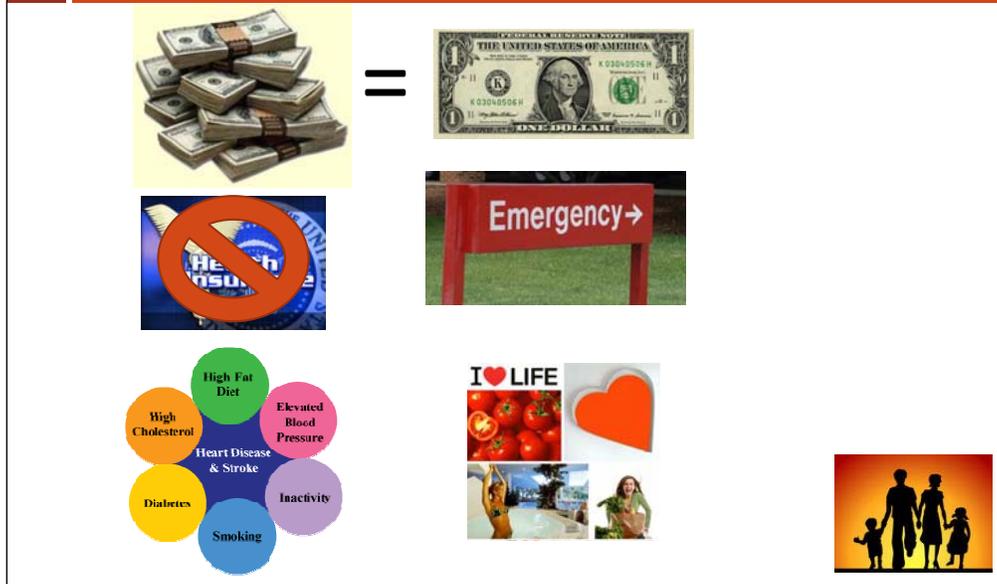


# A NEW APPROACH TO MCH



The Life Course Framework for the  
Early Childhood Systems Initiative

# Why We Need This New Approach



Why do we need a new approach to Maternal and Child Health?

- **We spend more (Click) but get less. (Click>Click)** Despite the fact that the U.S. has the highest spending on health care of any nation in the world, our ranking on health status and health outcomes falls below that of many other developed nations. For example, in 2004, the latest year for which worldwide data are available, the U.S. was ranked 29<sup>th</sup> in infant mortality, tied with Slovakia and Poland, and behind countries as Japan, Hungary, and Cuba. **The 2008 infant mortality rate in Wisconsin was 7 infant deaths per 1,000 live births. Each County could insert what their Health Ranking is in the state.**

- **Our systems of care is fragmented at best.** Millions of Americans, lacking any or adequate health insurance coverage (**Click>Click**), only have access to emergency or urgent care (**Click**). Children may have health insurance but their parents may not. Low income women can receive prenatal care through Medicaid once they are pregnant, but coverage for services before and after pregnancy continues to be much more difficult to obtain.

- **Our financing system favors treating preventable disease (Click) rather than preventing diseases in the first place (Click).** The U.S. health system is geared toward episodic care, primarily responsive to acute illness. Treatment for chronic conditions has grown along with the disease burden of these conditions, but healthcare financing favors pharmaceutical and surgical interventions once a condition has developed and provides only limited incentives for disease prevention and health promotion. In many respects we have a disease care system, not a health care system focused on building health or promoting healthy development.

## Why We Need This New Approach (Cont.)



- **We need to take health promotion beyond clinical care.** Even as we focus clinical health services more prominently on promoting health and preventing disease, we must also recognize that the social, economic, and physical environments in which children and families live (**Click**), work (**Click**), and play (**Click**) have a profound impact on their health.

## Why We Need This New Approach (Cont.)



*Communities of Color Hardest Hit,  
Slowest to Recover from Recession*

- **We need to address social-economic-environmental inequities that lead to health inequities.** Inequity in health coverage is mirrored by inequity in the conditions and environments in which people live, with poor populations and communities of color most often living in the least supportive environments and receiving the poorest quality care or none at all.

# As a society we have a choice!



**As a society, we have a choice:** We can invest in access to quality health care, and develop health promoting communities for all **(Click)**, thereby turning around some of the deep-seeded determinants of poor health that are passed down through generations. Or **(Click)**, **(Click)** we can wait until symptoms of preventable diseases and disorders appear and then try to treat them after the fact. To date, we have taken the second course and it has proven to be extraordinarily expensive and by no means the most effective, efficient, or just way to address the health of our nation, state, county, city.

## **Determinants of Health:**

**(Click)** Income and social status - higher income and social status are linked to better health. The greater the gap between the richest and poorest people, the greater the differences in health.

**(Click)** Education – low education levels are linked with poor health, more stress and lower self-confidence.

**(Click)** Physical environment – safe water and clean air, healthy workplaces, safe houses, communities and roads all contribute to good health. Employment and working conditions – people in employment are healthier, particularly those who have more control over their working conditions

**(Click)** Social support networks – greater support from families, friends and communities is linked to better health. Culture - customs and traditions, and the beliefs of the family and community all affect health.

**(Click)** Genetics - inheritance plays a part in determining lifespan, healthiness and the likelihood of developing certain illnesses. Personal behavior and coping skills – **(Click)** balanced eating, **(Click)** keeping active, **(Click)** smoking, **(Click)** drinking, and how we deal with life's stresses and challenges all affect health.

**(Click)** Health services - access and use of services that prevent and treat disease influences health.

**(Click)** Gender - Men and women suffer from different types of diseases at different ages.

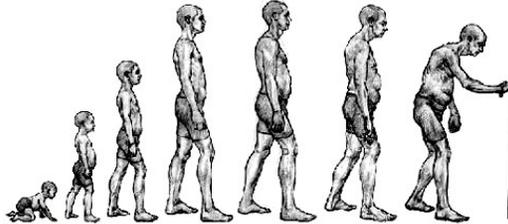
Do we want to spend more money on disease? **(Click>Click)**

# MCH Goals

To Optimize  
Health Across  
the Lifespan,  
for all People;

**AND**

To Eliminate  
Health  
Disparities  
Across  
Populations  
and  
Communities



The Maternal Child Health goals are to optimize health across the lifespan, for all people and to eliminate health disparities across population and communities.

These goals assume a broad definition of health, with the understanding that healthy development is an interactive process that continues throughout life **(Click)**. We must think about those populations that are most at risk – **(Click)** children, people of color, elderly, **(Click)** rich vs. poor, and **(Click)** race.



## What is a healthy community?



*“... one that is continually creating and improving those physical and social environments and expanding those community resources that enable people to mutually support each other in performing all the functions of life and in developing to their maximum potential.”* World Health Organization

## Why do health disparities persist across population groups?

What are the factors that influence the capacity of individuals or populations to reach their full potential for health and well-being?



While Life Course Framework has developed in large part from efforts to better understand and address disparities in health and disease patterns, it is also applied more universally to understand factors that can help everyone attain optimal health and developmental trajectories (pathways) over a lifetime and across generations. For the field of Maternal and Child Health, Life Course Framework addresses two separate but related questions:

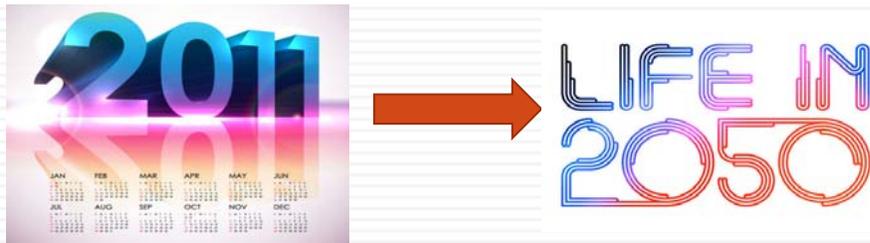
- 1) **(Click)** Why do health disparities persist across population groups, even in instances where there has been significant improvement in incidence, prevalence and mortality rates for a specific disease or condition across all groups?
- 2) **(Click>Click)** What are the factors that influence the capacity of individual or populations to reach their full potential for health and well-being?

Life Course Framework offers several key concepts to address these two fundamental questions.



## Key Life Course Concepts

Today's experiences and exposures influence tomorrow's health (Timeline).



Four key concepts – timeline, timing, environment, and equity – are fundamental to understanding and applying Life Course Framework.

**(Click>Click>Click) Today's experiences and exposures influence tomorrow's health**

Life Course Framework holds that health develops over a lifetime, with health improving or diminishing based in part on exposures to risk and protective factors. Life Course Framework emphasizes the importance of cumulative and longitudinal impacts both within an individual's life span and across generations.



## Key Life Course Concepts

Health pathways are particularly affected during critical or sensitive periods.

(Timing)



Life Course Framework points to the importance of the earliest experiences and exposures (early programming) and of critical or sensitive periods throughout life, in shaping the health of individuals and populations. Life Course Framework builds on the expanding science of human development to identify periods in which intervention can be maximized.

“Early programming” does speak to the need to focus substantial attention on the earliest periods of development, including interventions that help assure a healthy pregnancy for mother and baby (**Click>Click**) and services and supports that help assure the healthy development of children (**Click>Click**) – and their families – during the period of early childhood. Making sure that children (**Click**), adolescents and young adults (**Click**) are healthy is a form of very early intervention, paving the way for healthy births and healthy families for the next generation.



## Key Life Course Concepts

The broader community environment strongly affects the capacity to be healthy. (Environment)



CLEAN  
AIR  
WATER  
STREETS



Life Course Framework recognizes that physical, social, and economic environments play an important role in shaping health and disease patterns across populations and communities. Environment is broadly defined to include not only physical factors such as safe housing, areas for recreation, availability of nutritious foods, clean air and water, etc. but also social and economic factors such as racism, poverty status of families and communities, job opportunities, community or family violence, eternal stress, etc. and the capacity of the community to engage in change.

Life Course Framework suggest that planning should include strategies that help link women, children and families to other service systems that can address environmental factors such as employment services, housing, family support programs, etc.

# Risk and Protective Factors

## Risk Factors



## Protective Factors



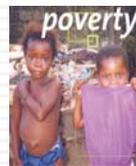
Within the broader community environment the interplay of risk and protective factors influences health. Examples of risk factors include: food insecurity ([Click](#)), homelessness ([Click](#)), living in poverty, unsafe neighborhoods ([Click](#)), domestic violence ([Click](#)), environmental pollution ([Click](#)), inadequate education opportunities, racial discrimination, being born low birthweight ([Click](#)), and lack of access to quality health services.

Protective Factors include a nurturing family ([Click](#)), a safe neighborhood ([Click](#)), strong and positive relationships ([Click](#)), economic security ([Click](#)), access to quality primary care and other health services ([Click](#)), and access to high quality schools and early care and education ([Click](#)).



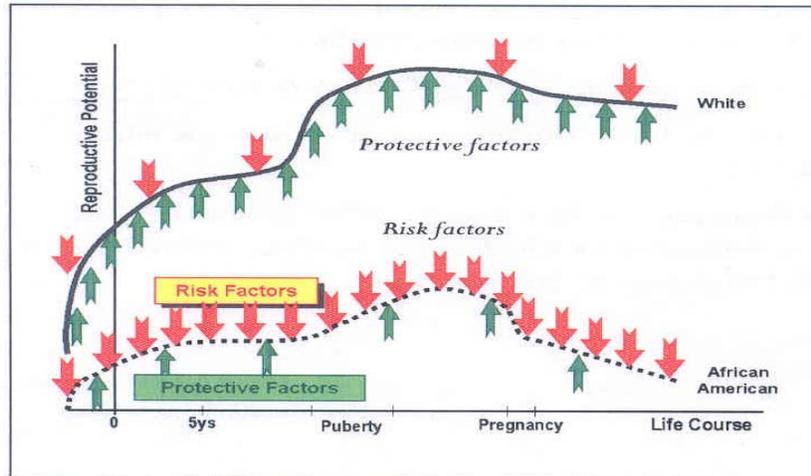
## Key Life Course Concepts

Inequality in health reflects more than genetics and personal choice. (Equity)



Life Course Framework seeks to explain health disparities across populations and communities. Marked and persistent difference in health across populations and communities cannot be explained solely in terms of genetic make-up or individual choices, but rather reflect the impact of broader societal and environmental conditions over time. Disparities in the life circumstance of population groups within our society (poor vs. rich; Black vs. White vs. Hispanic vs. Asian vs. Native American; immigrant vs. U.S. born – etc.) lead to disparities in health across these same groups.

# A Life Course Perspective



Lu MC, Halfon N. Racial and ethnic disparities in birth outcomes: a life-course perspective. *Matern Child Health J.* 2003;7:13-30.



This graph is commonly used to illustrate the key concepts of the Life Course framework. Across the bottom you see the timeline, the life span, with each stage of life influencing the next. As you move up vertically, there is improved health. This particular graph is labeled as “Reproductive Potential” along the left side and illustrates healthy birth outcomes for the White population represented by the top line, and less healthy outcomes for African Americans represented by the bottom line. Although this is a reproductive health example, you can also think of this illustration representing general health development and other types of disparities. So what influence these disparate health pathways?

Look at the steepness of the slope before age 0, that is during fetal development. Some babies are born with a healthy start in life, while others are born at a low birth weight or preterm. The slope of the line remains steep during early childhood and adolescence. These are the critical and sensitive periods that greatly influence our health throughout the life course. If you don’t start out on a positive pathway, it is very hard to catch up later in life.

Also influencing the pathways of the lines are the arrows pushing up and pushing down. The top line has more upward arrows representing protective factors such as social support and access to health care. The bottom line, with less healthy outcomes has more downward arrows representing risk factors such as chronic stress and poverty. Risk and protective factors are not limited to individual behaviors, but are related to the broader community environment. This illustration helps to explain that inequality in health reflects more than genetics and personal choice. The cumulative effect and differential exposures significantly contribute to disparate outcomes.

Consider that White women who smoke have better birth outcomes than African American women who don’t smoke. And White women with late or no prenatal care have better birth outcomes than African American women with first trimester prenatal care. The life course framework gives us a bigger picture of what influences health across the life span. And not only reproductive health, but also child health development.

# Life Course and Child Health Development

- Early brain development
- From Neurons to Neighborhoods
  - Early environments matter
  - Nurturing relationships are essential
- Adverse Childhood Events



A number of studies support a life course perspective for child development. Research has clearly shown that brain development of children (**Click**) before the age of five has a profound influence on their social, emotional, language, memory, physical, and cognitive development.

The publication *From Neurons to Neighborhoods* identify that positive environments and relationships in the life of a child serve as protective factors to support development and provide a strong foundation for all future learning, behavior, and health.

It is well established that adverse conditions such as family turmoil, enduring poverty, violent neighborhoods, and substandard daycare conditions put children at higher risk for mental health and developmental problems that can persist into school-age years and adulthood.

The ACE study of Adverse Childhood Events found that the more problems in early childhood, the more likely you are to have heart disease and depression when you are older.

These studies make the case that early childhood is a critical or sensitive period with lifelong implications for health.

# From Theory to Practice

## ■ MCH Objective

**A collaborative plan for a community system that supports early childhood health and development will be developed by the Health Department in partnership with key stakeholders.**



That brings us to the Early Childhood Initiative and the MCH objective for 2011: A collaborative plan for a community system that supports early childhood health and development will be developed by the Health Department in partnership with key stakeholders.

The Early Childhood Systems Objective includes 2 initiatives. The Wisconsin Healthiest Families Initiative focuses on systems of services addressing 4 areas: family supports, child development, mental health and safety and injury prevention. The Keeping Kids Alive Initiative focuses on the implementation of Child Death Review and Fetal Infant Mortality Review processes. Recommendations for prevention can then be identified and implemented.

How does the Life Course perspective serve as the framework for this work?

## MCH Objective and Life Course

- MCH Objective focuses on early childhood because it is a **critical, sensitive period** with life-long impacts on health



The objective focuses on the early childhood period because it is a critical, sensitive period with life-long impacts on health. Some local public health departments participating in the Keeping Kids Alive Initiative will also be focusing on strategies to improve birth outcomes as a result of their Fetal Infant Mortality Reviews. The Life Course Framework supports a focus on these critical developmental periods because early experiences can program an individual's future health and development. A striking example of this is the research on fetal origins of chronic disease. Babies born at low birthweight have an increased risk of developing heart disease, high blood pressure, and diabetes in later life.

## MCH Objective and Life Course

- MCH Objective supports a plan for a community system that supports early childhood health and development that can **build on protective factors and reduce risk factors** for young children and families



Exposure to risk or protective factors have the greatest impact during critical periods of development. The Early Childhood Systems objective supports the development of systems that provide routine, early identification of health risks and early interventions to address and minimize the impact of risks.

Some Health Departments with the Early Childhood Systems objective will build on protective factors by identifying the continuum of family support services within the community. Some will be working to assure increased access to developmental screening for children and depression screening for postpartum mothers. Many agencies are focused on reducing the risk of injury for young children.

# MCH Objective and Life Course

- MCH Objective involves collaborations with community partners because the **broader community environment** strongly affects the capacity to be healthy



The life course framework says the broader community environment strongly affects the capacity to be healthy. What needs to change within the community so that the healthy choice is the easy choice? The Early Childhood Systems Objective includes plans for a community systems that promotes integrated, multi-sector service systems and assures that those systems are easily accessed.

Health departments working on the Wisconsin Healthiest Families Initiative will be collaborating with community partners to complete assessments and answer the questions:

What service, program, or other resources are in our community that supports families and/or provide parent education?

What service, program, or other resources are in our community that addresses the mental health and social emotional wellness of infants and young children and their parents or families?

What resources in our community supports infant and child development through screening, and if indicated, promotes early identification, referral, assessment and early intervention?

What resources in our community supports infant and child safety and promotes injury prevention?

Next steps are to ask, what are the gaps in services and programs in our community, and what can we do about it.

Local public health departments working on the Keeping Kids Alive Initiative will be exploring the questions - What can our community learn from Fetal Infant Mortality Review and Child Death Review and how can we implement recommendations for prevention?

# Developing a Strategic Agenda for Improved MCH Outcomes



Richmond & Kotelchuck, '



The Maternal and Child Health Bureau at the federal level says to improve Maternal and Child Health Outcomes, we must:

Increase our collective knowledge about the Life Course framework. Local Public Health Departments across the state have received education on Life Course Theory and in turn, are training community partners.

We must rethink and redirect programs and policies. Our MCH objective is a new direction for us with a focus on early childhood systems of services. With systems in place, more individuals can be served by the collective whole with improved health and well being for our communities.

And we must build broad support among stakeholders. Relationships and partnerships are key. No one agency can do it all. It will take a community

# THANK YOU!



Thank You for your time and commitment to improving the health of women, children, and families in our community.