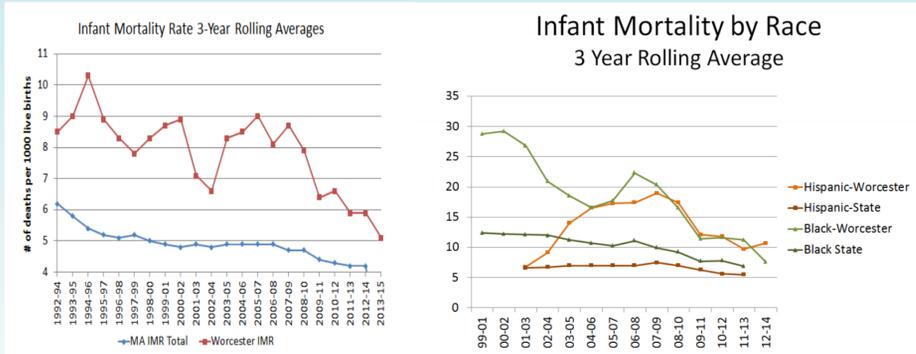


About Worcester Healthy Baby Collaborative

- **Volunteer group** of community and healthcare organizations working to reduce disparities in Worcester's infant mortality rate
- Prioritize not only medical but also social determinants of health
- Involved with **>30 agencies** including Worcester Department of Public Health, Massachusetts Department of Public Health and March of Dimes
- Voted in the Community Healthy Baby Forum in September 2016 to have the WHBC pursue a Baby Box program
- Partnered with the Baby Box Co., which has committed to supply **free Baby Boxes for every baby born in Worcester**

Infant Mortality Rate: Statistics in Worcester



- **Disparities:**
- Worcester's unofficial IMR was **5.2 per 1,000 in 2013-5** compared to **Massachusetts' 2013 rate of 4.15 per 1,000**
- The Black IMR is **4-5 times higher** than the white IMR
- Worcester's **Hispanic IMR has been twice the state Hispanic IMR** since 2010 and recently surpassed Worcester's black IMR

What Causes Worcester's High IMR?

- **Infant Mortality Rate (IMR):** the number of deaths in the first year of life per 1,000 live births in a given year
- Infant death in Worcester is linked to:
 - 1) **Preterm birth:** at highest risk in the first month of life
 - 2) **Unsafe sleep in older infants:** can cause sudden unexpected infant death (SUID)
- ~75% of Worcester's infant deaths over the last decade are neonatal deaths related to extreme prematurity (22-24 weeks gestation)
- Infant prematurity **usually reflects an underlying maternal health issue** often related to the **social determinants of health**
- Social determinants of health are defined as **environmental conditions** in which people are "born, live, learn, work, play, worship, and age that affect a wide range of health and quality-of-life outcomes and risks"
- **IMR reflects not only a medical problem, but a city's overall health**

What is a Baby Box?

"It's not just a box, it's a movement"

-Baby Box Co.

- The Baby Box concept is based off of a 75-year tradition in Finland which has an **exceptionally low IMR: ≈2.5 deaths/1000 live births**
- **Benefits of the Box:**
 - Acts as a bassinette, functioning as a safe sleep space for the newborn
 - Filled with clothing, supplies and educational materials
 - Symbolizes the value that a community places on ensuring a child's health

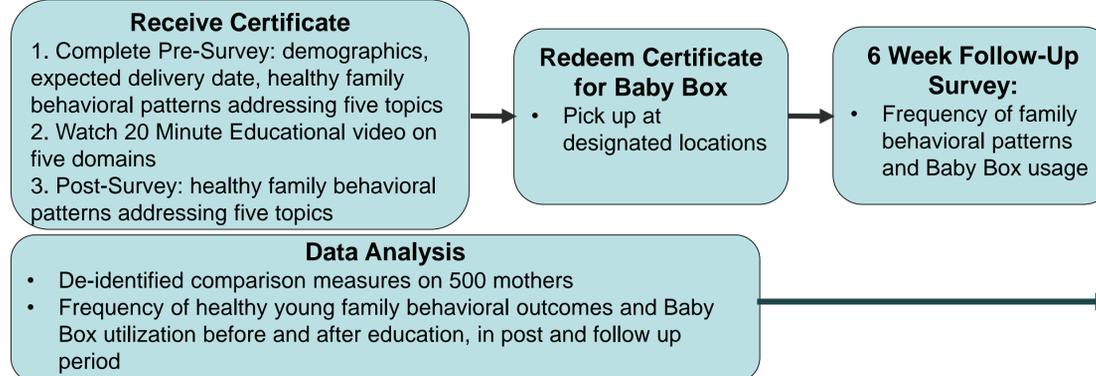


The Baby Box Initiative

- The WHBC is working with the Baby Box Co. to lay the groundwork necessary for **Worcester to become the next universal Baby Box distribution community**
- **2017-2018 Goals:**
- **Scale up the Baby Box program to reach 500 Worcester families** by fall 2018 with a free Baby Box tailored to best meet Worcester's local needs
- **Educate** parents on **five major topics** surrounding infant health:
 - Safe Sleep
 - Breastfeeding
 - Contraception
 - Postpartum Depression
 - Early literacy
- **Compare** frequency of healthy young family behaviors in five topics before and after video education
- **2017 Summer Work:**
 - Proposed a plan for Remillard Grant funding disbursement in September
 - Filmed medical experts discussing above topics in English, Spanish, and Twi
 - Collected local resources catered to the greater Worcester community
 - Continued to develop the program initiated by last year's medical student interns



Methods and Outcome Measures



Previous Studies

- Baby boxes are now being distributed in **at least 20 U.S. states**
- Last year, WHBC conducted a pilot study with summer medical interns in their Population Health Clerkship for Baby Box distribution in Worcester, distributing 10 free Boxes to Worcester families
- In the pilot survey, mothers gave suggestions for Box content and ideal locations to receive a Box
- Preliminary data in 2016 from Temple University's hospital's universal distribution program showed a **25% reduction in bed-sharing** in the first week of life among families receiving Baby Boxes at hospital discharge

Community Impact and Future Goals

- Promote **parental education** to expectant families in the hope of **reducing the high IMR in Worcester**
- Move the Baby Box program towards the ultimate goal of **universal distribution** in Worcester by 2019
 - Create longitudinal house **Legacy Project** through Blackstone and Burncoat Houses that encourages interprofessional collaboration
 - Foster student and faculty connection with grass-roots organization **servicing at-risk maternal and infant population**
 - Teach medical and nursing students about community led practices to address significant **public health issues**



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