



Infant health in nine Chicago community areas

HEALTH SNAPSHOT NO.8

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Infants born preterm (<37 weeks) or low birth weight (<2500 grams or 5 pounds, 8 ounces) are at increased risk of immediate life-threatening health problems, long-term complications, developmental delays, and infant mortality.¹ When combined, preterm and low birth weight are the second leading cause of infant mortality (nearly 18% of deaths).² In the US in 2014, approximately one in ten live births was preterm and 8% of births were low birth weight.³ Important risk factors for these associated adverse birth outcomes include maternal age, nutrition, smoking, prenatal care, infection, and stress.¹ This health snapshot presents infant health findings from the *Sinai Community Health Survey 2.0*, a community-driven, representative survey of nine communities in Chicago.

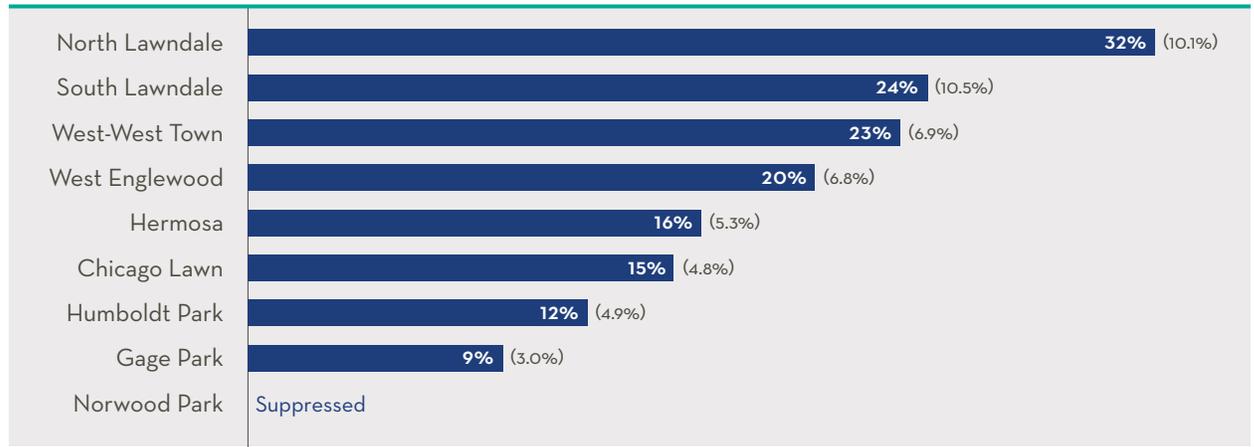
WHICH COMMUNITIES ARE MOST AFFECTED?

- Among North Lawndale females who had at least one live birth, about one in three ever had a baby born prematurely and one in four ever had a low birth weight baby.
- In South Lawndale and west-West Town, over 20% of females who had at least one live birth ever had a baby born prematurely.

WHO IS MOST AFFECTED?

- Among non-Hispanic Black females who had at least one live birth, 22% ever had a baby born prematurely and 16% ever had a low birth weight baby.
- The percentage of females who ever had a low birth weight baby was nearly three times as high for non-Hispanic Black females compared to non-Hispanic White females.

FIGURE 1: Percent of females who ever had a baby born prematurely by community area

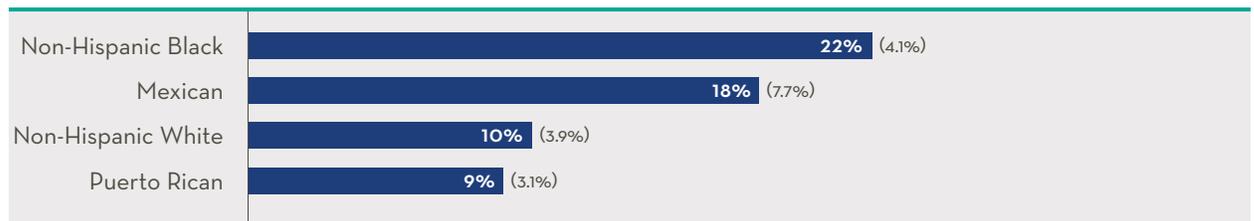


Sampled West Town community area west of Western Avenue only
 Restricted to females who had at least one live birth
 No national comparison data available

PREVALENCE (STANDARD ERROR)

- Among females who had at least one live birth, the percentage who ever had a baby born prematurely ranged from a high of 32% for females in North Lawndale to a low of 9% for females in Gage Park.
- In North Lawndale, about one in three women who had at least one live birth ever had a baby born prematurely.

FIGURE 2: Percent of females who ever had a baby born prematurely by race/ethnicity

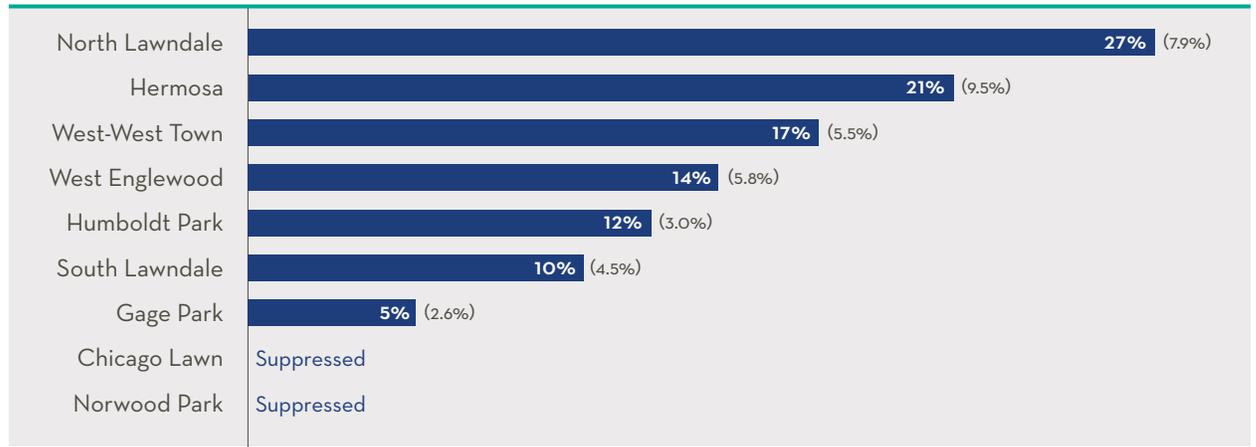


Restricted to females who had at least one live birth
 No national comparison data available
 Rao-Scott Chi-Square p-value = 0.3670

PREVALENCE (STANDARD ERROR)

- Among females who had at least one live birth, the percentage who ever had a baby born prematurely was highest for non-Hispanic Black females (22%) and lowest for females of Puerto Rican origin (9%). These differences were not statistically significant.
- Nearly one in four non-Hispanic Black females who had at least one live birth ever had a baby born prematurely.

FIGURE 3: Percent of females who ever had a low birth weight baby by community area

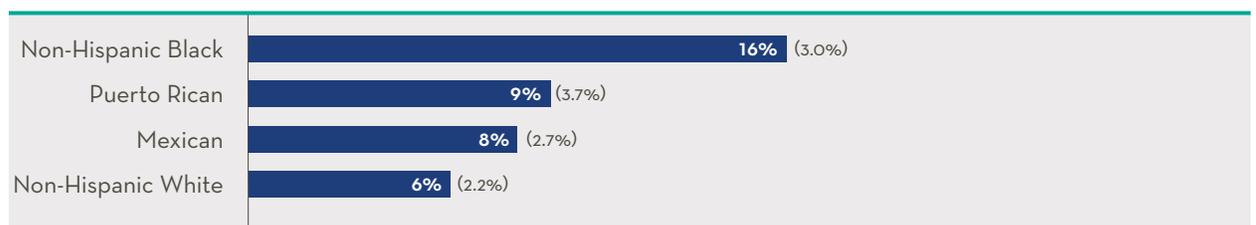


Sampled West Town community area west of Western Avenue only
 Restricted to females who had at least one live birth
 No national comparison data available

PREVALENCE (STANDARD ERROR)

- Among females who had at least one live birth, the percentage who ever had a low birth weight baby ranged from a high of 27% for females in North Lawndale to a low of 5% for females in Gage Park.
- In North Lawndale, over one in four women who had at least one live birth ever had a low birth weight baby.

FIGURE 4: Percent of females who ever had a low birth weight baby by race/ethnicity



Restricted to females who had at least one live birth
 No national comparison data available
 Rao-Scott Chi-Square p-value = 0.0490

PREVALENCE (STANDARD ERROR)

- Among females who had at least one live birth, there was a statistically significant difference in the percentage who ever had a low birth weight baby, which was highest for non-Hispanic Black females (16%) and lowest for non-Hispanic White females (6%).
- The percentage of females who ever had a low birth weight baby was nearly three times as high for non-Hispanic Black females compared to non-Hispanic White females.

ABOUT THE SURVEY

Sinai Urban Health Institute (SUHI) is a unique, nationally-recognized research center on the west side of Chicago. Our mission is to achieve health equity among communities through excellence and innovation in data-driven research, interventions, evaluation, and collaboration. SUHI is a proud member of Sinai Health System. For more information about SUHI, visit www.SUHChicago.org.

SUHI designed and conducted the *Sinai Community Health Survey 2.0* in partnership with our Community Advisory Committee and The University of Illinois at Chicago Survey Research Laboratory (SRL). SRL administered surveys face-to-face in both English and Spanish to randomly selected households from each of the nine surveyed communities. Interviewers randomly selected up to two adults (18 and over) per household. Data collection took place between March 2015 and September 2016 with a final sample size of 1,543 adults. Survey results are representative at the community area level for all communities with the exception of West Town, which was sampled west of Western Avenue only. More information about the survey is available at www.SinaiSurvey.org.

DEFINITIONS

Ever having a baby that was born prematurely was defined as ever having a baby who was born before you reached 37 weeks of pregnancy.

Ever having a low birth weight baby was defined as ever having a baby that weighed less than five pounds, eight ounces at birth.

METHODS

We used sampling weights to compute statistical estimates to ensure (1) the estimates accounted for the differential probability of the selection of respondents; and (2) the demographic profile of survey respondents matched the community area demographic profiles from the *2010-2014 American Community Survey*. The Rao-Scott Chi-Square test was used to test for statistical differences by race/ethnic group. Findings were suppressed when the number of observations was less than five.

REFERENCES

1. Institute of Medicine Committee on Understanding Premature Birth and Assuring Healthy Outcomes. The National Academies Collection: Reports funded by National Institutes of Health. In: Behrman RE, Butler AS, eds. *Preterm birth: Causes, consequences, and prevention*. Washington (DC): National Academies Press National Academy of Sciences; 2007.
2. Heron M. Deaths: Leading causes for 2013. *Natl Vital Stat Rep*. 2016; 65(2): 1-95.
3. Hamilton BE, Martin JA, Osterman MJK, et al. Births: Final data for 2014. *National vital statistics reports*; 64(12). Hyattsville, MD: National Center for Health Statistics. 2015.