

Nassau County, New York

Cribs for Kids-Nassau County Chapter Summary Report March 2019

Contents

| Introduction | 1 |
|--|----|
| Overview of Participants of Cribs for Kids-Nassau County Chapter Program | 2 |
| Demographics of Participants | 3 |
| Characteristics of Mother and Infant in Context of the Program | 7 |
| Summary | 12 |
| References | 12 |

Introduction

Cribs for Kids is a national safe sleep education program that originated in Pittsburg, Pennsylvania in 1998 due to a high number of infant sleep-related deaths, mostly from low income areas and mostly African American infants, in Allegheny County, Pennsylvania. Furthermore, of these deaths most infants were found on couches, chairs or adult beds. The mission of Cribs for Kids is to provide a comprehensive safe sleep education program that includes the intervention of a safety-approved crib if the family otherwise cannot afford one. The goals are to decrease the number of infants dying from sleep-related deaths including accidental suffocation and SIDS and to reduce the disparity between Caucasian and African-American infant mortality. Cribs for Kids has over 950 partners throughout the country.

The Nassau County Child Fatality Review Team (NCCFRT) is a multidisciplinary, multiagency child fatality review team whose mission is to review child deaths to better understand the causes of childhood deaths in the county and to make recommendations based on the findings to reduce future preventable child fatalities. The NCCRFT reviewed 35 infant deaths occurring since 2009, where unsafe sleeping could not be eliminated as a risk factor in the death. Of the 35 infant deaths reviewed by the team, 34 cases revealed at least one of the following risk factors: bed sharing, prone sleep position, positional supports/sleep positioners, soft bedding and/or sleeping on adult bed or couch. Of the 35 cases reviewed, 46% are Black/African American, 46% White, 6% Multi-Racial, 3% unidentified, and 31% Hispanic/Latino. This illustrates a significant disparity as out of the 1.3 million residents in Nassau County only 11.5% are Black/African American, 69.7% are White and 16.1% are Hispanic/Latino. This disparity can also be seen in infant mortality rates by race/ethnicity in Nassau County; in 2012-2014 the infant mortality rate in Nassau County was 3.5 per 1,000 live births with rates among Whites, Blacks and Hispanics of 2.2 per 1,000 live births, 9.4 per 1,000 live births and 3.3 per 1,000 live births, respectively.

Based on individual case reviews, the NCCFRT determined there was a need to improve and expand infant safe sleep efforts in Nassau County. On behalf of the NCCFRT, the Nassau County Department of Health (NCDOH) signed an agreement to create the Nassau County Chapter of Cribs for Kids. The Nassau County Chapter of Cribs for Kids is based on a unique partnership between three entities; the national organization who created a NCDOH local chapter and maintains an account in their 501c3 for this chapter, the NCDOH which serves as the local administrator and training agent and commits to continuing to secure program grant funding and donations, and local community partners who agree to training and home visiting to educate families on safe sleep. This partnership was given a Model Practice Award by the National Association for County and City Health Officials (NACCHO) in 2016 (https://application.naccho.org/Public/Applications/View?id=978).

Every year, approximately 3,500 babies in the U.S. die suddenly and unexpectedly in their sleep from accidental suffocation, strangulation and Sudden Infant Death Syndrome (SIDS).³ The purpose of the Cribs for Kids-Nassau County Chapter is to ensure that our at-risk families have the equipment and education needed to decrease their risk of unsafe sleep deaths. Goals of the Cribs for Kids-Nassau County Chapter include: reduce the number of infants who sleep in unsafe sleep environments, increase knowledge of parents and the community regarding safe sleep practices and reduce the number of unsafe sleep deaths and disparities among these deaths. The Cribs for Kids-Nassau County program targets low-income and underserved families. Families/participants are identified and referred by local community agencies that have partnered with Cribs for Kids-Nassau County. A family/participant is eligible if they meet one of the following criteria: they received some type of public health benefit, nobody in the home is working, they can demonstrate that they otherwise are unable to afford a crib or if the partner agency feels that a special circumstance exists, that would qualify the family for a crib. All recipients should be a Nassau County resident, do not have a safe crib or pack n' play for the referred infant and either be pregnant within 8 weeks of delivery or already have an infant under 9 months of age. The program provides low-income families in Nassau County who are eligible for the service with a portable cribs, Halo sleep sack, a crib sheet with a safe-sleep message, a soothie pacifier and safe sleep education material. The family will receive three home visits during the program. The first home visit is where a community-based partner agency identifies the family in need of the crib. At the second home visit, the family is given safe sleep education and are taught how to set up the portable crib by the partner community agency. A follow up visit occurs at their home by the partner agency 3 months after they receive the portable crib and a questionnaire completed. The NCDOH follows up with the recipient by phone when the child is about a year of age with another questionnaire. These questionnaires are to assess the safe sleep education provided by the program during the home visits.

Overview of Participants of Cribs for Kids-Nassau County Chapter Program

The first referral to the Nassau County Chapter of Cribs for Kids was on 2/26/2015. Since that first referral through 7/31/2018 there have been 102 mothers referred to the program. Among these 102 women there are 6 sets of twins, resulting in 108 infants who have received cribs. To better understand the families/participants being served by the program, a preliminary data analysis has been conducted. As the program is ongoing, the data analysis will continue to be updated.

The following data presented is based on analysis of Cribs for Kids-Nassau County data collected via the Cribs for Kids program referral form, initial Safe Sleep questionnaire, 3 months safe sleep follow-up questionnaire, and the 1-year follow up questionnaire, from 102 participants (108 infants/cribs) between February 2015- July 2018.

Demographics of Participants

Maternal Age

From 2/2015-7/2018, the average age of the participants in the program was 25.6 years, with the youngest mother being 13 years old and the oldest mother being 42 years old. As shown in Figure 1, most of the women in the program are under 30 years of age. Two of the women in the program had missing age and were not included in the analysis.

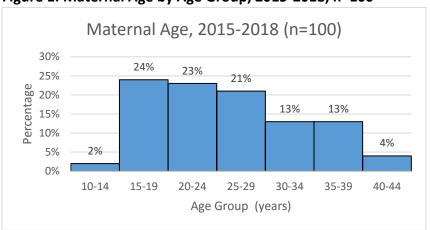


Figure 1: Maternal Age by Age Group, 2015-2018, n=100

Maternal Race and Ethnicity

Of the 102 participants in the program, 28 participants had race missing. Of the remaining 72 women, 41% are Black, 30% are White and 26% are Other (Figure 2.).

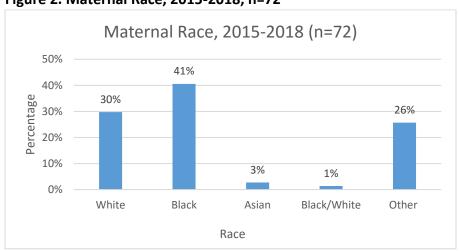


Figure 2. Maternal Race, 2015-2018, n=72

Of the 102 women in the program, 20 had ethnicity missing. Among the remaining 82 women, 83% are Hispanic (Figure 3.).

Maternal Ethnicity, 2015-2018 (n=82) 100% 83% 80% Percentage 60% 40% 17% 20% 0% Non hispanic Hispanic Ethnicity

Figure 3. Maternal Ethnicity (Hispanic vs. Non-Hispanic) 2015-2018, n=82

Maternal Education

As shown in Figure 4, most of the participants had some high school education or graduated high school. According to the U.S. Census⁴, in Nassau County 90.9% of the adult population are high school graduates or higher. From 2012-2016, in Nassau County 47.6% of the adult population had some college with no degree, associate's degree or bachelor's degree.⁴ Among our participants, less than 20% had some college or graduated from 2-year community college or college. Four participants were excluded from analysis, due to missing data.

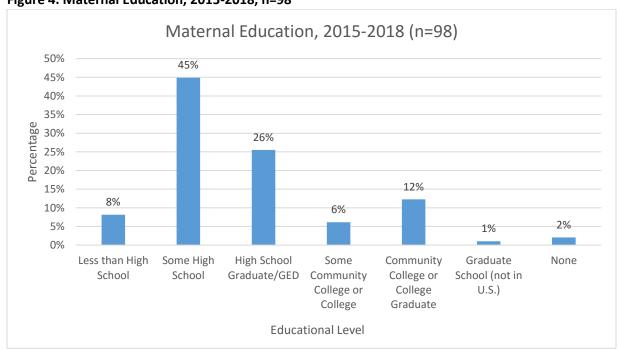


Figure 4. Maternal Education, 2015-2018, n=98

Communities Where Participants Reside

According to the U.S. Census⁴, from 2012-2016 the median household income in Nassau County was \$102,044, compared to the median household income in the United States and NY of \$55,322 and \$60,741, respectively. Despite this prosperity in Nassau County as a whole, there are areas of socioeconomic, racial and health disparities in Nassau. Using an index that consists of multiple socioeconomic and health-related factors as well as populations historically considered "at risk" the NCDOH CHA 2014-2017 chose 9 communities as Select Communities as comparisons to help locate and demonstrate health disparities in the county.⁵ These 9 communities are: Freeport, Hempstead, Inwood, Long Beach, Westbury, Roosevelt, Uniondale, Elmont, and Glen Cove.⁵ According to the NCDOH Community Health Assessment (CHA)⁵, from 2016-2018, the Select Communities had an infant morality rate close to 6 per 1,000 live births compared to an infant mortality rate of close to 3 per 1,000 live births in the rest of the county.

As shown in Figure 5, close to half (44%) of the participants reside in Hempstead, one of the select communities. As shown in Figure 6, 85% of the participants reside in one of the 9 select communities.

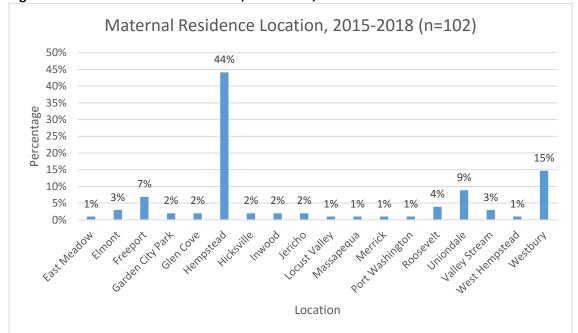
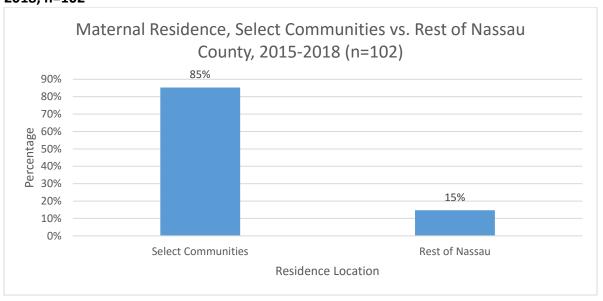


Figure 5. Maternal Residence Location, 2015-2018, n=102

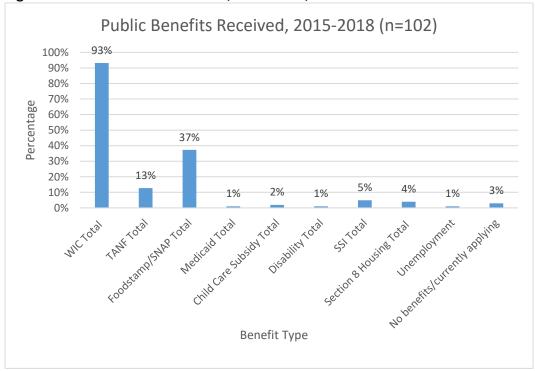
Figure 6. Maternal Residence Location, Select Communities vs. Rest of Nassau County, 2015-2018, n=102



Public Health Benefits Mother Receives

As shown in Figure 7, 93% of our participants receive WIC, whether on its own or in combination with other public benefits.

Figure 7. Public Benefits Received, 2015-2018, n=102



As shown in Figure 8, 58% of the participants receive 1 benefit, and 3% receive no benefits at time of referral.

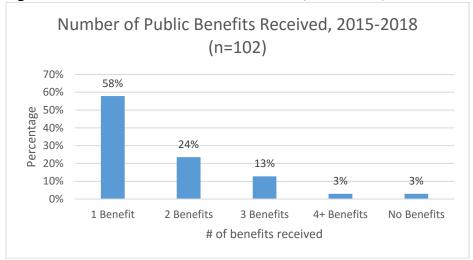


Figure 8. Number of Public Benefits Received, 2015-2018, n=102

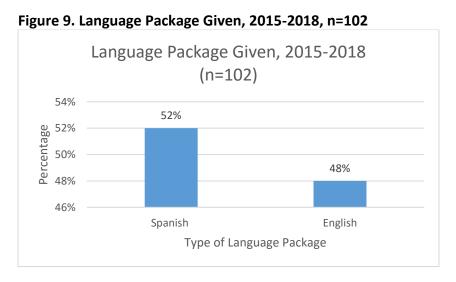
Smoke Exposure

Even though data regarding whether the participant and/or any household member smokes was collected, 66% of the participants had missing data. Therefore, data regarding smoking was not further analyzed.

Characteristics of Mother and Infant in Context of the Program

Type of Language Package Received by Mother

According to the U.S. Census⁴, from 2012-2016, in Nassau County 28% of households spoke a language other than English and of that 28%, 12.7% of households spoke Spanish. As shown in Figure 9, most of the language packages given to the participants were in Spanish.



Referring Agency

To date, Cribs for Kids-Nassau County has 8 partner community agencies that refer participants and provide safe sleep education and follow up with participants 3 months from crib delivery. As shown in Figure 10, most of our referrals come from EOC and VNSNY-NFP, 32% and 25%, respectively.

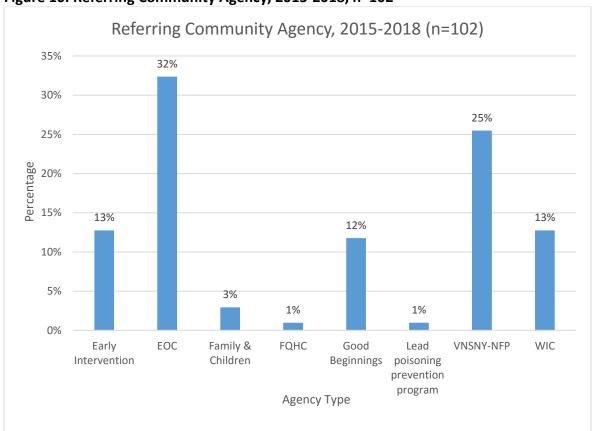


Figure 10. Referring Community Agency, 2015-2018, n=102

Referral Type and Type of Crib Delivery

Cribs for Kids-Nassau County program referral can be done prenatally, within 8 weeks of due date, or postnatally where the infant is less than 9 months of age. As shown in Figure 11, 67% of the referrals were done prenatally. As shown in Figure 12, almost half (46%) of the cribs were delivered prenatally. Of the 68 prenatal referrals, 74% received the crib prenatally (Figure 13). Safe sleep education as well as instruction for crib set up is provided at time of crib delivery.

Figure 11. Prenatal vs. Postnatal Referral, 2015-2018, n=102

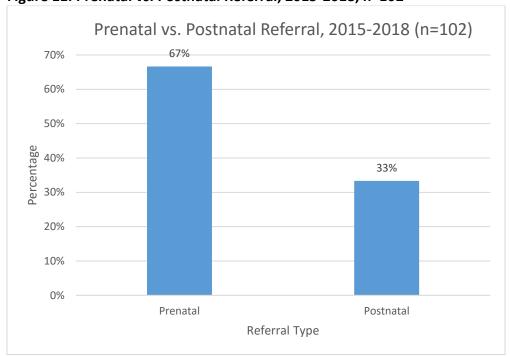
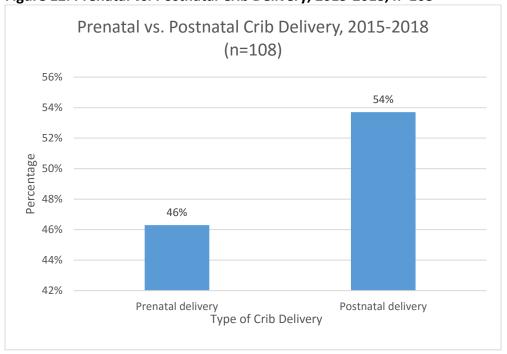


Figure 12. Prenatal vs. Postnatal Crib Delivery, 2015-2018, n=108



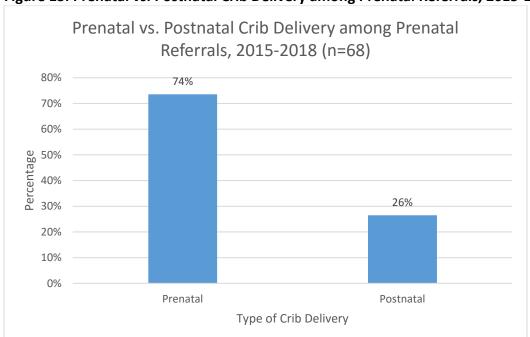


Figure 13. Prenatal vs. Postnatal Crib Delivery among Prenatal Referrals, 2015-2018, n=68

Age of Infant at Crib Delivery

As shown in Figure 14, of the 58 cribs delivered postnatally, almost half were delivered to infants < 1 month of age and 90% of the cribs were delivered to infants < 5 months of age.

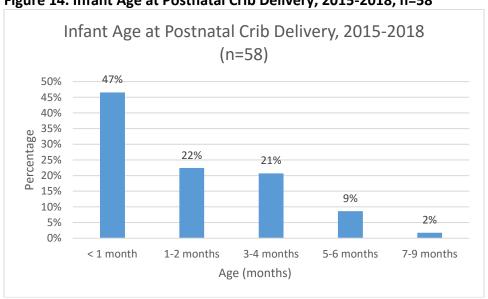


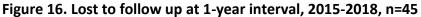
Figure 14. Infant Age at Postnatal Crib Delivery, 2015-2018, n=58

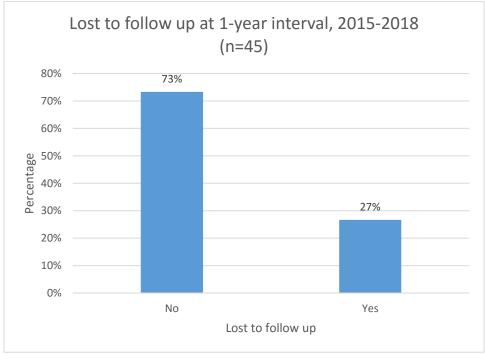
Lost to follow up

Among the 79 participants who were due for the 3-months follow, 10% were lost to follow up (Figure 15.). As shown in Figure 16, among the 45 participants who were due for the 1-year follow up, 27% were lost to follow up.

Lost to follow up at 3 months interval, 2015-2018 (n=79)100% 90% 90% 80% 70% 60% 50% 40% 30% 20% 10% 10% No Yes Lost to follow up

Figure 15. Lost to follow up at 3 months interval, 2015-2018, n=79





Summary

As shown above, to date, the participants of the Cribs for Kids-Nassau County Chapter, tend to be young, from racial and ethnic minorities (Black and Hispanic, respectively), Spanish-speaking, have some high school education, receive at least one public benefit, predominantly WIC, and reside in the Select Communities, particularly in Hempstead. Therefore, to date, the Cribs for Kids-Nassau County Chapter is capturing the target population of at risk, low-income, underserved families/mothers/infants.

The program receives most of its referrals from EOC and VNSNY-NFP, and the majority of referrals are prenatal. Among the prenatal referrals almost three-quarters of the cribs are delivered prenatally, which is ideal as you are educating the caregiver and providing a safe sleep location before the infant even comes home. Of all the cribs delivered postnatally, 47% were delivered to infants < 1 month of age, reaching the caregiver and infant at a very young age. To date, 90% of the participants who were due for the 3 months follow up were successfully reached. To date, 75% of those participants who were due for the 1-year follow up were successfully contacted. This baseline data will help guide the program in terms of ongoing program evaluation and improvement to better serve participants and minimize loss to follow up.

The Health Department would like to acknowledge Dr. Sandra Carrera, Preventive Medicine and Public Health Resident from Stony Brook University Hospital for assistance with the data analysis and initial drafting of this report.

References

- https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk
 Accessed 8/24/18
- 2. https://www.health.ny.gov/statistics/community/minority/county/nassau.htm
 Accessed 8/24/18
- http://pediatrics.aappublications.org/content/early/2016/10/20/peds.2016-2938
 Accessed 8/24/18
- 4. https://data.census.gov/cedsci/geoprofile?q=Nassau%20County,%20New%20York&g=0500000
 https://data.census.gov/cedsci/geoprofile?q=Nassau%20County,%20New%20York&g=0500000
 https://data.census.gov/cedsci/geoprofile?q=Nassau%20County,%20New%20York&g=0500000
 https://data.census.gov/cedsci/geoprofile?q=Nassau%20County,%20New%20York&g=0500000
 https://data.census.gov/cedsci/geoprofile?q=Nassau%20County,%20New%20York&g=0500000
 <a href="https://data.census.gov/cedsci/geoprofile?q=Nassau%20County,%20New%20York&g=0500000
 <a href="https://data.census.gov/cedsci/geoprofile?q=Nassau%20Coun
 - Accessed 8/24/18
- 5. https://www.nassaucountyny.gov/DocumentCenter/View/17688 Accessed 8/24/28