in Whole County will report not using drugs or alcohol before engaging in sexual intercourse.

33



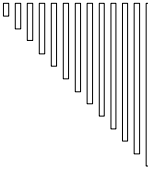
Health Objectives Example

- The maternal mortality rate within Counties A and B will be reduced by 10% within the first 2 years and an additional 51% the next 3 years with reductions continuing until the state average rate is reached.



Health Objectives Example

- The infant mortality rate will be reduced to the state average within 10 years. Perinatal mortality rate will be reduced by 94%. Fetal death will be reduced from X to Y% in the same period.



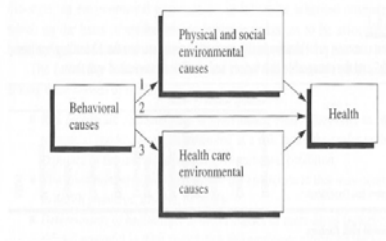
Behavioral and Environmental Assessment

Behavioral and Environmental Assessment

- Looks at the ecological perspective of health.
- Behavioral Assessment
 - A systematic analysis of the behavioral links to the goals or problems identified in the epidemiological and social assessments.
- Environmental Assessment
 - A parallel analysis of factors in the intermediate social and physical environment that could be causally linked to the behavior identified in the behavioral assessment or directly to the outcomes of interest.

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Behavioral Influences on Health



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Etiology

- Risk factor
 - Characteristics of individuals
- Risk condition
 - Characteristics of the environment that may contribute to health problems, disease or injury
- Determinants of health
 - Broad classes of more distal factors which are powerful contributors in their cumulative and aggregate effects on health of populations

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Non-behavioral Factors

- Includes personal factors that are least controllable by individual or collective action but that do contribute to health problems
 - Genetic predisposition, age, gender, congenital disease, physical and mental impairment, places of work and residence
- Must be taken into account in planning in order to avoid victim blaming.

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Behavioral Assessment

- Step 1: Delineating the behavioral and non-behavioral causes of the health problem
- Step 2: Developing a classification of behaviors
- Step 3: Rating behaviors in terms of importance
- Step 4: Rating behaviors' changeability
- Step 5: Choosing behavioral targets

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Step 2: Developing a classification of behaviors

- Divide list of behavioral factors into:
 - Preventive behaviors:
 - Behaviors associated with promoting health, preventing the health problem, or maintaining self-care and controlling the sequelae of the health problem
 - Primary, secondary, and tertiary prevention
 - Treatment procedures:
 - Actions or treatment procedures for the health goal or problem.

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Step 3: Rating behaviors in terms of importance

□ Importance of behavior is indicated when:

- It occurs frequently.
- It is clearly and potently linked to the health problem.
- There is a strong theoretical link for causal relation to the health problem.

□ Also need to consider resources and attributes.

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Step 4: Rating behaviors' changeability

□ High changeability is probable when behaviors:

- Are still in the developmental stages
- Have only recently been established
- Are not deeply rooted in cultural patterns or lifestyles
- Have been found to change in previous attempts

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Step 5: Choosing Behavioral Targets

	More Important	Less Important
More Changeable	High priority for program focus Quadrant 1	Low priority except to demonstrate change for political purpose Quadrant 3
Less Changeable	Priority for innovative program; evaluation crucial Quadrant 2	No program Quadrant 4

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Behavioral Objectives

□ Example:

- District residents age 20-35 will show a 20% reduction in the prevalence of cigarette smoking within two years of program implementation.

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Environmental Assessment

□ Focus on environmental aspects that are:

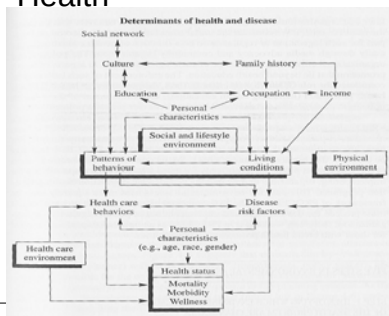
- More social than physical
- Interactive with behavior in their impact on health
- Changeable by social action and health policy.

□ Environment components:

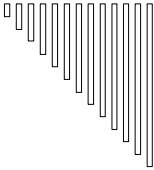
- Social
- Physical
- Health care

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Environmental Influences on Health



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Educational and Ecological Assessment



Educational and Ecological Assessment

- Examines behavioral and environmental conditions linked to health status to determine what causes them
- Identifies factors that require change to initiate and sustain the process of behavioral and environmental change.



Predisposing Factors

- Any characteristic of a person or population that motivates behavior prior to the occurrence of the behavior
- Awareness
- Knowledge
- Beliefs
- Values
- Attitudes
- Self-Efficacy
- Behavioral Intention
- Existing Skills



Enabling Factors

- Any characteristic of the environment that facilitates action and any skill or resource required to attain a specific behavior.
- Absence of the resource blocks the behavior; barriers to the behavior are included.

- Health Care Environment
- Other Environmental Conditions
- New Skills

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Reinforcing Factors

- Any reward or punishment following or anticipated as a consequence of a behavior, serving to strengthen the motivation for or against the behavior

- Positive Feedback
- Negative Feedback
- Rewards
- Punishment

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Selecting Determinants of Behavior and Environmental Change

- Step 1: Identifying and Sorting
 - Informal and formal methods
- Step 2: Setting Priorities Among Categories
 - Development
- Step 3: Establishing Priorities within Categories
 - Importance based on prevalence, immediacy, and necessity
 - changeability

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Learning and Resource Objectives

- Learning objectives
 - Define targeted predisposing factors and skills in the targets of intervention at the end of a program
 - May be developed not only for the target population but also for those people who will reinforce the target population
- Resource objectives
 - Define environmental enabling factors that should be in place at the end of a program

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Types of Interventions By Factor

- Predisposing Factors
 - Direct communications
- Enabling Factors
 - Indirect communications
- Enabling Factors
 - Community organization

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Environmental Assessment

- Step 1: Identifying which environmental causes of the health problem are changeable
- Step 2: Rating environmental factors on relative importance
- Step 3: Rating environmental factors on changeability
- Step 4: Choosing the environmental targets

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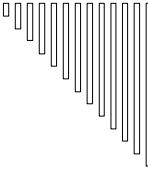
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	More Important	Less Important
More Changeable	High priority for program focus Quadrant 1	Low priority except to demonstrate change for political purpose Quadrant 3
Less Changeable	Priority for innovative program; evaluation crucial Quadrant 2	No program Quadrant 4



Environmental Objectives

☐ If actions of specific people are needed, behavioral objectives might be set for those people.



Administrative and Policy Assessment



Definitions

- Administrative Assessment
 - An analysis of the policies, resources, and circumstances in an organizational setting the either facilitate or hinder the development of a health promotion program
- Policy
 - The set of objectives and rules guiding the activities of an organization or an administration
- Regulation
 - The act of enforcing policies, rules or laws

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Administrative Assessment

- Matches the determinants of behavioral and environmental change to educational and organizational strategies and then budgeting the time and material resources to implement the methods and strategies.

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Administrative Assessment

- Step 1: Assessment of Resources Needed
 - What is needed to implement the proposed educational methods and strategies?
 - Time
 - Personnel
 - Budget
 - Pay attention to funding organization's requirement

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Administrative Assessment

- Step 2: Assessment of Available Resources
 - Personnel
 - Use existing personnel vs. hiring new personnel
 - Other Budgetary Constraints

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Administrative Assessment

- Step 3: Assessment of Factors Influencing Implementation
 - Staff commitment and attitudes
 - Program goal(s)
 - Rate of change
 - Familiarity
 - Complexity
 - Space
 - Community circumstances
 - Quality assurance, training and supervision

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Policy Assessment

- Assessing legal, political, or environmental conditions that are set by existing policies or regulations
- In conflict with policies of a collaborating organization:
 - Adapt the proposed plan to be consistent with organizational mission and policies
 - Seek to change the policy or organizational mandate
 - Some of both

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Policy Assessment

- Step 1: Assessment of the Organizational Mission, Policies, and Regulations
- Step 2: Assessing Political Forces

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