Cardiovascular disease in nine Chicago community areas

HEALTH SNAPSHOT NO.4

Michelle M. Hughes, Bijou R. Hunt, Maureen R. Benjamins, and Jana L. Hirschtick

Over one in ten US adults live with heart disease,[1] which encompasses several heart conditions including coronary heart disease and heart attacks. Heart disease is the leading cause of death for adults in the US.[2] There are several known risk factors, including high blood pressure, a common condition in which the force of blood from the heart flowing through the arteries is too high.[3,4] High cholesterol, another risk factor, is a high concentration of a waxy substance in the blood.[5] Because these risk factors often do not have symptoms, but are treatable, it is important to get screened for them regularly. This health snapshot presents heart disease, high blood pressure, and high cholesterol findings from the *Sinai Community Health Survey 2.0*, a community-driven, representative survey of nine communities in Chicago.

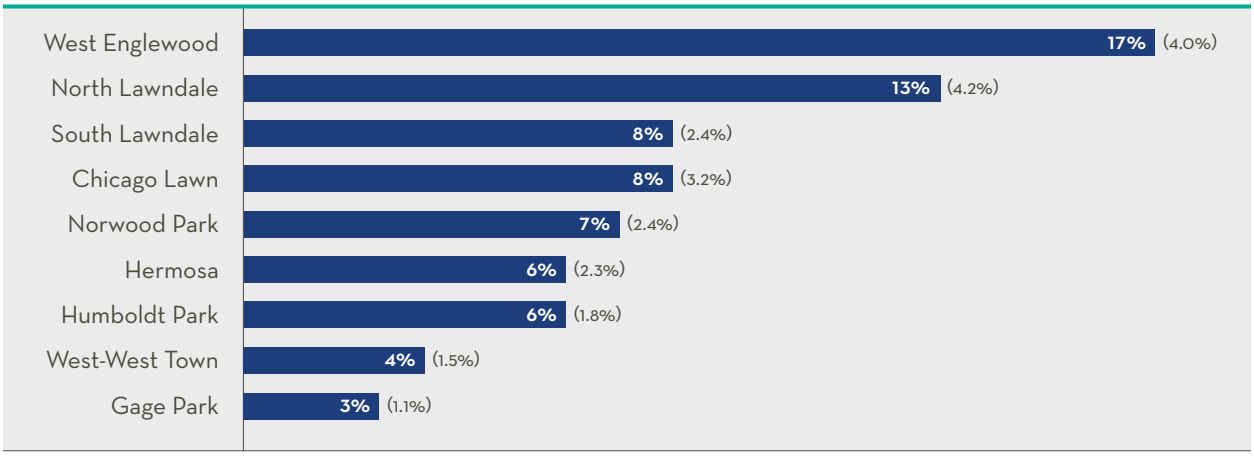
WHICH COMMUNITIES ARE MOST AFFECTED?

- One in six adults in West Englewood had been diagnosed with heart disease.
- In West Englewood and North Lawndale, nearly half of females had been diagnosed with high blood pressure.
- Males in Norwood Park had the highest diagnosed prevalence (42%) of high cholesterol.

WHO IS MOST AFFECTED?

- Non-Hispanic Black females and non-Hispanic White males had the highest prevalence of diagnosed heart disease (both 16%).
- Over half of females of Puerto Rican origin had been diagnosed with high blood pressure.

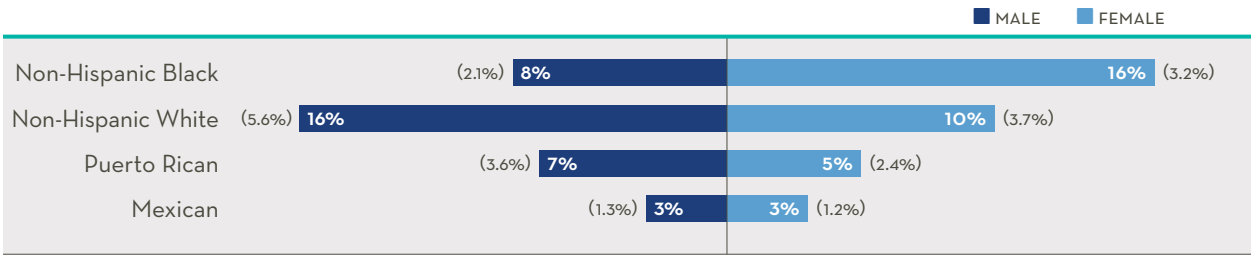
FIGURE 1: Prevalence of diagnosed heart disease by community area



Sampled West Town community area west of Western Avenue only
No national comparison data available

- In the nine communities surveyed, the prevalence of diagnosed heart disease ranged from a high of 17% in West Englewood to a low of 3% in Gage Park.
- In West Englewood, one in six adults had been diagnosed with heart disease.

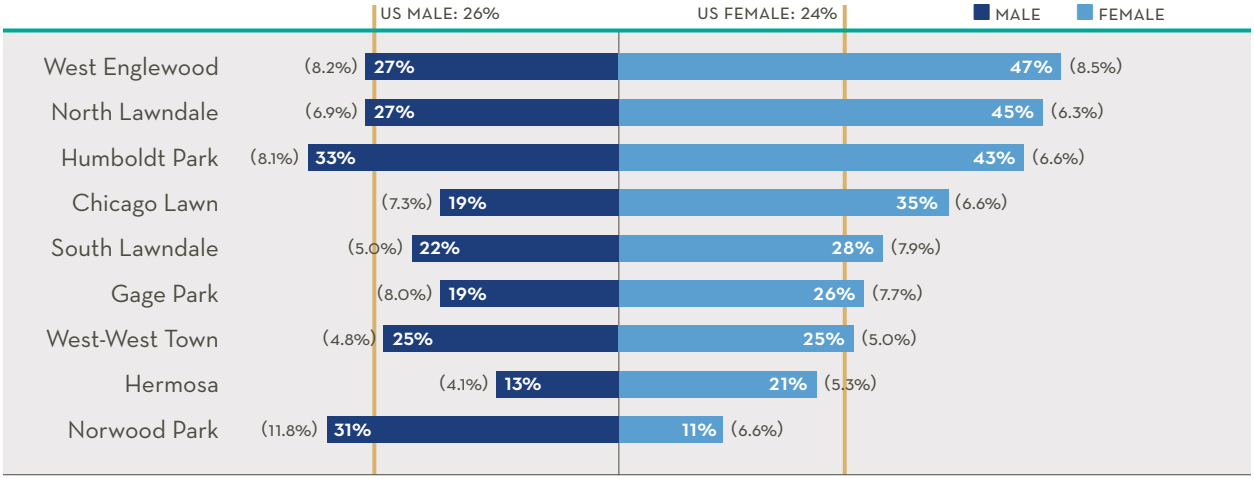
FIGURE 2: Prevalence of diagnosed heart disease by race/ethnicity and sex



No national comparison data available
Rao-Scott Chi-Square p-value = 0.0031 (males); p = 0.0001 (females)

- There was a statistically significant difference in the prevalence of diagnosed heart disease by race/ethnic group for females, which was highest for non-Hispanic Black females (16%) and lowest for females of Mexican origin (3%).
- There was also a statistically significant difference in the prevalence of diagnosed heart disease by race/ethnic group for males, which was highest for non-Hispanic White males (16%) and lowest for males of Mexican origin (3%).

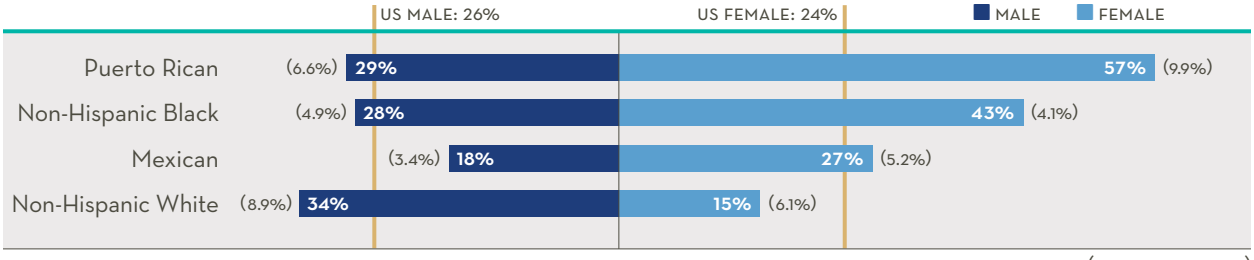
FIGURE 3: **Prevalence of diagnosed high blood pressure by community area and sex**



Sampled West Town community area west of Western Avenue only
US DATA SOURCE: *National Health Interview Survey, 2015 (age-adjusted)*

- Among females, the prevalence of diagnosed high blood pressure ranged from a high of 47% for females in West Englewood to a low of 11% for females in Norwood Park.
- Among males, the prevalence of diagnosed high blood pressure ranged from a high of 33% for males in Humboldt Park to a low of 13% for males in Hermosa.

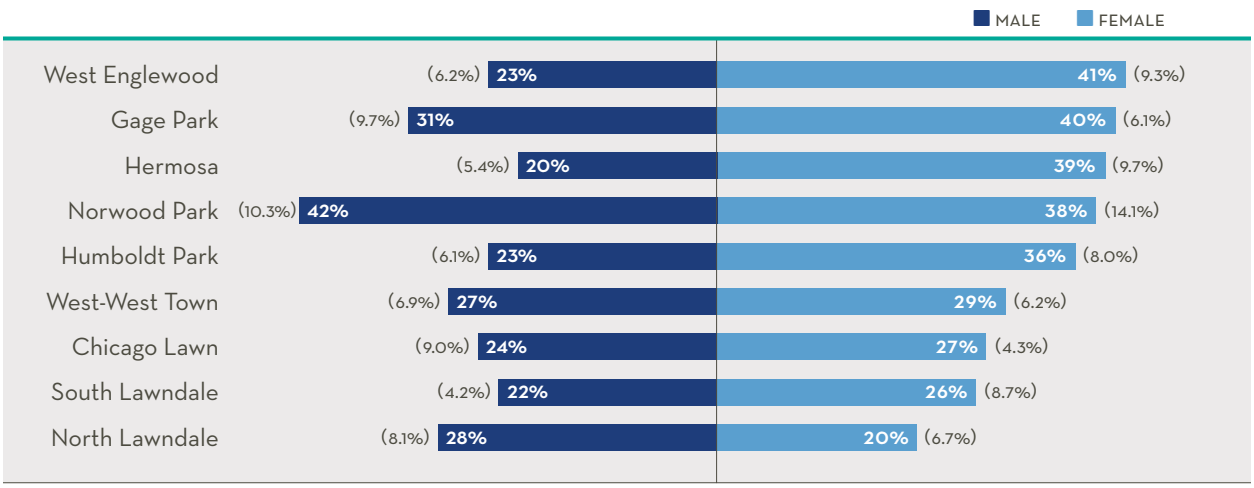
FIGURE 4: **Prevalence of diagnosed high blood pressure by race/ethnicity and sex**



US DATA SOURCE: *National Health Interview Survey, 2015 (age-adjusted)*
Rao-Scott Chi-Square p-value = 0.1135 (males); p = 0.0012 (females)

- There was a statistically significant difference in the prevalence of diagnosed high blood pressure by race/ethnic group for females, which was highest for females of Puerto Rican origin (57%) and lowest for non-Hispanic White females (15%).
- Among males, the prevalence of diagnosed high blood pressure was highest for non-Hispanic White males (34%) and lowest for males of Mexican origin (18%). These differences were not statistically significant.

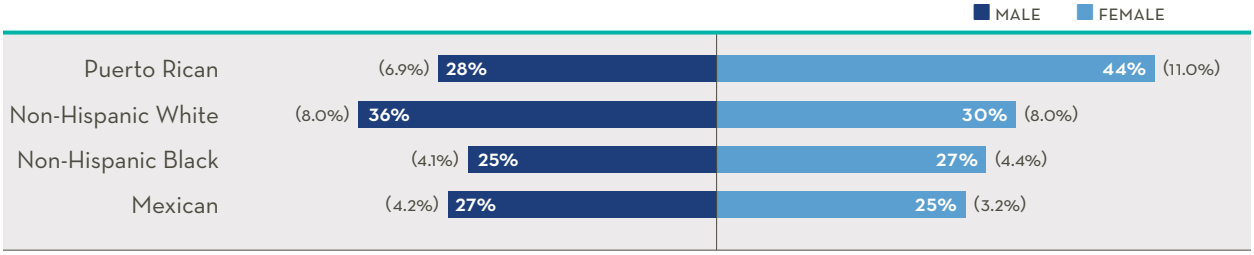
FIGURE 5: Prevalence of diagnosed high cholesterol by community area and sex



Sampled West Town community area west of Western Avenue only
No national comparison data available

- Among females, the prevalence of diagnosed high cholesterol ranged from a high of 41% for females in West Englewood to a low of 20% for females in North Lawndale.
- Among males, the prevalence of diagnosed high cholesterol ranged from a high of 42% for males in Norwood Park to a low of 20% for males in Hermosa.

FIGURE 6: Prevalence of diagnosed high cholesterol by race/ethnicity and sex



No national comparison data available
Rao-Scott Chi-Square p-value = 0.5312 (males); p = 0.3572 (females)

- Among females, the prevalence of diagnosed high cholesterol was highest for females of Puerto Rican origin (44%) and lowest for females of Mexican origin (25%).
- Among males, the prevalence of diagnosed high cholesterol was highest for non-Hispanic White males (36%) and lowest for non-Hispanic Black males (25%).
- The differences in the prevalence of diagnosed high cholesterol by race/ethnic group were not statistically significant for males or 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.SUHIChicago.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

Diagnosed heart disease was defined as (1) having ever been told by a doctor or other health professional that you had congestive heart failure, or (2) having ever been told by a doctor or other health professional that you had any other kind of heart condition including coronary heart disease, angina, or heart attack.

Diagnosed high blood pressure was defined as having ever been told by a doctor or other health professional that you had hypertension or high blood pressure.

Diagnosed high cholesterol was defined as (1) having ever had your blood cholesterol checked, and (2) having ever been told by a doctor, nurse or other health professional that your blood cholesterol is high.

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 and sex. Findings were suppressed when the number of observations was less than five.

REFERENCES

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