



Life Course Approach and Preconception Health



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CFHE Vision



CFHE aims to achieve health equity for all populations, through eliminating health disparities, assuring healthy child development, preventing and controlling disease, preventing disability, and working to make the environment healthy.

Community, Family Health & Equity



- **Community-** because all health is local
- **Family-** because families are our key partners in health
- **Equity-** because our mission is to assure that all Rhode Islanders will achieve optimal health

CFHE Priorities

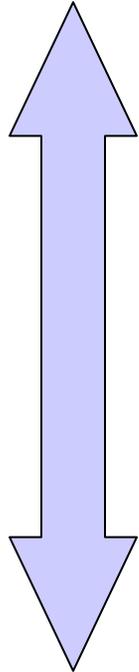


- Health Disparities and Access to Care
- Healthy Homes and Environment
- Chronic Care and Disease Management
- Health Promotion and Wellness
- Perinatal, Early Childhood and Adolescent Health
- Preventive Services and Community Practices

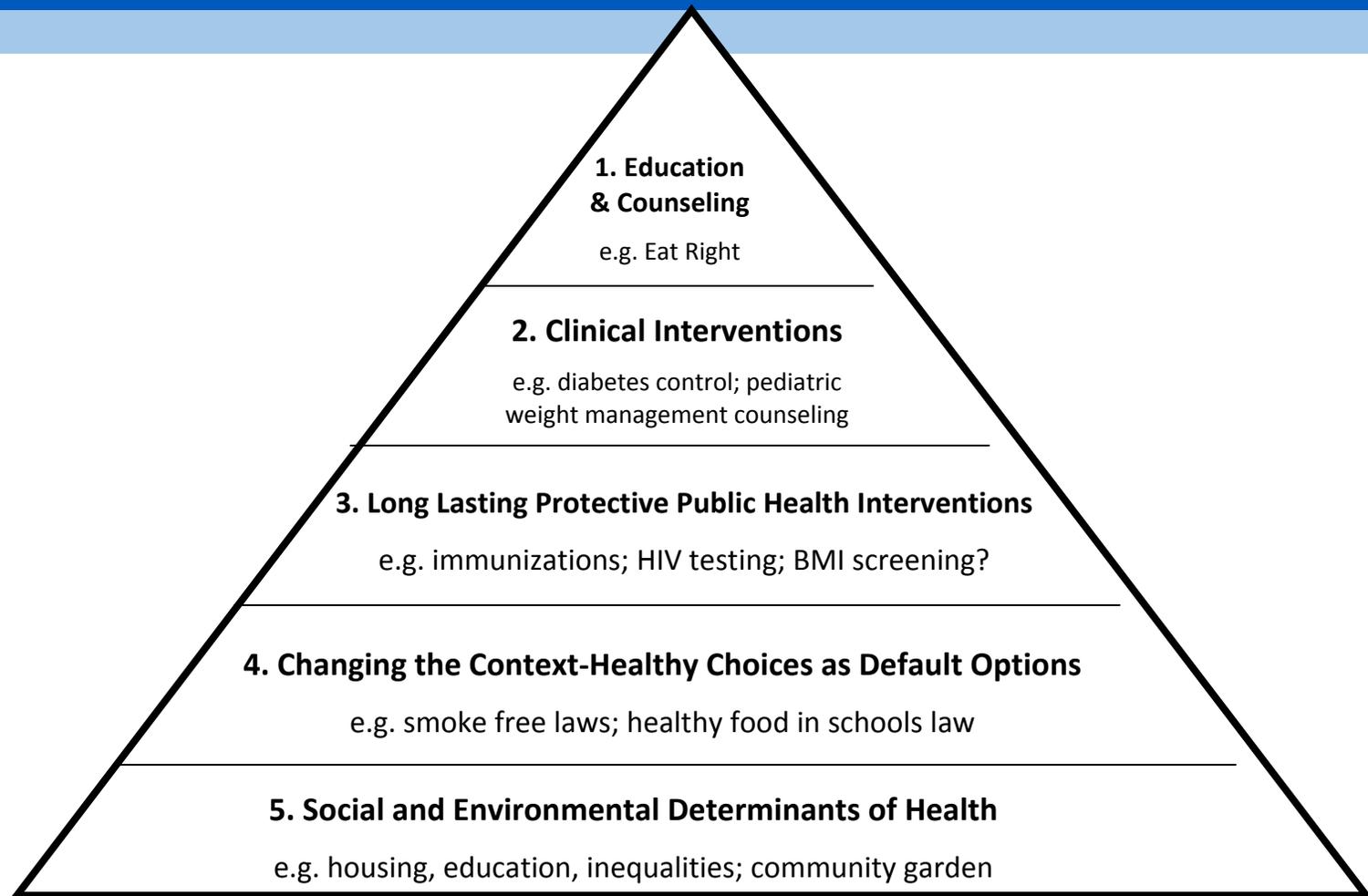
Equity Pyramid



Lowest
Impact (1)



Highest
Impact (5)



This pyramid is adapted from Thomas Frieden, MD, MPH presentation at the Weight of the Nation conference, Washington D.C., July 27, 2009

CFHE Equity Framework



- Social and environmental determinants of health
- Lifecourse developmental approach
- Program integration
- Social and emotional competency

CFHE Integration Initiative



- Provides for consistency in approaches, data
- use and evaluation to address common:
 - Socio-economic determinants of health and health equity issues
 - Population risk and protective factors
 - Opportunities in venues like CBOs, FBOs, workplaces and schools, health care and other systems

What Life Course Is ... and Isn't



- Is a theory, perspective, framework
- Not a model – researchers are currently developing and strengthening practice, program and policy models based on LC science
- There is no single, definitive text
- Reflects a convergence of ideas, informed by multiple sources , across multiple fields

Key Questions



- What are the earliest origins of chronic health conditions?
(temporal focus)
- How do genes and environment interact to impact health?
(social/environmental determinants)
- How does early development affect future functioning?
(critical periods/temporal focus)

Key Questions – Public Health Frame



- Why do health disparities exist and persist across population groups? (population focus -targeted)
- What are the factors that influence the capacity to reach full potential for health and well-being? (population focus-universal; protective factors)

Life Course Core Concepts



- Today's experiences and exposures determine tomorrow's health.
- Health trajectories are particularly affected during critical or sensitive periods.
- The broader environment –biologic, physical, and social –strongly affects the capacity to be healthy.
- Inequality in health reflects more than genetics and personal choice.

Fine, Kotelchuck, Address, Pies 2009

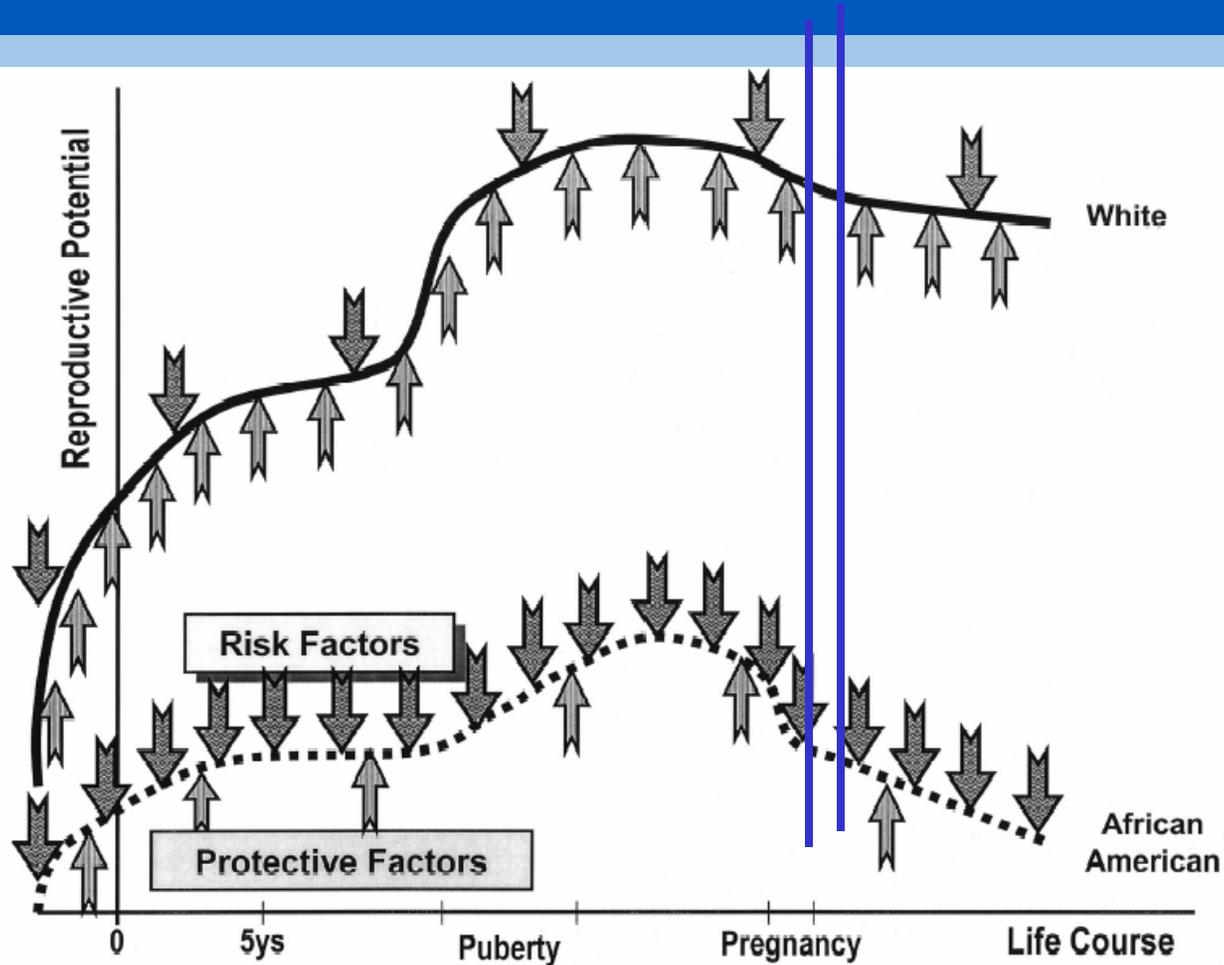
T2E2: The Real “Cliff Notes”



- **Timeline** – Today’s experiences and exposures determine tomorrow’s health.
- **Timing** -- Health trajectories are particularly affected during critical or sensitive periods.
- **Environment** –The broader environment –biologic, physical, and social –strongly affects the capacity to be healthy.
- **Equity** –Inequality in health reflects more than genetics and personal choice.

Fine and Kotelchuck, MCHB Concept Paper, 2010

T2E2 - Graphic



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



Life Course Builds on Core MCH Concepts

- **Environment** – Social and environmental determinants of health recognized for decades.
- **Equity** – Reducing inequity has always been key to public health approach.
- **Timing** – MCH's focus on preconception health, prenatal care, breastfeeding, child nutrition, teen pregnancy etc. all reflect importance of timing
- **Timeline** – probably least articulated in previous times- prior emphasis on age specific risks and risk factors
- **Risk and Protective factors** – Analysis tends to focus more on risk factors, but interventions focus on protective factors

....but New 21st Century Scientific Basis for the MCH Life Course



- Provides an understanding of how the social environment gets built into our bodies
- Bridges our intuitive understanding of the social causes of ill health with our understanding of the body's response and clinical manifestations
- Incorporates our growing scientific understanding of the biology of human development including brain development
- Focuses on root causes of illness and disparities

Adapted from Milt Kotelchuck, Martha May Eliot Symposium, APHA, October 2011

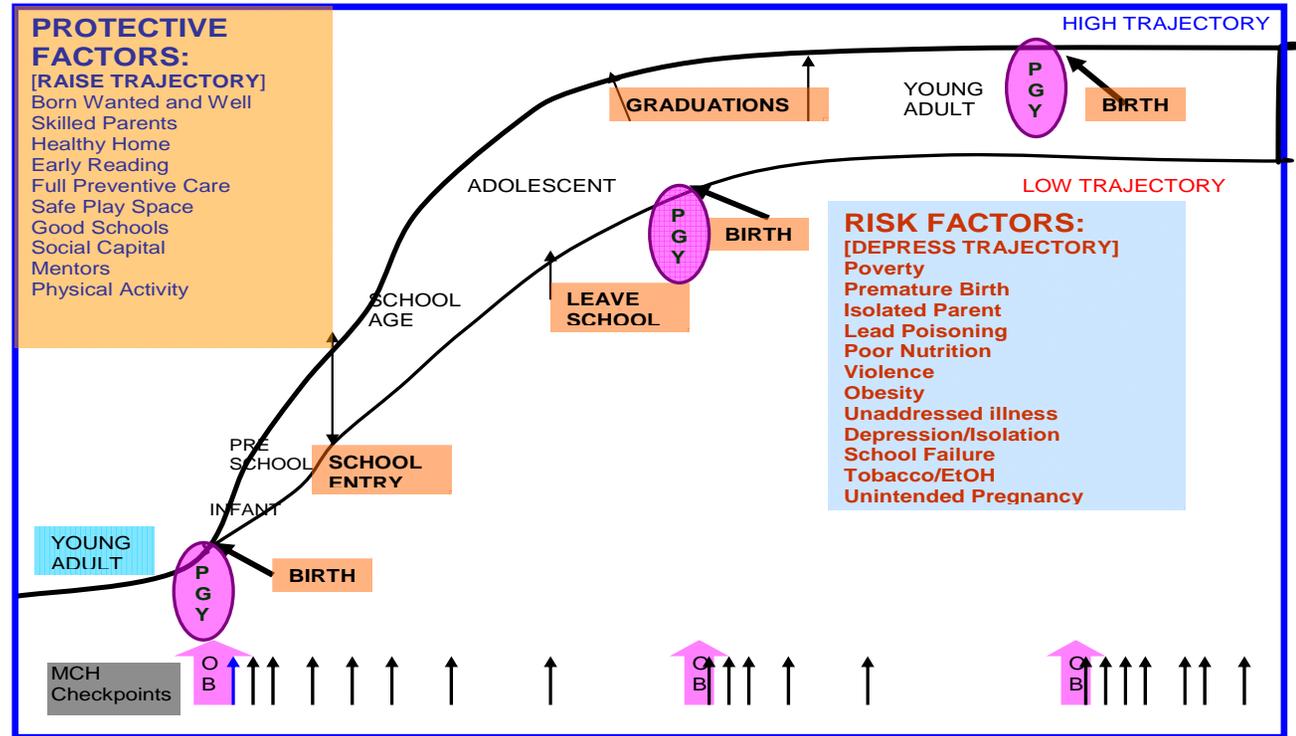
Lifecourse Framework



Trajectories of Health and Child Development, and MCH Checkpoints

DOMAINS OF HEALTHY CHILD AND FAMILY DEVELOPMENT:

- Environmental** – Poverty
 - Employment
 - Safety
 - Stress
 - Toxins
- Social** – Communication
 - Education
 - Social Support
 - Mobility
- Behavioral** – Mental Health
 - Tobacco/EtOH/drugs
 - Diet/Fitness
- Genetic** – Familial Factors
 - Geo-Ethnic ff
 - Personal
- Medical** – Chronic Disease
 - Infections
 - Disabilities



MCH Checkpoints are regular and prn times of contact between parents/children and health professionals:



In a community system of family-centered medical homes, these MCH Checkpoints are organized into a coherent, connected, longitudinal system. That Family Health system recognizes and address risks and protective factors that will influence childrens' healthy development, as it responds to acute needs, and offers prevention opportunities for all generations.



How is CFHE applying Life Course approach in Preconception Health?

Community, Family Health & Equity



- Our values guide us in the work we do internally and with our key partners:
 - Diversity
 - Health Equity and social justice
 - Open communication
 - Team work
 - Accountability
 - Data driven & science based

Some facts



- 1 in every 3 pregnancies is unintended
- Approximately 22% of pregnant women do not start prenatal care during their first trimester
- Cesarean section rate is at 33%
- Low birth weigh is 7.5%
- Smoking rate among pregnant women is at 8.9%
- Preterm birth rate is 10.3%
- Infant mortality rate is at 6/1,000
- Teen pregnancy rate is at 34.5/1,000
- MCH Data base -2011

Life Course & Preconception Health



- A continuum of care and preventive interventions across the life course ensures that health is addressed at different life stages as well as during critical and sensitive periods (**timing**)
- Improve the future well-being of the individual and also the health of future generations. (**timeline**)

Life Course & Preconception Health



- Effective preconception health interventions must therefore incorporate a broad spectrum of strategies across the continuum of care to address both genetic factors (clinical) environmental and social factors (public health and public policy) **(environment)**
- This will assure better health outcomes, minimize disparities in preconception risk factors and reduce
- broader social, racial, and economic inequalities in health **(equity)**



Questions?
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Resources:
www.health.ri.gov