Healthy People 2020: Who’s Leading the Leading Health Indicators?
“Who’s Leading the Leading Health Indicators?”

- Third installment of the monthly series, “Who’s Leading the Leading Health Indicators?”

- Highlight organizations using evidence-based approaches to address one of the Healthy People 2020 Leading Health Indicator (LHI) topics.
Webinar Agenda

- Don Wright, MD, MPH  
  HHS Deputy Assistant Secretary for Health

- Howard K. Koh, MD, MPH  
  HHS Assistant Secretary for Health

- Sharon L. Ricks, MA  
  HHS Deputy Regional Health Administrator, Region IV

- Ruth Ann Shepherd, MD, FAAP, CPHQ  
  Director, Division of Adult and Child Health Improvement, Kentucky Department for Public Health
What is Healthy People?

- A comprehensive set of national 10-year health objectives
- A framework for public health priorities and actions
- Roadmap for prevention
What are the Leading Health Indicators (LHIs)?

Leading Health Indicators are:

- Critical health issues that, if addressed appropriately, will dramatically reduce the leading causes of preventable deaths and illnesses.

- Linked to specific Healthy People objectives.

- Intended to motivate action to improve the health of the entire population.
LHI Topics

- Access to Health Services
- Clinical Preventive Services
- Environmental Quality
- Injury and Violence
- Maternal, Infant, and Child Health
- Mental Health
- Nutrition, Physical Activity, and Obesity
- Oral Health
- Reproductive and Sexual Health
- Social Determinants
- Substance Abuse
- Tobacco
Howard K. Koh, MD, MPH
Assistant Secretary for Health
Impact & Context:
Maternal, Infant, and Child Health

- Major causes of infant death in 2009
  - 12.2% of infants born preterm
  - 8.2% of infants born with low birth weight
- Determining the health of the next generation
Determinants: Maternal, Infant, and Child Health

- Numerous determinants can affect maternal, infant, and child health outcomes.

- A range of biological, social, environmental, and physical factors:
  - Individual behaviors
  - Access to services
  - Race and ethnicity
  - Socioeconomic status
  - General health status
Leading Health Indicators: Maternal, Infant, and Child Health

- Indicators for maternal, infant, and child health:
  - Infant Deaths
  - Preterm Births

- Healthy People at the community level:
  - Action at the community level creates momentum for national change.
Infant Deaths

Rate per 1,000 live births

NOTE: Includes all deaths <1 year.
Infant Deaths by Race/Ethnicity

Rate per 1,000 live births

<table>
<thead>
<tr>
<th>Year</th>
<th>Black</th>
<th>American Indian</th>
<th>Total</th>
<th>White</th>
<th>Hispanic</th>
<th>Asian</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Includes all deaths <1 year. American Indian includes Alaska Native. Asian includes Pacific Islander. The categories black and white exclude persons of Hispanic origin. Persons of Hispanic origin may be any race.


Obj. MICH-1.3
Total Preterm Births

NOTE: Less than 37 completed weeks of gestation.
SOURCE: National Vital Statistics System-Natality (NVSS-N), NCHS, CDC.
Percent Change in Preterm Birth Rate by State, 2006-2009

- **Decreased more than 10.0 percent** (Green)
- **Decreased 5.0 to 9.9 percent** (Dark Blue)
- **Decreased 0.0 to 4.9 percent** (Light Blue)
- **Not significantly changed** (Gray)

NOTE: Preterm is less than 37 completed weeks of gestation. SOURCE: CDC/NCHS, National Vital Statistics System.
Maternal, Infant, and Child Health: Federal Actions

- Centers for Medicare and Medicaid Innovation
  - Strong Start
- Health Reform Law
  - National Prevention Strategy
- Office of Minority Health
  - A Healthy Baby Begins With You
- Health Resources and Services Administration
  - Healthy Start
Community-Based Prematurity Prevention
The Kentucky Experience

Ruth Ann Shepherd, MD, FAAP
Director, Division of Maternal and Child Health
Kentucky Department for Public Health

Healthy Babies ARE WORTH THE WAIT®
A Prematurity Prevention Partnership

A PREMATURITY PREVENTION PARTNERSHIP

 marzoofdimes®  Johnson & Johnson Pediatric Institute, LLC  Kentucky Department for Public Health
The Problem of Prematurity

- Leading cause of infant mortality
- Associated with increased risk for medical issues across the life span
  - e.g., coronary heart disease, diabetes, mental disorders, and learning problems
- Between 2000 and 2006, preterm birth was on the rise in the U.S., and Kentucky was experiencing an even higher increase than the nation
Prematurity Focus for Infant Mortality Efforts

• Prematurity is a prototypical public health problem

  – can happen to anyone
  – high prevalence
  – known risk factors
  – Significant disparities
  – short and long term consequences
  – high cost to multiple systems
  – not just about medical interventions

  – Multiple determinants
  – evidence based policy and practice not well established
  – Prevention pays
Determinants of Health

Policies and Interventions

Physical Environment

Behavior

Individual

Biology

Social Environment

Access to Quality Health Care

Healthy People 2010: Understand and Improving Health (page 18)
Healthy Babies are Worth the Wait
Pilot Initiative

• Prevent preventable preterm birth
• ‘Real world’, ecological design
• Bundled multi-dimensional and evidence-based interventions in different health care settings
Kentucky Experience

Healthy Babies are Worth the Wait℠: Hospital Sites

- **Intervention Sites**
- **Comparison Sites**

**Central:**
Intervention: University of Kentucky (UK), Lexington
Comparison: Norton Hospital (NH), Louisville

**West:**
Intervention: Trover Clinic (TC), Madisonville RMC
Comparison: Western Baptist Hospital (WB), Paducah

**East:**
Intervention: King’s Daughters (KD), Ashland, KY
Comparison: Lake Cumberland RH (LC), Somerset, KY
Core Components (The 5 Ps)

- Partnership and Collaboration
- Provider Initiatives
- Public Engagement
- Patient Support
- Progress Measures

Community-based Preterm Birth Prevention
Partnerships

Healthy Babies ARE WORTH THE WAIT
A Prematurity Prevention Partnership

- National and local experts, variety of disciplines and interests
- Site councils, implementation teams, conference calls
- HBWW Gatherings at other state and national perinatal meetings
Example Interventions

• Provider Initiatives
  – Provider Report Card
  – Grand Rounds (state of art in PTB prevention)
  – ACOG Guidelines (induction, elective C/S, 17-P & progesterone, antenatal steroids, tx of infections, etc.)
  – Late Preterm Birth (ACOG, AAP)
  – Resource centers with Cutting edge journal articles and latest research

• Public Engagement
  – Billboards, newsletters, t-shirts
  – HBWW community toolkit
  – Local TV stories and radio PSA’s
  – Website with public information

• Patient Support
  – HBWW Information Items
  – Early referral to public health programs – WIC, home visiting (HANDS), smoking cessation, QUIT line, etc.
  – Health Literacy- pregnancy diaries on line and hard copy
  – Text-4-Baby
  – Mental health care access
  – Psychosocial screenings

• Progress Measures
  – C/S rates
  – Induction rates
  – Service data
  – Vital statistics
## Brain Growth Matters

The brain of a 35 week-old baby is smaller and much less developed than the brain of a baby at 40 weeks.

<table>
<thead>
<tr>
<th>35 WEEK BRAIN</th>
<th>BRAIN FUNCTION</th>
<th>40 WEEK BRAIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Smooth, less developed; fewer circuits and connections</td>
<td>- CEREBRAL CORTEX: site of thinking, reason, learning, motor control, language</td>
<td>- More developed, more circuits and connections</td>
</tr>
<tr>
<td>- Small, only about 1/2 the size it will be at term</td>
<td>- CEREBELLUM: where the brain controls balance &amp; coordination, social functioning, hand skills</td>
<td>- Grows and develops to almost double the size from 34 weeks</td>
</tr>
<tr>
<td>- Underdeveloped shows up as babies who have apnea – forget to breathe at times</td>
<td>- BRAINSTEM: lowest part of the brain where automatic actions of the body are controlled, like breathing, temperature, swallowing</td>
<td>- More developed – babies born at 40 weeks rarely forget to breathe.</td>
</tr>
</tbody>
</table>
Healthy Babies are Worth the Wait

Materials
Every Week Counts

New information about your pregnancy including the last few weeks

Healthy Babies are Worth the Wait™

Cada semana cuenta

Nueva información sobre su embarazo, inclusive las últimas semanas

Healthy Babies are Worth the Wait™

(El esfuerzo vale la pena)
Key messages:

• Full Term is about 40 weeks

• Unless there are medical complications, women should try to take pregnancy to a full 40 weeks, because....

• Much of the brain development happens in those last 4-6 weeks of pregnancy

• Preventing prematurity improves the lives of families and communities

• Available at http://www.kfap.org (The KY Folic Acid Partnership)
Outcomes

• By the end of the second year of the project, KY had had the largest drop in preterm birth and late preterm birth of any of our surrounding states.

• From 2007 to 2009 HBWW evaluators monitored rates of preterm and late preterm births:

Preterm Birth Rates

- Implementation Sites: -6.5%
- Comparison Sites: 10.4%

Late Preterm Birth Rates

- Implementation Sites: -1.8%
- Comparison Sites: 14.3%
The impact of the project, measured from 2007 through 2010, did meet the target of reducing preterm birth in the intervention sites by 15%.

**Preterm Birth Rates**
- Implementation Sites: -15.6%
- Comparison Sites: -4.2%

**Late Preterm Birth Rates**
- Implementation Sites: -13.5%
- Comparison Sites: -2.9%
What Went Well

- Building partnerships
- Identifying appropriate measurement
- Systems-building to identify and fill gaps based on community’s needs
- Engagement
- Motivation to continue
- Speeding time from Research to Practice
- Outcomes
- Sustainability
Lessons Learned

• Have a dedicated project coordinator on site
• Have a Physician Champion
• Involve the community from the start
• Have an evaluation and data collection plan
• Celebrate more and increase project visibility with rewards and recognition
Keys to Community-Based Prematurity Prevention

- DATA → ACTION
  - Data drives the focus

- RESEARCH → “REAL WORLD”
  - Implement Best Available Evidence

- SILOS → SYSTEMS
  - Comprehensive, coordinated clinical and public health services

- MEDICAL MODEL → ECOLOGICAL MODEL
  - Multiple determinants of health; Prematurity is a public health problem

- RELATIONSHIPS → RESULTS
  - We CAN do better with what we know now
HBWW: Moving Forward

• In 2010 the 3 Kentucky control sites began implementing HBWW
  – Data has shown a decrease in preterm and late preterm birth rates in these sites since intervention implementation
• An additional 2 sites have been added to the Kentucky program in 2011
• March of Dimes is expanding program sites in New Jersey and Texas, with a goal of reaching 20 sites by 2014
For Further Information

QUESTIONS?

March of Dimes –
hbww@marchofdimes.com
https://www.prematurityprevention.org/

Kentucky Maternal and Child Health –
Ruth.Shepherd@ky.gov
Question & Answer Session
Please take a moment to fill out our brief survey.
Stay Connected

- Get the updated data and read implementation stories, visit http://www.healthypeople.gov.

- To receive the latest information about Healthy People 2020 and related events, visit our website to:
  - Register now for the National Health Promotion Summit on April 10 to 11, 2012
  - Follow us on Twitter @gohealthypeople
  - Join our Healthy People 2020 group on LinkedIn