



Community Needs Assessment

Models &
Measures



Community Needs Assessment Process

People

- Build interest group
- Work collaboratively
- Report extensively
 - Educate core group
 - Inform community
 - Develop stories
 - Create identifier

Measures

- Identify Issues
 - Focus groups
 - Surveys
 - Dialogs
 - Town hall meetings
- Create indicators
 - Secondary Data
 - Primary Data
 - Interviews
 - Surveys
 - Focus Groups





Davenport's Health Issues

- Our health concerns are.....
- People's diets especially that of our children, including school nutrition programs
 - Opportunities to live active lifestyles, especially in the younger years and when confined by schools
 - Access to dental care when on T-19
 - Mental health service access – few qualify and have long waits when they do qualify
 - Prevention screening

Community Change Model

- Measures of a healthy community
- Systems – definitions & measures
- Factors that influence health
- Determinants of health

Communities / Systems

Growth Process

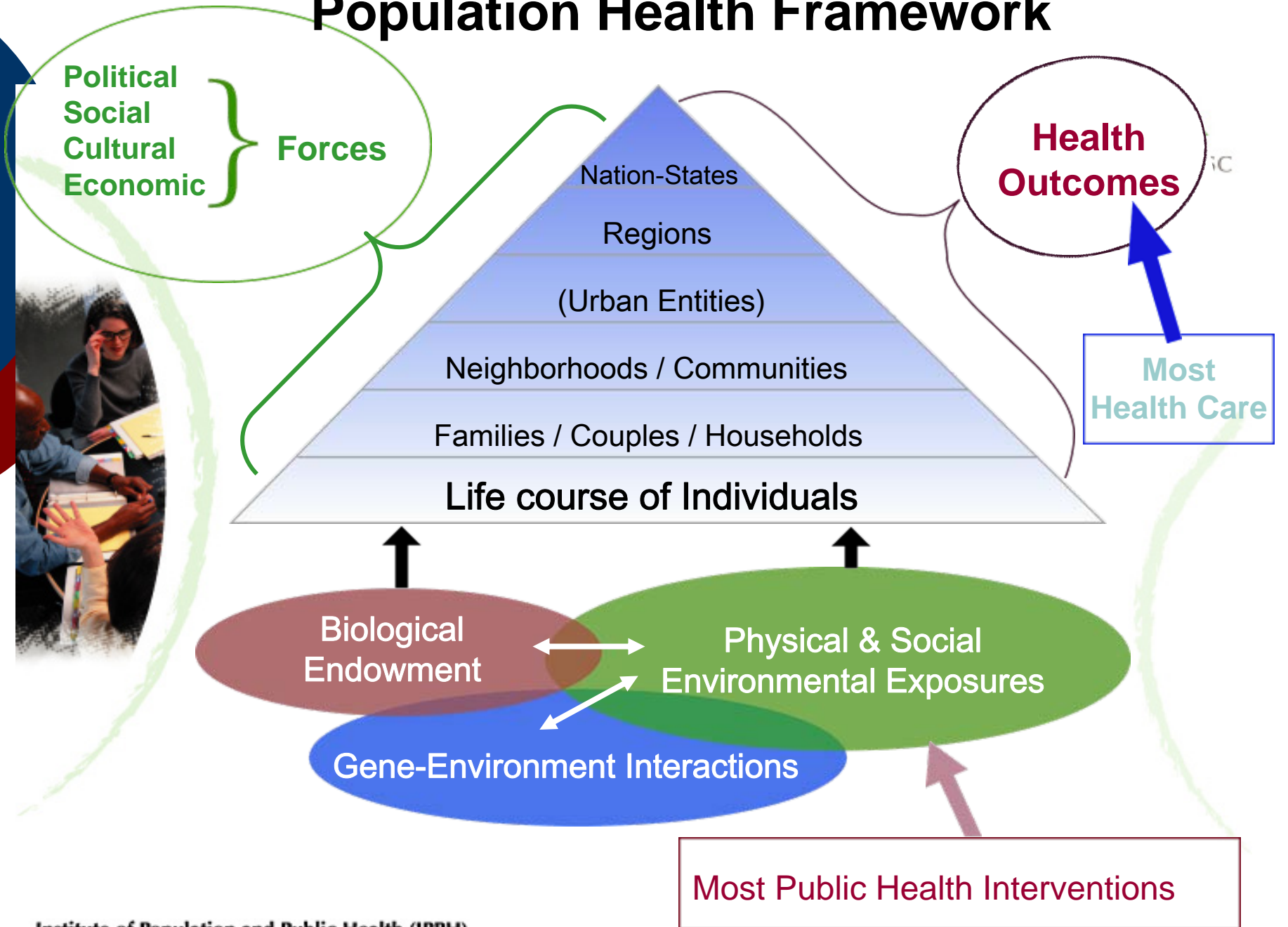
- Levels of planning
- Who should be involved
- How to make decisions
- Definitions
 - Conversations
 - Decisions
 - Planning
 - Implementation

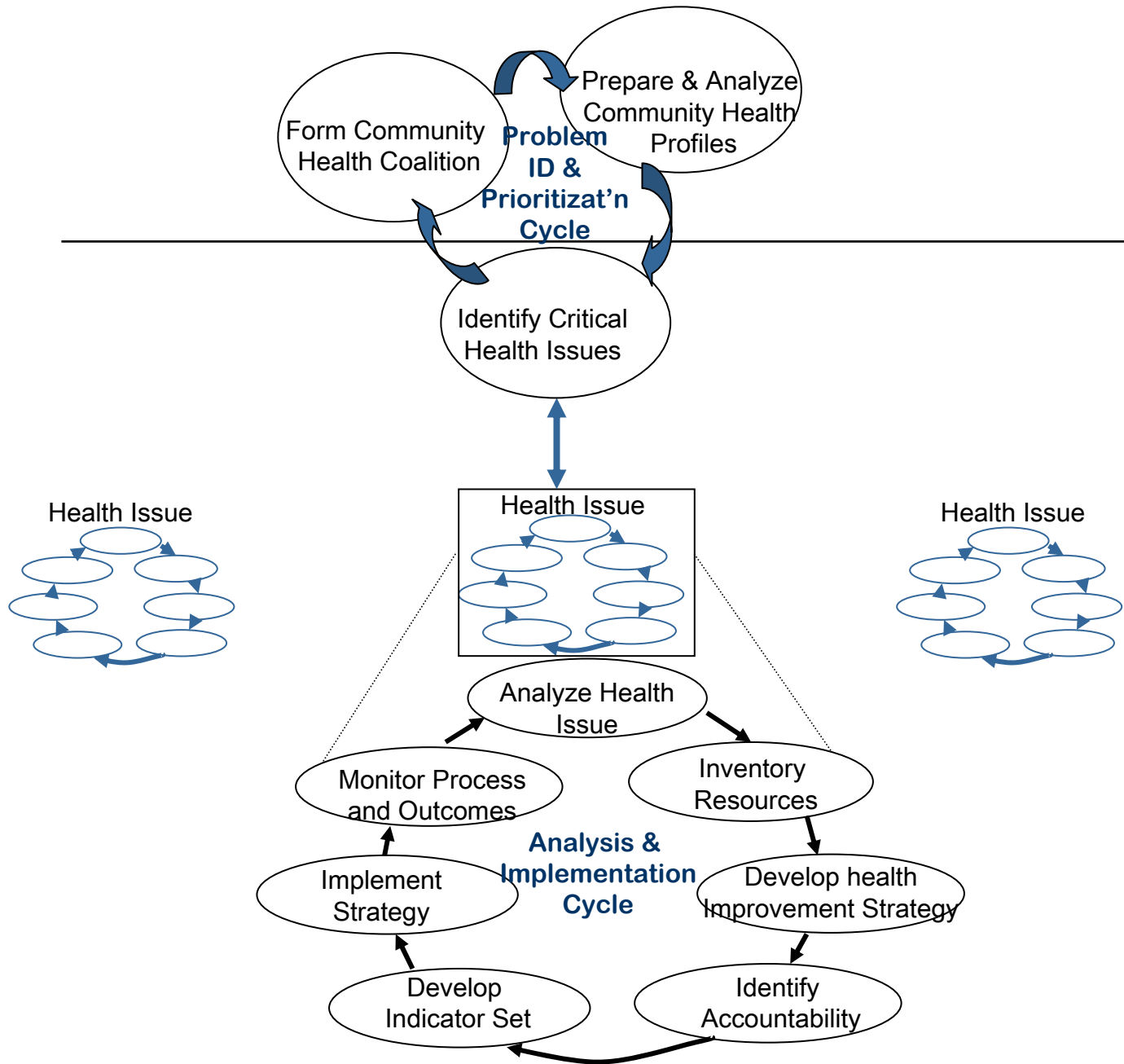
Models / Roadmap

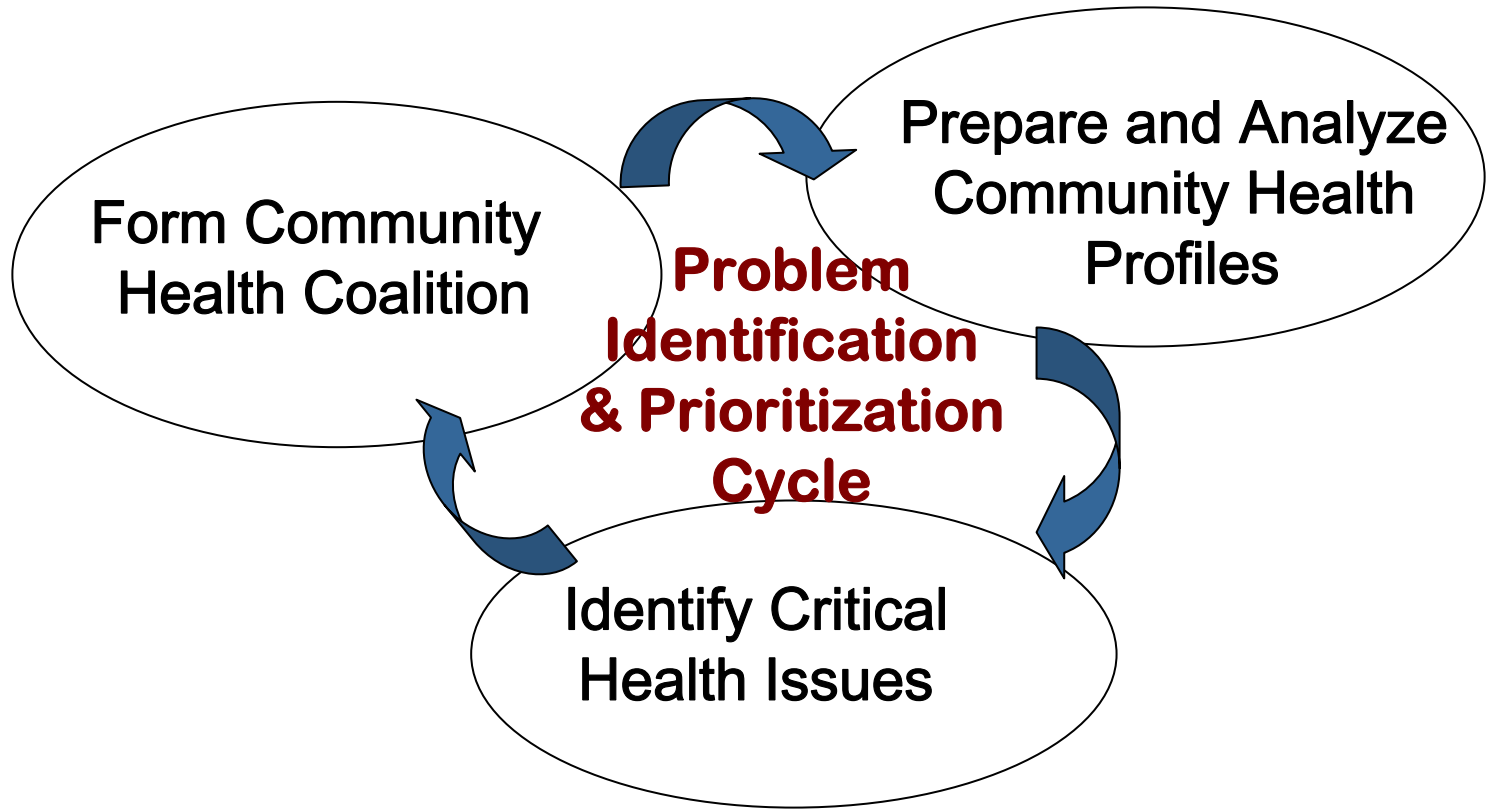
- Handouts
- How to pick a model
- Community planning framework

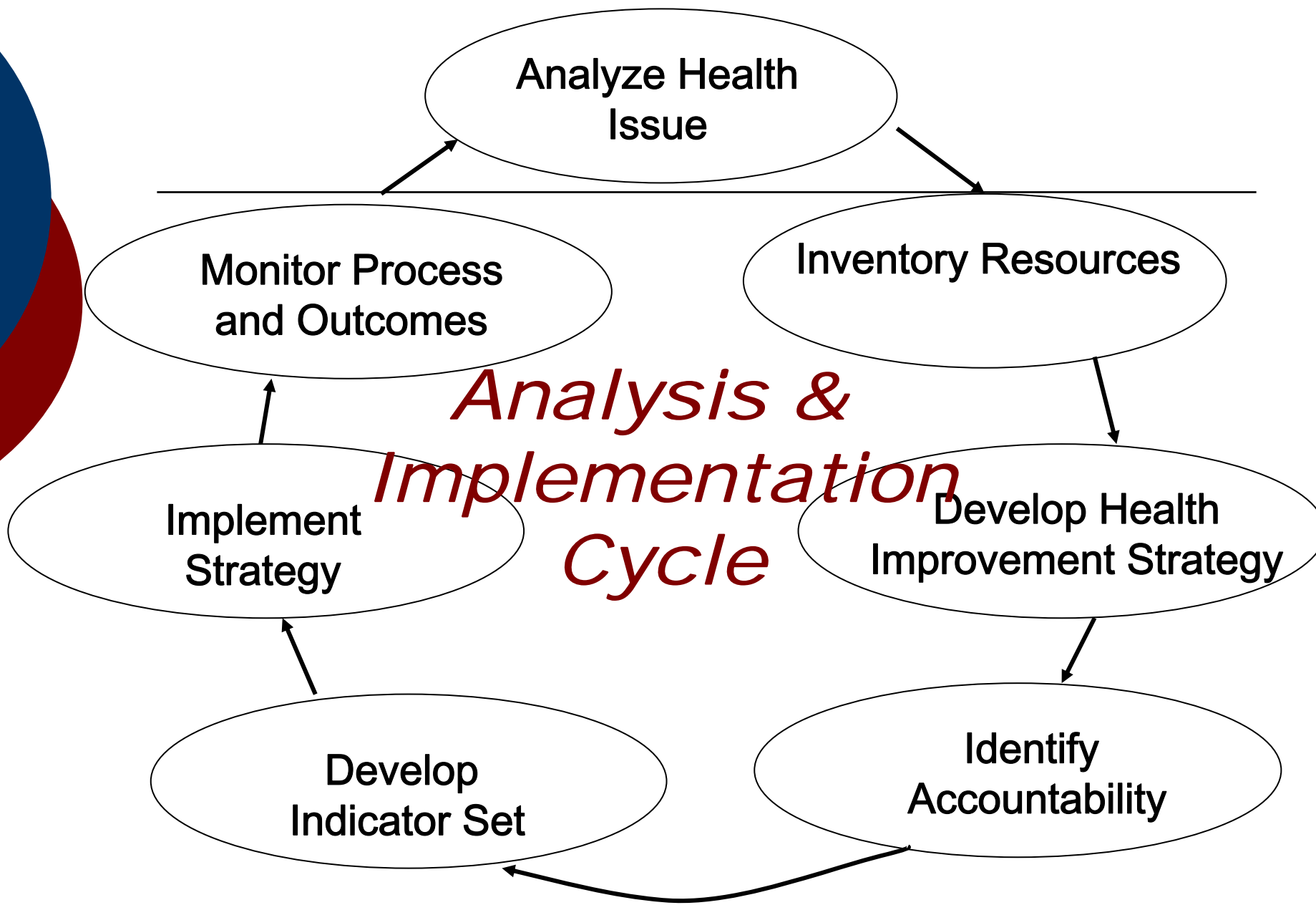


Population Health Framework









Analyze Health Issue

Inventory Resources

Monitor Process and Outcomes

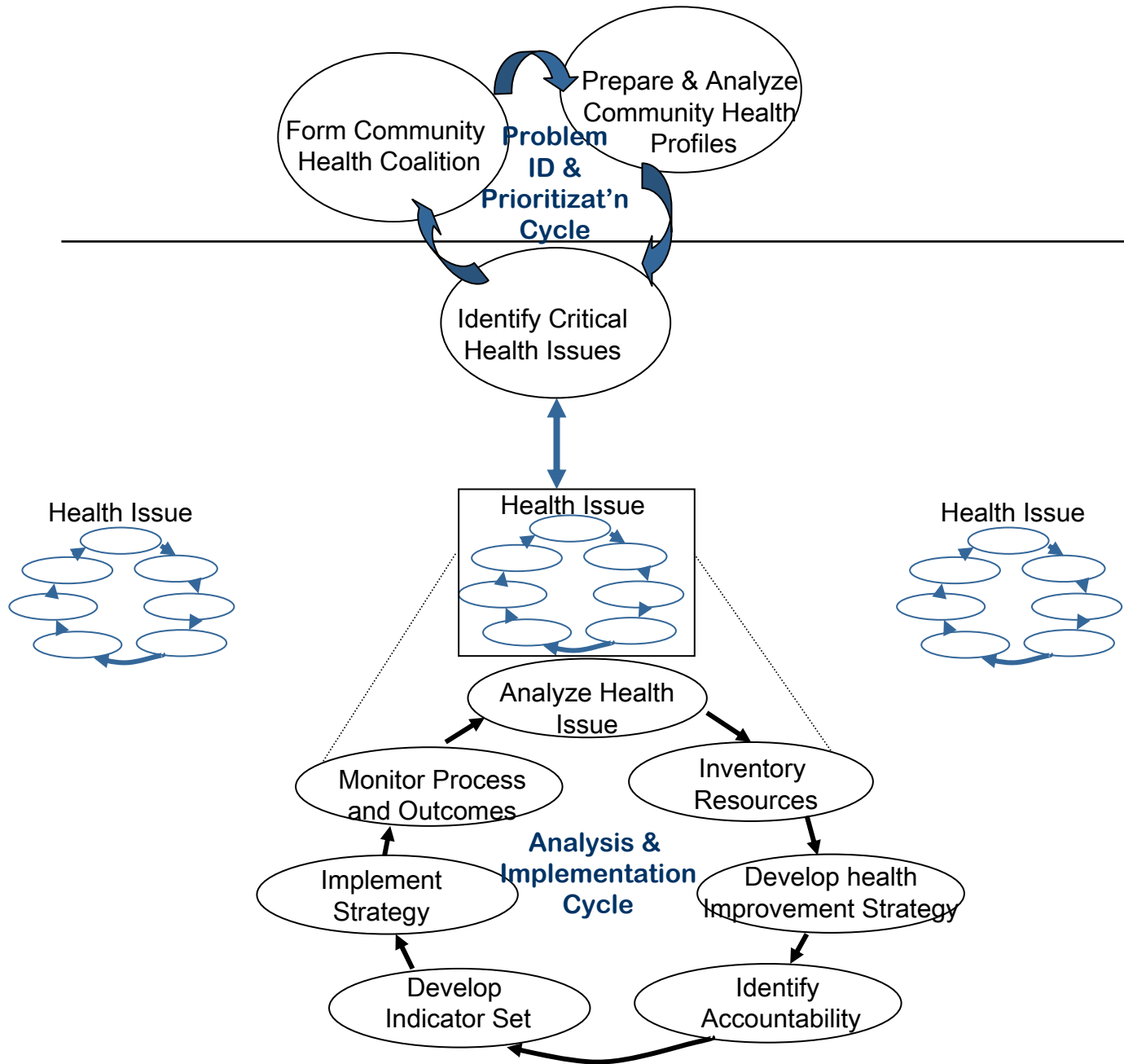
Analysis & Implementation Cycle

Develop Health Improvement Strategy

Implement Strategy

Identify Accountability

Develop Indicator Set





Models Available for Use

- PDSA/PDCA
- PATCH
- Home Town Health
- CHANGE
- Community Change Planning Model
- “Big Picture” Planning Model
- APEX – PH
- MAPP
- Institute of Medicine
- Determinants of Health – Woodbury County
- Drey Model



ACHI

Association for Community Health Improvement

Community Health Improvement Steps

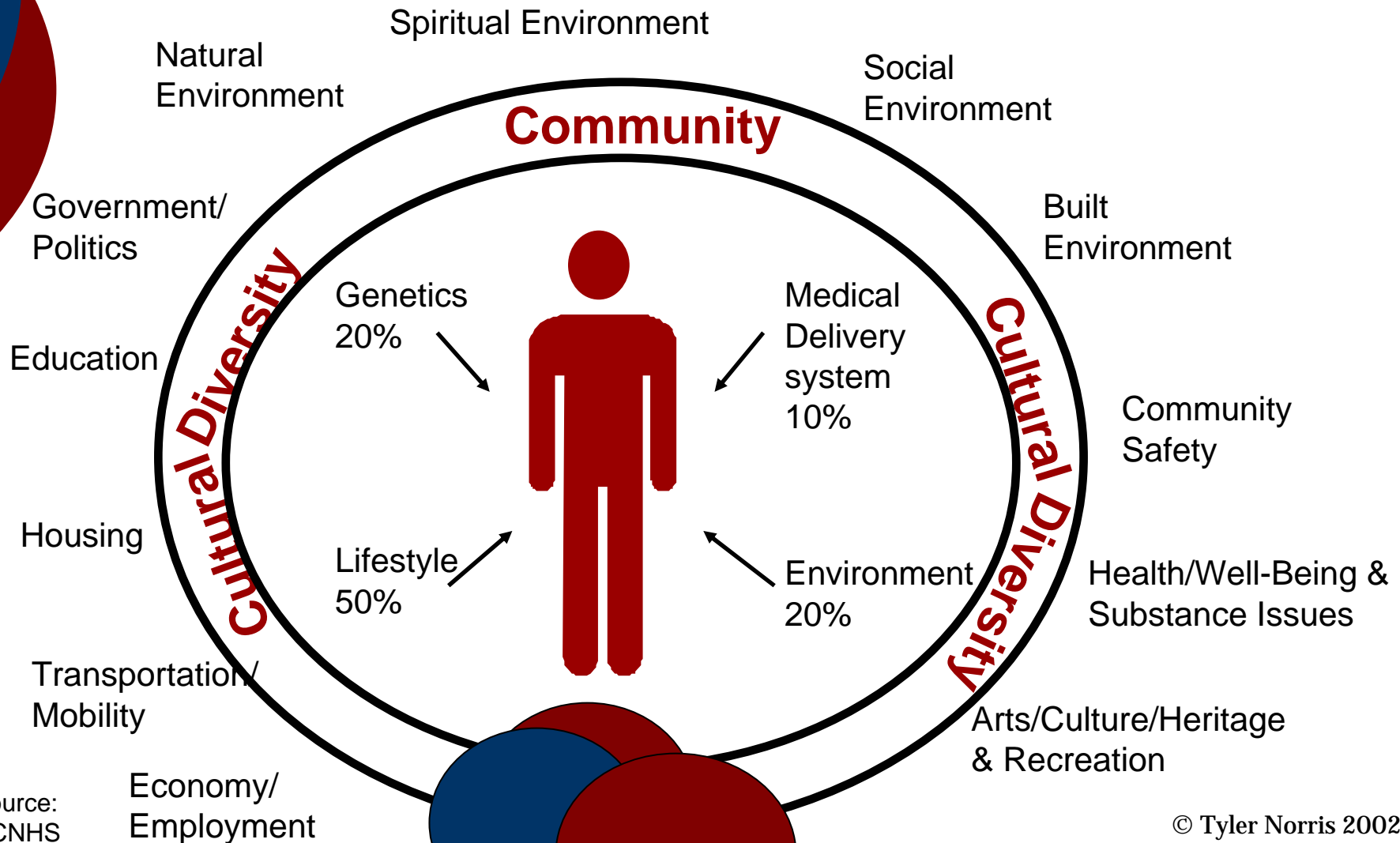
1. **Build your team and gather resources**
2. **Engage community partners**
3. **Collect data – Primary and Secondary**
4. **Analyze Data**
5. **Present to Primary Stakeholders**
6. **Set Priorities**
7. **Present Results Publicly**
8. **Take Action (and track data, impacts, etc.)**



Health Indicators

Targets for your outcome
Measures of your process

Factors that Influence Health *and* Community Well-Being



Social Determinants of Health

- The social gradient
- Stress
- Early life
- Social exclusion
- Work
- Unemployment
- Social support
- Addiction
- Food
- Transport





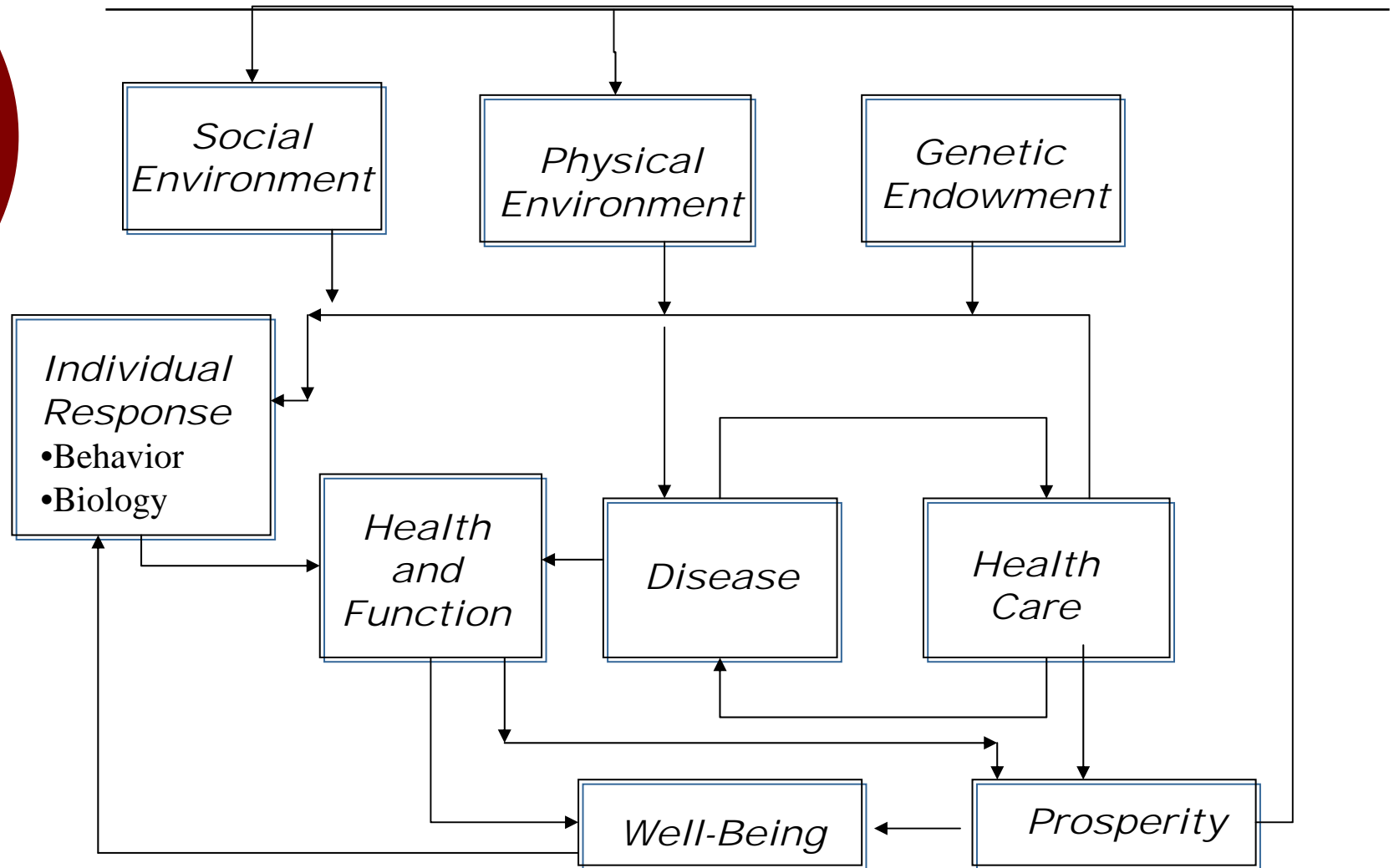
Determinants of Health

*Why Are Some
People healthy
and Others Not?*

Evans, R.G. &
Stoddart, G. L., De
Gruyter, New York,
1994

- **Social environment**
- **Physical environment**
- **Genetic endowment**
- **Individual response**
- **Health care**
- **Disease**
- **Health & function**
- **Well-being**
- **Prosperity**

A Model of the Determinants of Health





Measures

Health Indicators
Indicator Sets



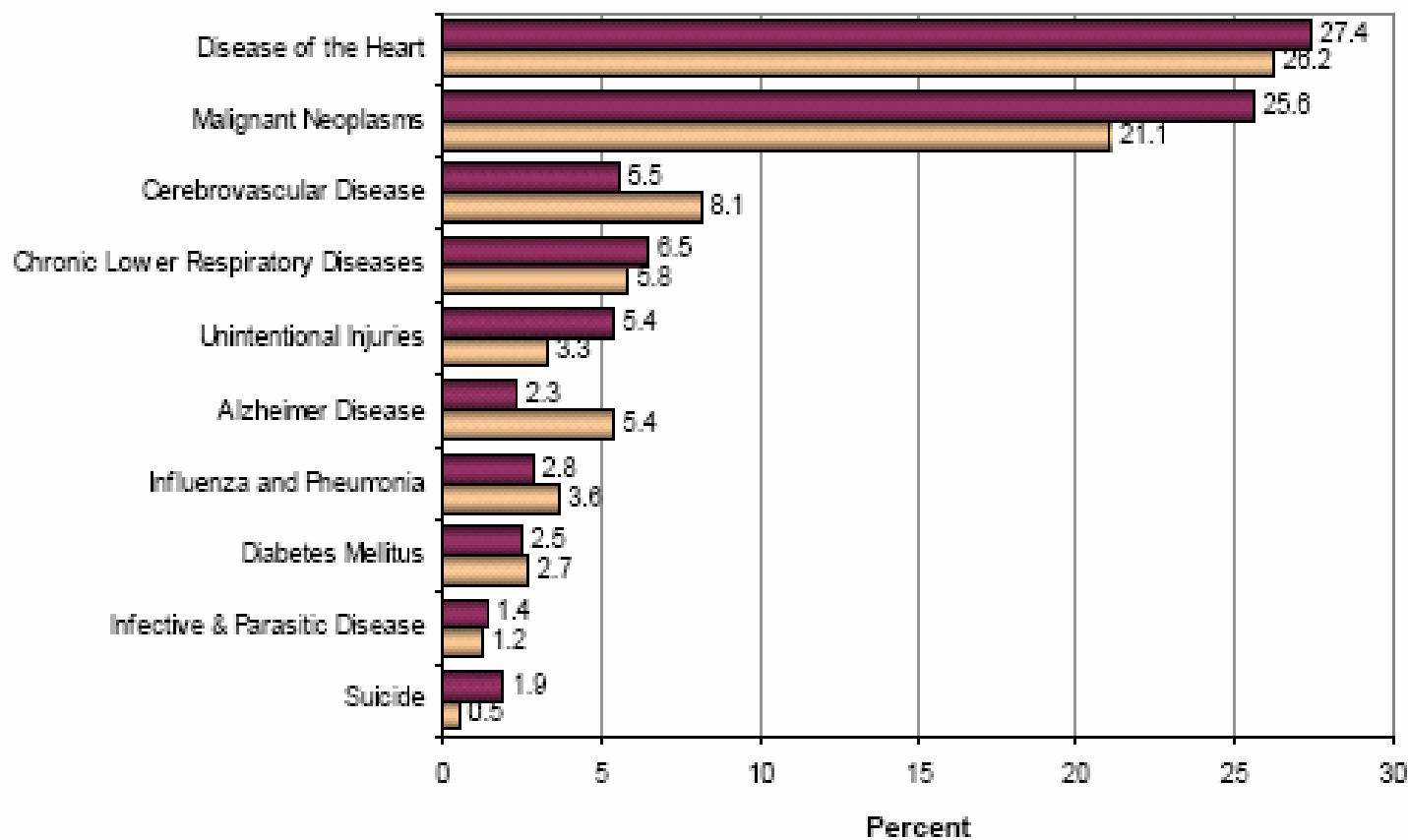
Top 10 causes of death

- Heart disease
- Cancer
- Stroke
- Chronic obstructive pulmonary disease
- Unintentional injuries (including MVC)
- Pneumonia/influenza
- Diabetes
- Alzheimer's disease
- Infectious/parasitic diseases
- Suicide



Top 10 causes of death in IA 2004

FIGURE 14: TEN LEADING CAUSES OF DEATH
AS PERCENTS OF ALL DEATHS BY GENDER
1995-2005 RESIDENT DATA



Female Male



TABLE 17
15 LEADING CAUSES OF DEATH BY NUMBER AND PERCENT OF TOTAL DEATHS, BY SEX
2005 RESIDENT DATA

	<u>Total</u>		<u>Male</u>		<u>Female</u>	
	Number	Percent	Number	Percent	Number	Percent
Total	27,770	100.0	13,270	100.0	14,500	100.0
Disease of the Heart	7,425	26.7	3,631	27.4	3,794	26.2
Malignant Neoplasms	6,444	23.2	3,391	25.6	3,053	21.1
Cerebrovascular Disease	1,899	6.8	731	5.5	1,168	8.1
Chronic Lower Respiratory Diseases	1,702	6.1	864	6.5	838	5.8
Unintentional Injuries	1,199	4.3	720	5.4	479	3.3
Alzheimer Disease	1,080	3.9	299	2.3	781	5.4
Influenza and Pneumonia	893	3.2	367	2.8	526	3.6
Diabetes Mellitus	722	2.6	335	2.5	387	2.7
All Infective and Parasitic Disease	358	1.3	181	1.4	177	1.2
Other Diseases of Circulatory System	337	1.2	182	1.4	155	1.1
Suicide	331	1.2	255	1.9	76	0.5
Essential Hypertension and Hypertensive Renal Disease	274	1.0	100	0.8	174	1.2
General Atherosclerosis	264	1.0	100	0.8	164	1.1
Nephritis, Nephrotic Syndrome, and Nephrosis	246	0.9	122	0.9	124	0.9
Symptoms, Signs, and Abnormal Findings, NEC.	243	0.9	68	0.5	175	1.2
All Other Diseases (Residual)	4,353	15.7	1,924	14.5	2,429	16.8

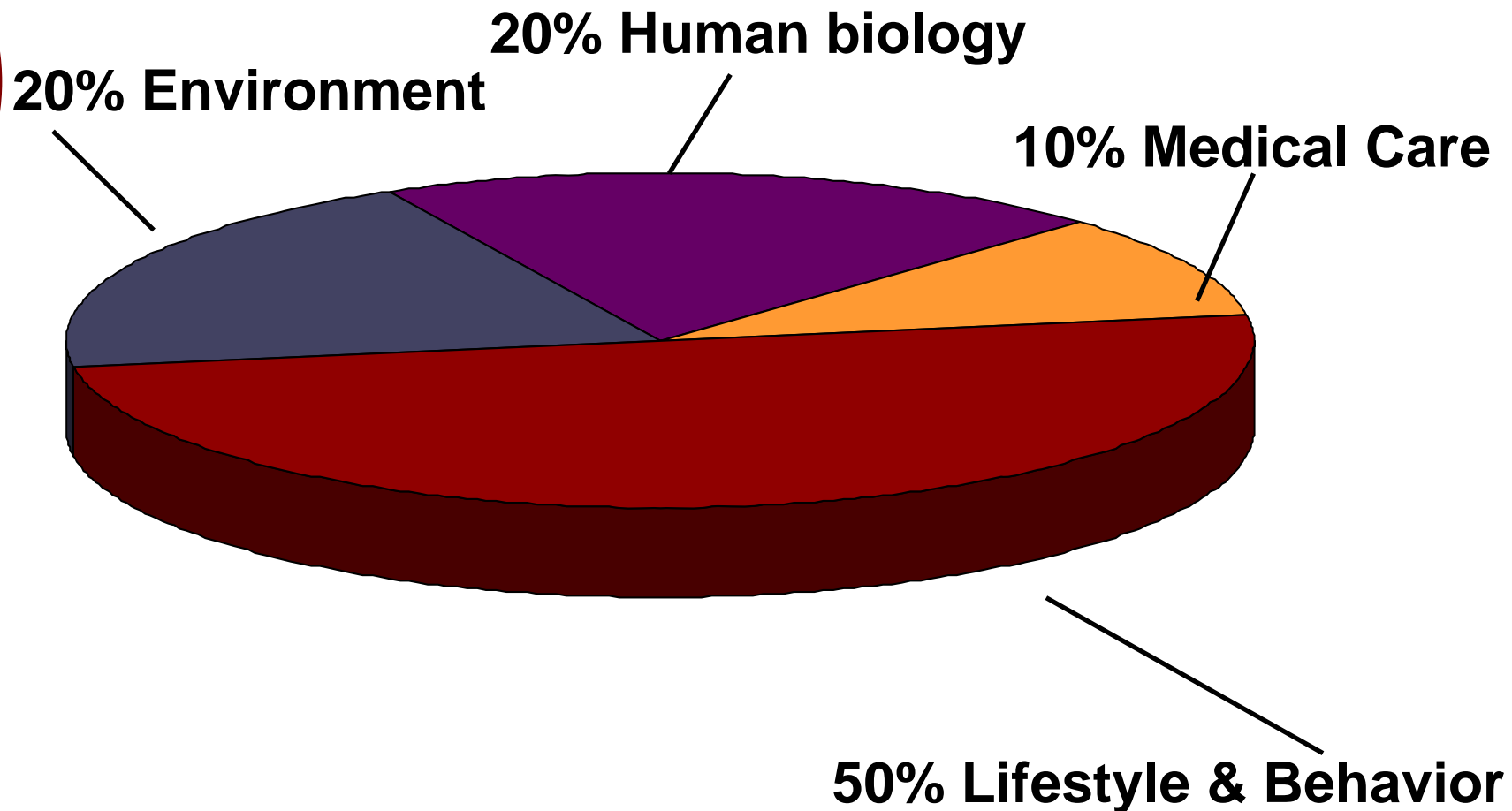




From an Epidemiologist's Perspective

○ Tobacco	400,000	19%
○ Diet/Activity	300,000	14%
○ Alcohol	100,000	5%
○ Microbial Agents	90,000	4%
○ Toxic Agents	60,000	3%
○ Firearms	35,000	2%
○ Sexual behavior	30,000	1%
○ Motor vehicles	25,000	1%
○ Illicit use of drugs	20,000	<1%

Health Field Conceptual Model Influence of Factors on Health Status





Health Indicators

...Measures or sets of measures that allow intimations about health status of a target population.



Health Indicators

Indicator Measures

- Death rates
- Disease Incidence and prevalence
- Birth Rate
- Marriage/Divorces
- Communicable disease
- Treatment efficacy

Indicator Sets

- Kids Count - 21
- Health Status
 - Health
 - Quality of Life
 - Functional Status
- Healthy Communities
 - Health Systems
 - Nutritional Access
 - Healthy environments
 - Quality of Care



Dubuque

Indicator

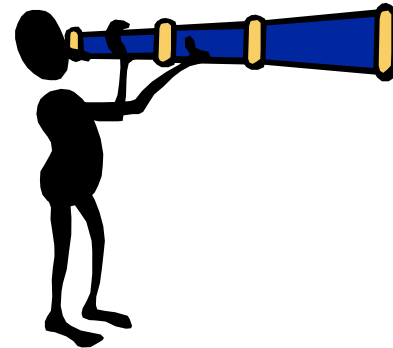
- Teen abortions last year
- Teen pregnancies last year

Context Measure

- Teen pregnancy trends over 10 years
- Teen abortions over 10 years
- School sex education program

Community Indicator Sources

- Institute of Medicine
- HEDIS
(Health Plan Employer Data & Information Set)
- Kids Count
- Vital Statistics
- Census





Proposed Indicators for a Community Health Profile

- **Socio-demographic Characteristics**
- **Health Status**
- **Health Risk Factors**
- **Quality of Life**
- **Health Care Resource Consumption**
- **Functional Status**



Socio-demographic Characteristics

- Age & race/ethnicity distribution
- Size of groups with access problems such as migrants, homeless or non-English speaking
- Number of people without HS education
- Ratio of # graduating to number who entered HS 3 years prior
- Median household income
- Unemployment rate
- # & distribution of single parent families
- Proportion of children in poverty
- # & proportion of people without health insurance.



Census

State Data Center of Iowa: <http://www.iowadatacenter.org/>



Health Status

Vital Statistics

- Infant mortality rate by race/ethnicity
- Deaths & age-adjusted death rate for motor crashes, work related injuries, suicide, homicide, lung cancer, breast cancer, cardiovascular diseases, and all causes by age, race and gender as appropriate
- Incidence of AIDS, measles, tuberculosis, and primary & secondary syphilis, by age, race, and gender as appropriate
- Births to adolescents (ages 10-17) as a proportion of total live births
- Number & rate of confirmed abuse and neglect cases among children

Vital Statistics: http://www.idph.state.ia.us/apl/vital_stats.asp





The System of Health Care

- **Provides Accessibility**
- **Is Productive**
- **Offers Quality Care**
- **Contains Costs**

Health Status Indicators as Measures of System Performance

- YPLL
- Lost wages & costs due to illness
- Mortality rates
 - infant, neonatal, perinatal
 - maternal
 - heart attacks
 - trauma
- Life expectancy
- Quality-adjusted life years/ well years
- Morbidity rates
 - acute conditions
 - chronic conditions
 - disability days & activity restrictions
- Preventable Diseases
- Provider based measures
 - case fatality
 - hospital readmission



CDC Home | NCHS Home | Contact NCHS | Trends in Health and Aging Home | Contact Trends ... | Privacy Policy | Accessibility



Trends in Health and Aging

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics



















Español

Tables Help

 Search

All Tables > Trends in Health and Aging > Socio-Economic Status

Folders	Name 
 Mortality	 Education 1
 Oral Health	 Income Per Person 2
 Perceived Health Status	
  Resident Population, Nation a	
  Risk Factors	
  Socio-Economic Status	
 Education	
 Income Per Person	
 Special Equipment Use	
 Use and Cost of Prescription	

CDC Home | NCHS Home | Contact NCHS | Trends in Health and Aging Home | Contact Trends ... | Privacy Policy | Accessibility



Trends in Health and Aging

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics



[Español](#)

Tables **Help**



All Tables > Trends in Health and Aging > Chronic Conditions

Folders	Name ↑↓
All Tables	
Trends in Health and Aging	
Chronic Conditions	1 Chronic Conditions. Diabetes (self-reported), State, 1993-2006. (Source: BRFSS)
Functional Status and Disability	2 Diabetes by Sex, Race/Hispanic Origin, and Age, United States, Selected Years
Health Care Expenditures	3 Hypertension (self-reported), State, 1993-2005 (Source: BRFSS)
Health Care Utilization	4 Hypertension by Sex, Race/Hispanic Origin, and Age, United States, Selected Years
Health Insurance	5 Prevalence of Selected Chronic Conditions by Age, Sex, and Race/Ethnicity: United States, 1993-2006
Immunization	6 Prevalence of Selected Conditions by Age and Sex: United States, 1984-2006
Incontinence	
Injury	
Life Expectancy	



So You've Got Indicators...

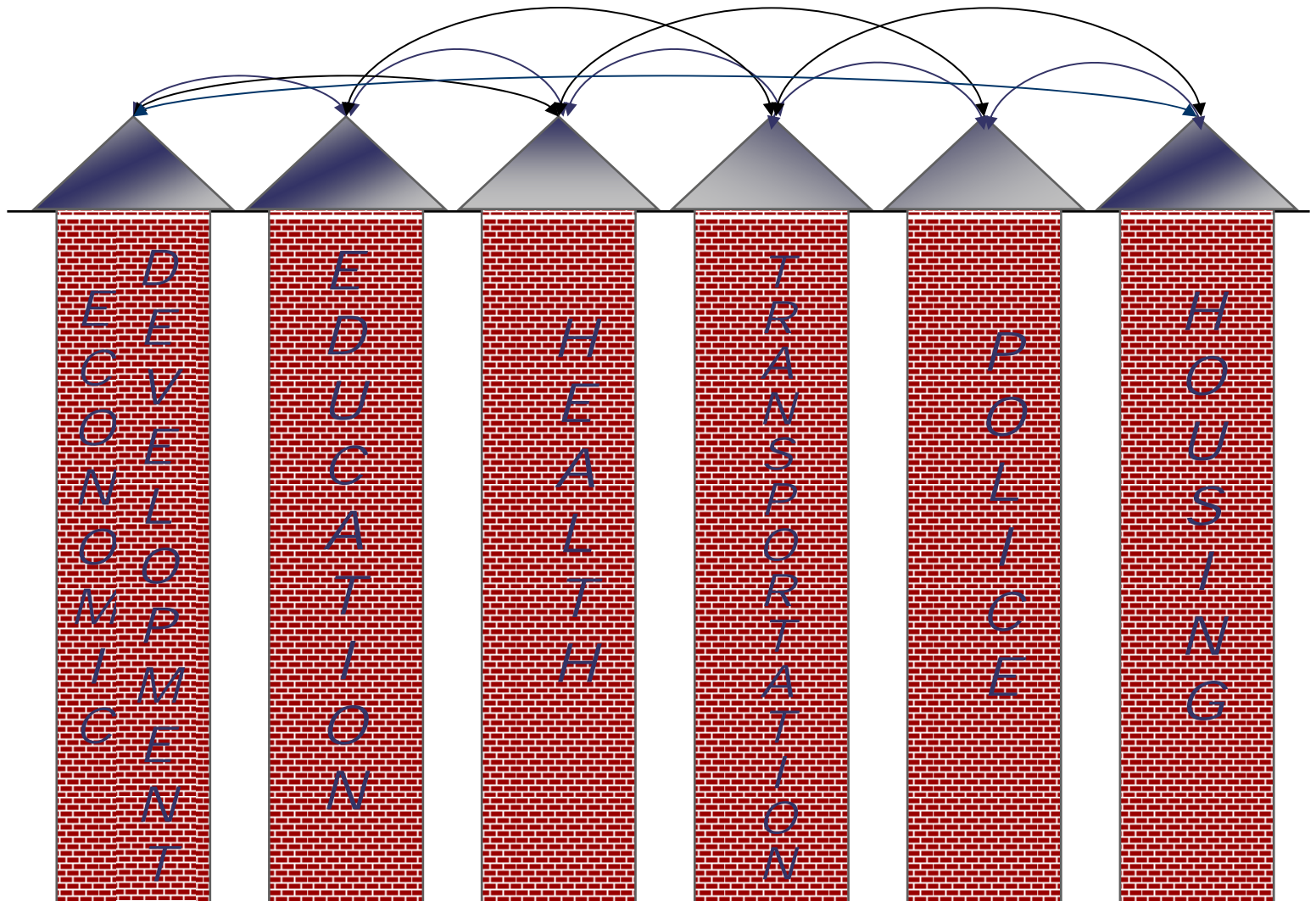
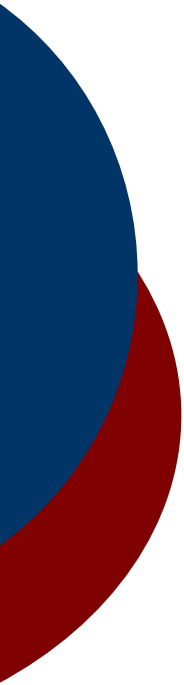
Now What?



Healthy Community Principles

Build true collaboration between:

- **Business**
- **Government**
- **Non-profit**
- **Citizens**



Collaboration

Resource Inventory

- Community Based Asset Assessment
 - Identifies resources
 - Builds internal capacity
 - Negates need for external rescue
 - Expands community capacity over time
 - Community Capitals

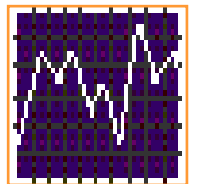


Ft Dodge Town Hall Meeting, 2007

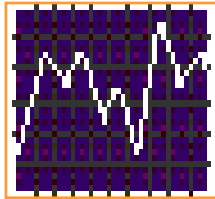
NA Indicator Sets



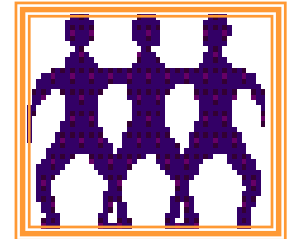
- Vital Statistics
 - Top 10 Mortality Measures
 - Births/deaths
 - Provider supply
- Preventable Deaths
 - YPLL
 - Disease incidence/prevalence
 - Chronic Disease Management
- Safety/Violence
 - Abuse
 - School violence
 - Arrests



NA Indicator Sets



- Resources
 - Providers
 - Insurance Coverage
 - Employers Providing Insurance
 - EMS
 - Home Care/Chore Service/etc.
- Social Measures
 - Employment
 - Impoverishment
 - Community Disparities
 - Housing and home ownership
 - Savings

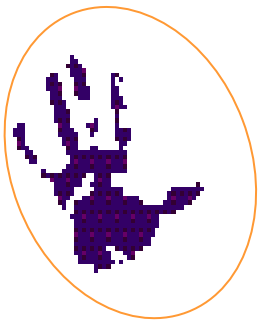


NA Indicator Sets



- Profile of the People

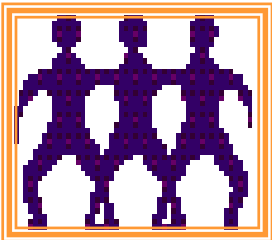
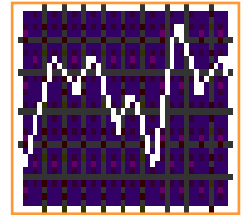
- Age
- Education
- Income (wage and transfer payments as well as interest income and dividends)
- Employment
- Chronic Diseases
- Nutrition and diet
- Physical Activity
- Insurance
- Un-served population
- Self-employed



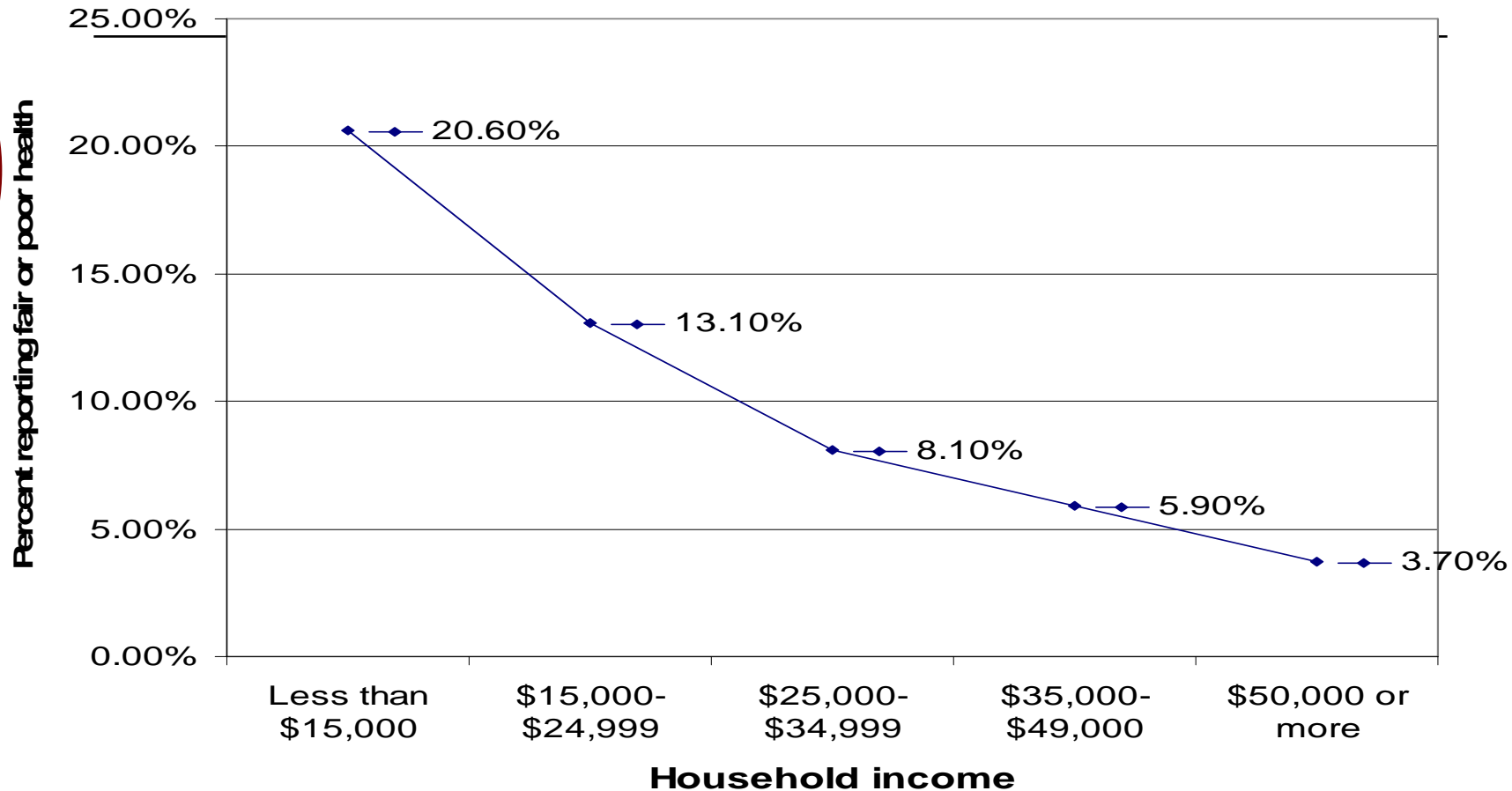
NA Indicator Sets

○ Culture

- Bullying in schools and out
- Smoking in public places
- Events – fairs, parades
- Arts
- Charity and charity care
- Strength of Religious Community
- Games, clubs, general activity of community
- Support for people in need or disenfranchised groups



Relationship between household income and self-reported health status, U.S., 1996



Source: National Center for Health Statistics.
Reproduced from *Healthy People 2010* (2000). www.cdc.gov/nchs

Examples

- Social capital is strongly and negatively associated with income inequality.
- The lower the trust between citizens, the higher the average mortality rate.
- A 10% higher level of trust was associated with an 8% lower death rate from all causes.

Kawachi, I., Kennedy, B.P., Lochner, K., Prothrow-Stith, D. (1997) Social capital, income inequality and mortality. *American Journal of Public Health*





This is Not New

“The fact is, poverty is the greatest problem in public health. A living wage is essential to a healthful standard of living.”

American Journal of Public Health, 1918





Alternative Tips for Better Health

Don't be poor. If you can, stop. If you can't, try not to be poor for long.

Don't have poor parents.

Have transportation.

Don't work in a stressful, low paid manual job.

Have a job with benefits.

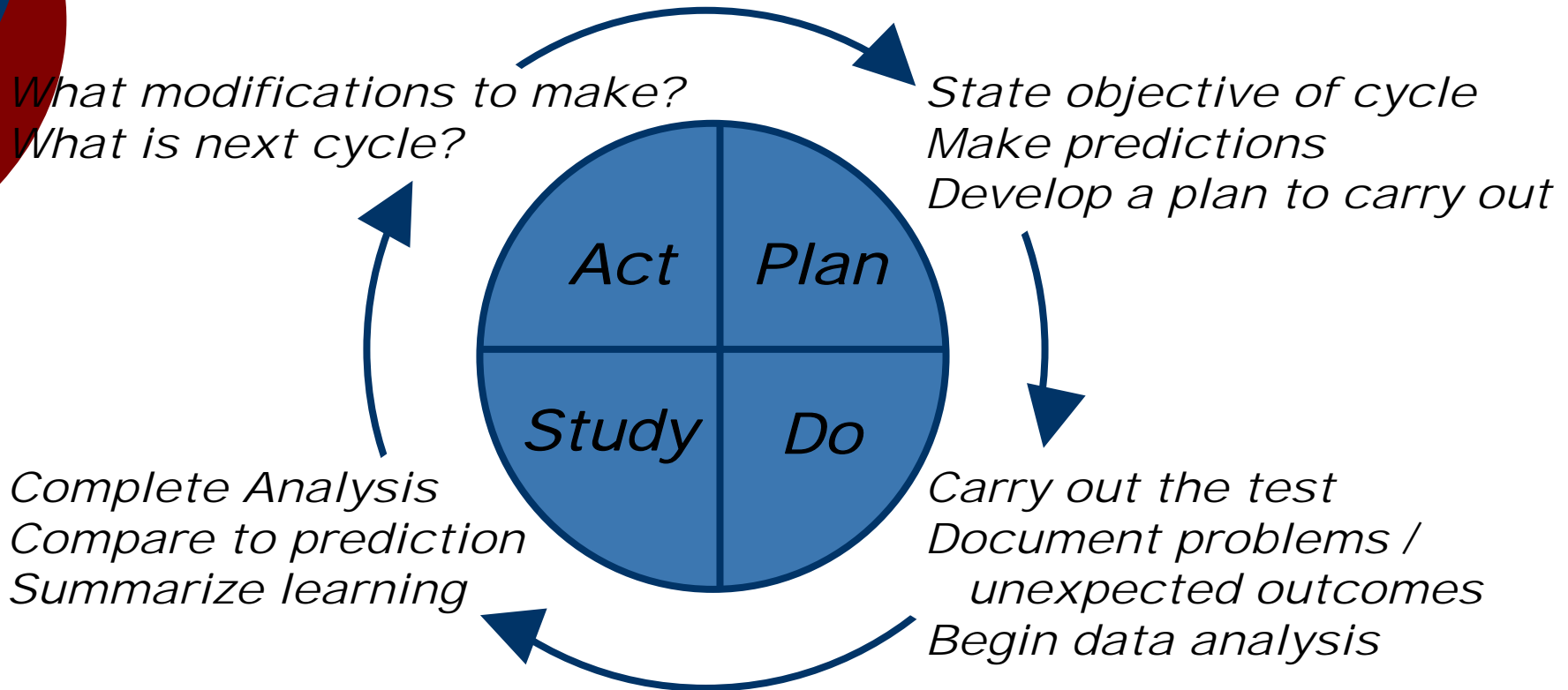
Don't live in damp, low quality housing.



Models to be Discussed

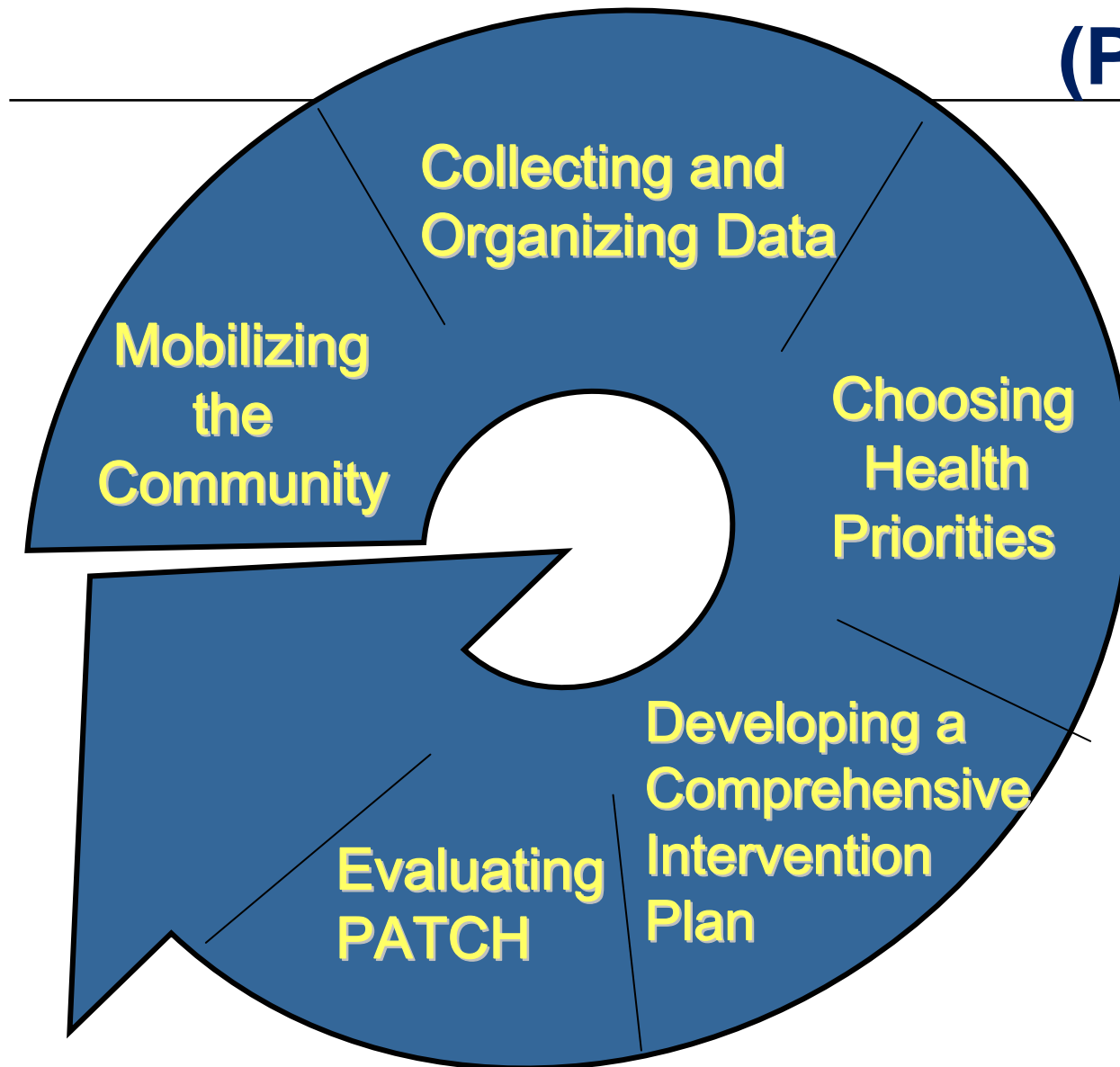
- PDSA/PDCA
- PATCH
- Home Town Health
- Logic
- Community Change Planning Model
- “Big Picture” Planning Model
- APEX – PH
- MAPP
- Institute of Medicine
- Determinants of Health – Woodbury County Drey Model

The PDSA Cycle for Learning and Improvement

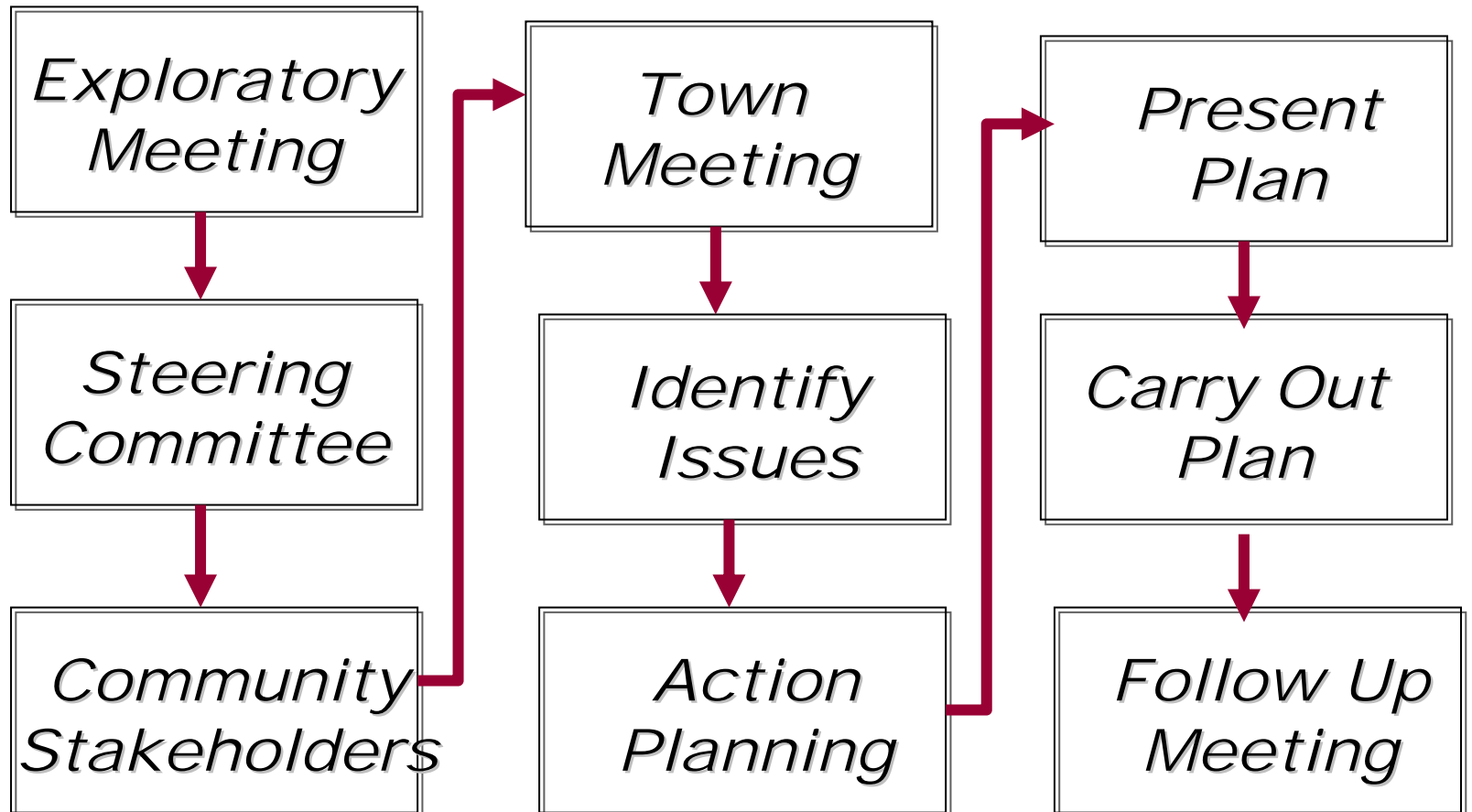


Planned Approach to Community Health

(PATCH)



Home Town Health





Who Should Be Involved?

- Agriculture
 - Industry
 - Banks
 - Chamber of Commerce
 - Extension
 - Churches
 - Local Health Department
 - Civic organizations
 - Providers
 - Patients
 - Stakeholders
 - Parents
 - Caregivers
 - Social support
 - Educators
 - Schools
- Hometown Health, 1998

Mobilizing for Action Through Planning and Partnership (MAPP)



MAPP - YOUR COMMUNITY ROADMAP TO HEALTH!

A Healthier Community

Action Cycle

Evaluate Implement Plan

Formulate Goals and Strategies

Identify Strategic Issues

Community Themes & Strengths Assessment

Forces of Change Assessment

4 Mapp Assessments

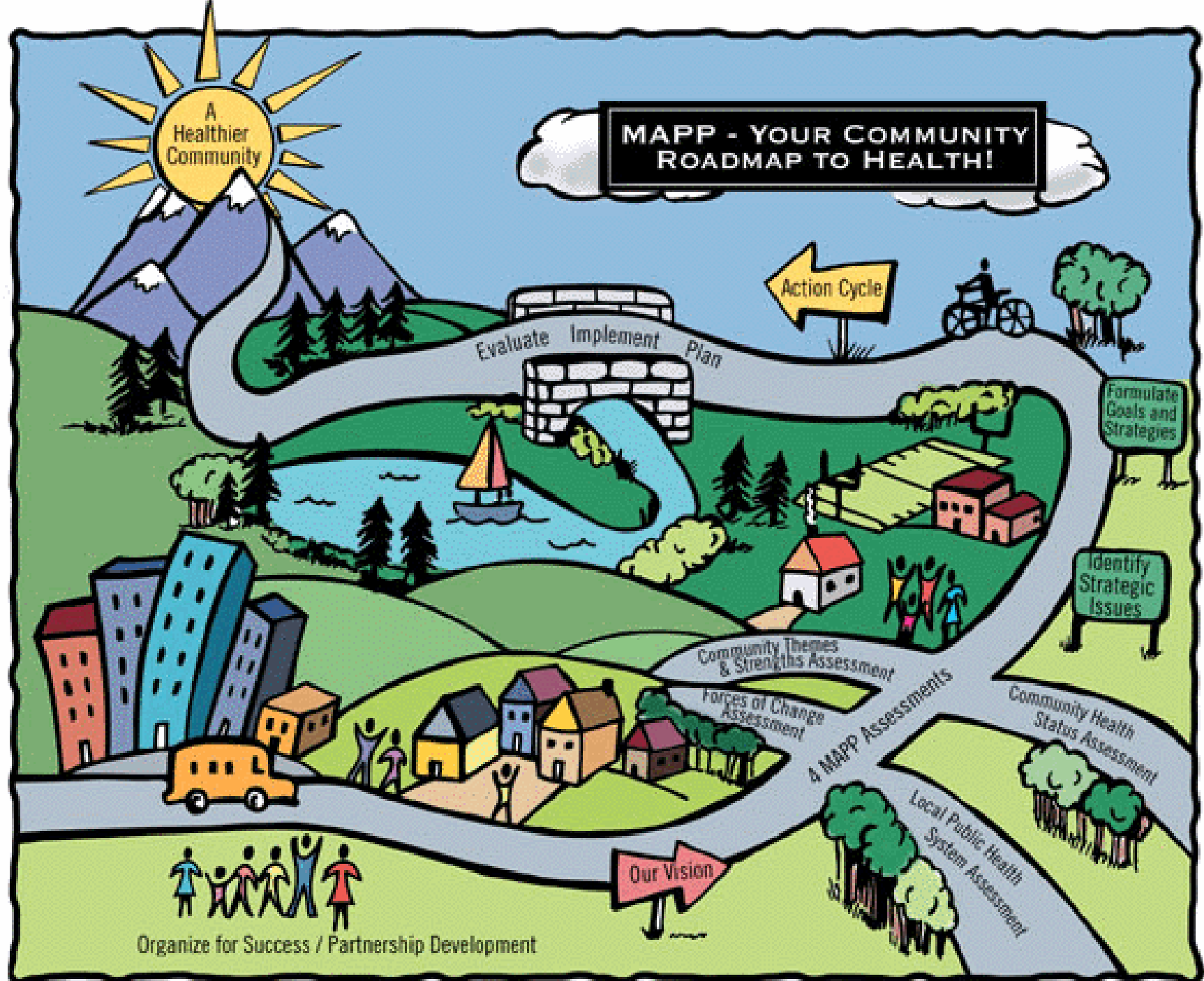
Community Health Status Assessment

Local Public Health System Assessment

Our Vision



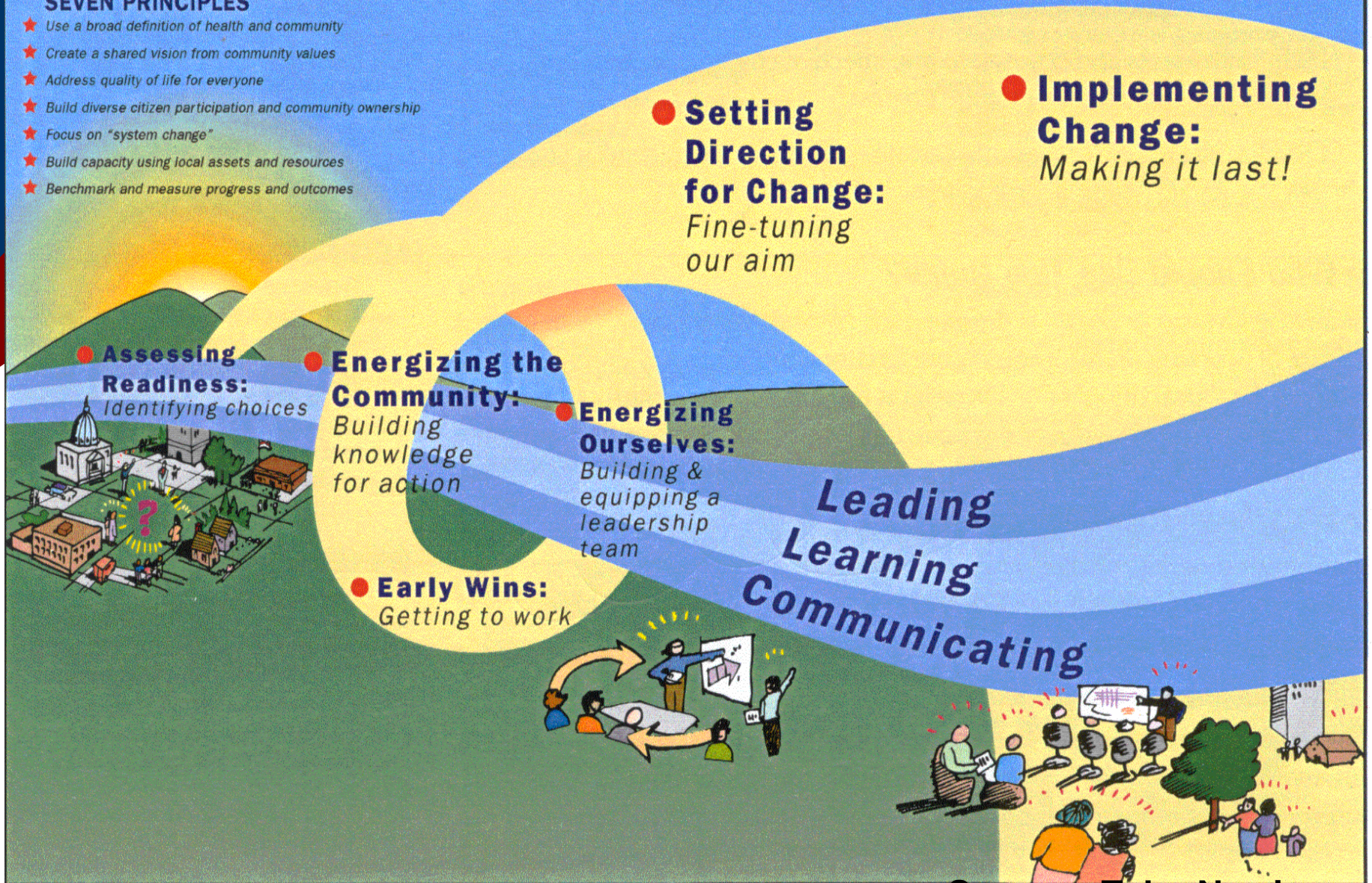
Organize for Success / Partnership Development



Community Change Model

SEVEN PRINCIPLES

- ★ Use a broad definition of health and community
- ★ Create a shared vision from community values
- ★ Address quality of life for everyone
- ★ Build diverse citizen participation and community ownership
- ★ Focus on "system change"
- ★ Build capacity using local assets and resources
- ★ Benchmark and measure progress and outcomes



Source: Tyler Norris



Never Doubt...

*....that a small, committed group
can change the world, it is the
only thing that ever has.*

M. Meade