

# Baby Boxes: Do They Safely Improve Safe Sleep?



**Worcester Healthy  
Baby Collaborative**

# IM in Worcester

- 1. Worcester's IMR:** Higher than MA, CHIP target
- 2. Black IMR:** 4-5 times white IMR
- 3. Hispanic IMR:** Highest, rising steeply since 2004

Infant Mortality by Race  
3 Year Rolling Average

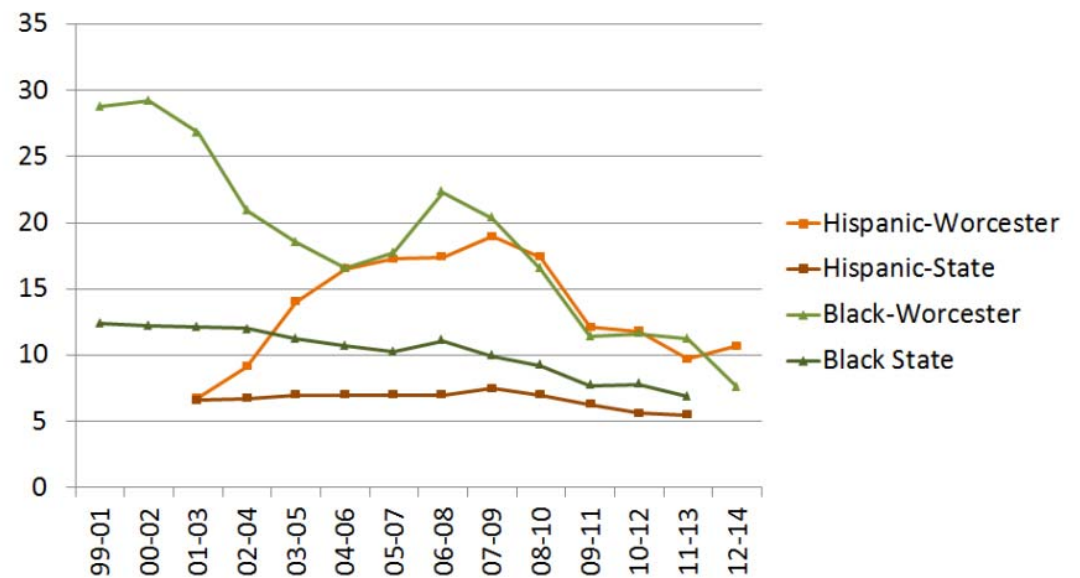



Figure 2: IMR by Race (source: MA DPH, WHBC)

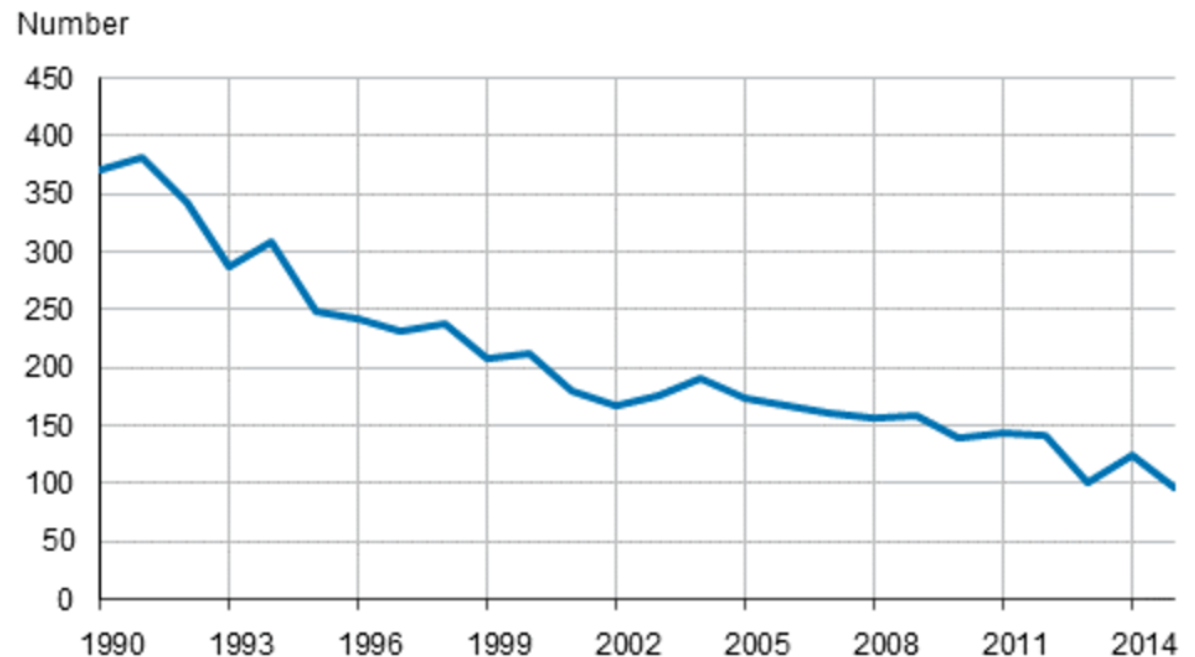
# 2016 Community Healthy Baby Forum

- Grant between the March of Dimes and UMass Department of Family Medicine and Community Health.
  - Community participants overwhelmingly voted to have WHBC pursue a Baby Box program.
  - WHBC partnered with the Baby Box Company, which has committed to supply free Baby Boxes for all babies born in Worcester.
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# Baby Boxes in Finland

1. Distributed for decades in Finland.
2. Program components: safe sleeping space, educational materials and supplies, bedside education.
3. Baby Boxes symbolize the national commitment to infant health and safety.


Children having died during their first year of life in 1990–2015




# Baby Boxes in the US

- Baby Box programs are currently being piloted in 20 states, including statewide distribution programs in New Jersey, Alabama, and Ohio.
- Very few studies available.
- Temple: Preliminary data from universal distribution showed a 25% reduction in bed sharing.
- Worcester's Baby Box program is the first of its size in Massachusetts.

# WHBC Baby Box Pilot Study

- Distributed 10 Boxes to expectant mothers at the Suds-Up Laundromat.
  - Mothers gave suggestions for contents and identified UMMC and FHCW as ideal distribution sites.
  - Most mothers reported keeping the Baby Box in their bedroom.
  - Additional research needed to demonstrate a positive effect on this and other health behaviors.
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# Current Status

1. PACE Grant Proposal
  2. Remillard Family Fund Survey Research
  3. Logistics of Baby Box Distribution
  4. Baby Box Contents and Donations
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# PACE Study: Updates

- Grant application submitted in July; currently in review

## Phase 1

Measure breaking strength of new Baby Boxes.

## Phases 2 and 3

Enroll 200 families.  
Randomize: 100 receive a Baby Box.

6 week home visit: Survey all families, retest 50 boxes.


12 week home visit: Survey all families, retest 50 boxes.

Local agencies track utilization.






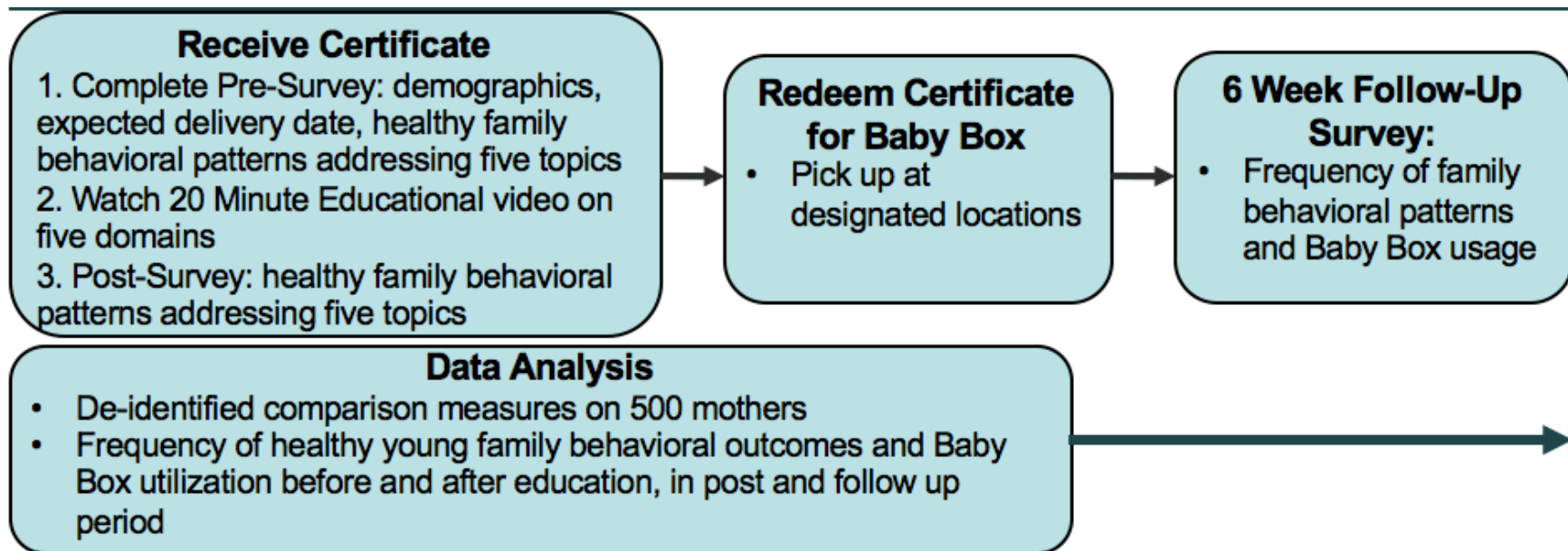
# PACE Study: Next Steps

1. Employ a research assistant and/or community health worker to conduct home visits and administer in-person survey.
  2. Coordinate with Dr. Kristen Billiar to test materials safety at WPI.
  3. Design survey. Consider making the electronic survey available on mobile devices.
  4. Develop a system for recruiting expectant mothers.
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# Remillard Study: Updates

1. IRB determination: study is not considered research and therefore will not require full IRB approval.
  2. Pre survey is complete and fully available in electronic format.
  3. Pilot testing has led to helpful feedback and survey edits. Additional feedback is welcome!
  4. Distribution days at UMMS need to be developed.
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# Current Plans for Data Collection



# Remillard Study: Donations

1. Donations, in the works:
  1. Annie's Book Stop in Worcester: board book donations/bulk sale by September- details to come by Tuesday 8/29/17 the latest
  2. Kiwani's Worcester: donated car seat stickers, fiscal donations
  3. Temple Sinai Emanuel : Fiscal donation
2. Attempts have been made to locate many large department stores including Babies R Us, Carters, Honest Co., Target, Walmart with no response to follow up
3. Additional suggestions are welcomed.
4. Confusion about the fund itself: who has access to see if anything has been donated?

# Remillard Study: Box Supplies

## 1. Legal Counsel:

1. We were informed by UMMS legal counsel that we cannot put items in the Baby Box outside of what is sold on the Baby Box Co. website
2. Baby Box Co. legal counsel now has also informed us that we can only put supplies purchased from the website in the Baby Box itself

## 2. Essential supplies: 2 fitted sheets and educational materials

1. Fitted sheets only found by Baby Box Co. for \$5.00 per piece in bulk order
  1. \*2 sheets/box per 500 boxes uses all \$5,000.00!
2. The additional \$2,500.00 donated for educational resources may be used for educational supplies like Board Books OR a Halo Sleep Sack (\$6.90/piece) if we are able to get book donations

# Remillard Study: Box Supplies Continued

1. **Recent Consideration:** New limitations on the box supplies will affect both the timing and distribution process of the Baby Boxes
  1. Perhaps, we should consider only essential items: 1 board book, educational pamphlets, 2 fitted sheets, and 1 sleeper (if possible) as the only staples in the box
  2. Supplies like diapers, wipes, and other potential donations can be **offered** during distribution days for free **if and when they become available**, but they will not be part of our Baby Box kit or study
  3. That way, supplies could be offered to families who need assistance when we have them, but will not be considered **official** baby box supplies

# Remillard Study: Next Steps

1. Develop electronic versions of the post survey and follow up survey.
  2. Finalize the logistics of distribution, including box storage and volunteer support for assembly.
    - Storage options in learning community rooms are being discussed via email with no conclusion yet.
  3. Finalize the system for recruiting expectant mothers.
  4. Consider how to administer the survey to participants who do not have computer/Internet access or struggle with literacy/language barriers
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