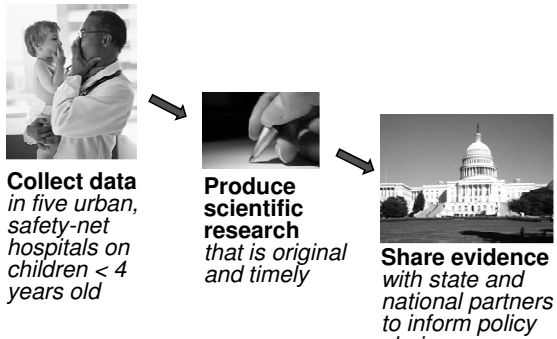
 CHILDREN'S HealthWatch

FOOD INSECURITY AMONG CHILDREN IN MASSACHUSETTS

Dr. Deborah A. Frank
Professor of Child Health and Well-Being, Boston University School of Medicine
Founder and Principal Investigator, Children's HealthWatch
Founder and Director, Grow Clinic for Children, Boston Medical Center
Family Impact Seminar 3/27/13

Children's HealthWatch



Collect data
in five urban, safety-net hospitals on children < 4 years old

Produce scientific research
that is original and timely

Share evidence
with state and national partners to inform policy choices

What Have We Learned?




3

Public Policies and Economic Conditions are Written on the Bodies and Brains of Babies

Food Insecurity: 16% of Children in Many Massachusetts Counties

Because of insufficient \$, limited or uncertain availability of enough foods for all household members to live active and healthy lives

Source: USDA



\$4.2 billion to market fast food and \$10 billion to market food to children vs \$20 million for WIC Farmers Market Vouchers



Real Cost of a Healthy Diet

Can parents afford to purchase healthy food?



\$0.79
880 calories



\$2.59
880 calories

Stop and Shop Price Check March 2010

How do you feed them without giving them harmful things ?

Witnesses to Hunger Mother Drewnowski 2004

The cheap foods that make adults fat starve children of absolutely essential nutrients. Children who do not receive protein and other nutrients during early development are damaged for the rest of their lives.

Dr. Margaret Chan WHO

What are the Child Health Impacts of Food Insecurity?

10

Food Insecurity Associated with Pregnancy Complications



FOOD INSECURITY IN PREGNANCY

(Carmichael 2007)



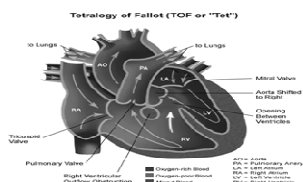
- Is associated with anencephaly and other neural tube defects

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FOOD INSECURITY IN PREGNANCY



- Is associated with “blue baby” cyanotic congenital heart disease



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Poor Maternal Nutrition Associated with Low Birth Weight



Low Birth weight: Infant Mortality



Low Birth Weight Increases Developmental Risk



•Breastmilk is Best Milk but Does Not Prevent Child Food Insecurity



- Pizza crust and Breastmilk

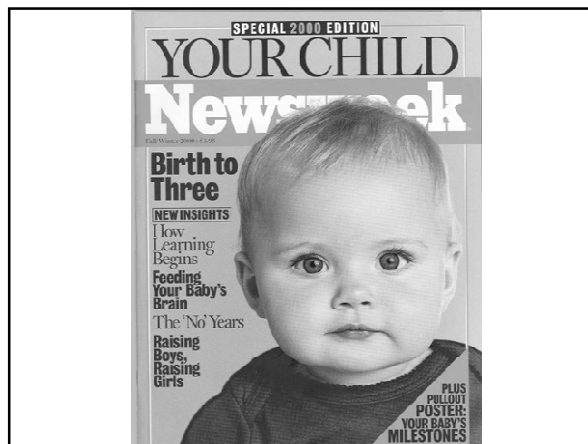
Post-natal Health Impacts of Food Insecurity

- Hospitalizations
- Increased inpatient costs < 1 year
- Decreased bone mineral density ?more fractures
- Iron-deficiency anemia – bad for brains
- More susceptible to lead poisoning
- ? Poor oral health



What are the Child Developmental Impacts of Food Insecurity?

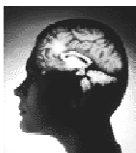
19



Brain

- Brain function is sensitive to *quality* and *quantity* of foods consumed throughout live span
- Brain structure most vulnerable to nutritional insults early in development
- Brains need constant energy and cannot store it

(Lyle et al, 1984)



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Young children from food insecure households are **40% more likely to be at developmental risk**

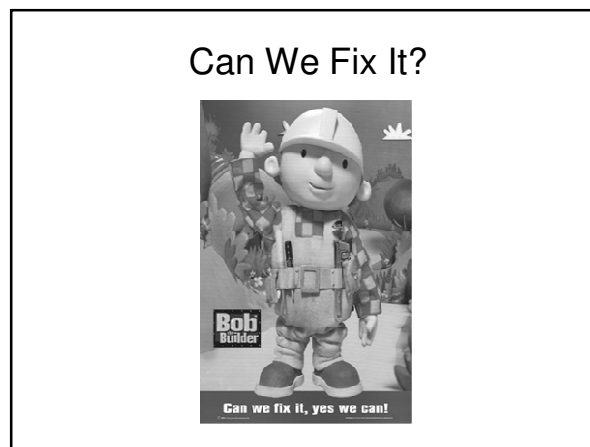
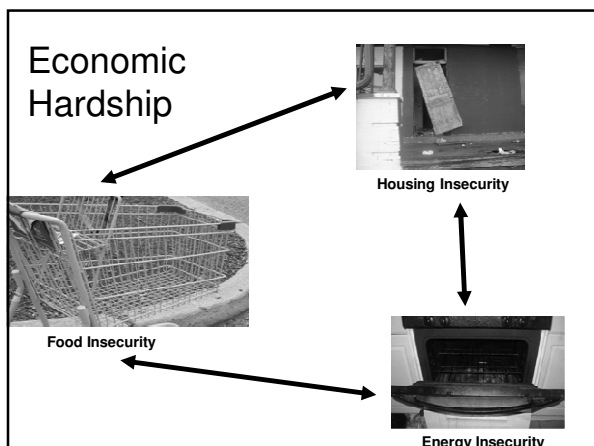
Developmental Functions at Risk

- Language
- Short Term Memory
- Attention
- Math Skills
- Modulation of Activity and Affect



FOOD INSECURE KIDS FIGHT MORE





Clinical Care

- Grow and Nutrition Clinics
- Special formulas not durable medical equipment: prior approval should be streamlined (now takes 2-3 weeks)

A black and white photograph of a newborn baby lying on a medical table, being held by a person's hands. The baby is wearing a white diaper.


WIC WORKS: Each \$ Saves \$4.21 in Perinatal Costs

A black and white photograph of a pregnant woman in a patterned dress, holding her belly. The image is cropped to focus on her midsection.

WIC WORKS: Good Investment State \$

- Young children who receive WIC more likely
 - Good/excellent health
 - Food secure
 - Healthy height/weight for age
 - Lower risk – developmental delays

With Sequestration National WIC calculates: 8 thousand of Massachusetts participants at risk



WHAT IS SNAP ?


Supplemental Nutrition Assistance Program – Formerly Known as Food Stamps

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SNAP: Good Medicine for Children and the Local Economy

\$5.00 SNAP benefits Generates \$9.00 economic activity

For young children SNAP decreases risk of underweight and developmental risk



Source: Children's HealthWatch, 2012


How Did Massachusetts SNAP Overpayment happen?



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SNAP

- State needs to put in \$ for administrative costs for frontline workers
- Advocate with USDA re overpayment



Source: Children's HealthWatch, 2012

SCHOOL BREAKFAST AFTER BELL IN CLASSROOM

- Massachusetts 42 in classroom breakfast
- In Lowell school breakfast
 - Decreased absenteeism
 - Decreased tardiness
 - INCREASED TEST SCORES



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Child and Adult Care Feeding Program (CACFP)



- Better health, growth
- Fewer hospitalizations
- Streamline paperwork ?online
- Improve meal reimbursement

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Forty Percent of Children's Health Watch Families in Emergency Food Network in Past 12 Months: MEFAP



WHY BOTHER?

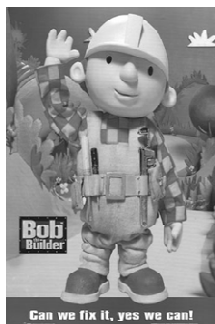


How Much Does Food Insecurity Cost Massachusetts ?

\$ 2.72 BILLION
In 2010

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Can We Fix It?



Thank You!
www.childrenshealthwatch.org

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