Obesity in nine Chicago community areas

HEALTH SNAPSHOT NO.2

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Obesity is a clinically-defined condition characterized by a high body mass index (BMI) (30.0 kg/m^2). It is correlated with an increased risk of diseases such as type II diabetes,[1,2] cardiovascular disease,[3,4] and certain types of cancers.[5,6] In addition, obesity is associated with increased rates of all-cause mortality and reductions in life expectancy.[3,7-9] Furthermore, it is estimated that obesity accounts for almost 10% of all medical spending, equating to nearly $150 billion per year.[10] Although the risks of being obese are generally well-known, individuals must also be aware of their weight status and be willing to make changes to their diet and physical activity levels in order to lose weight. This health snapshot presents obesity findings from the *Sinai Community Health Survey 2.0*, a community-driven, representative survey of nine communities in Chicago.
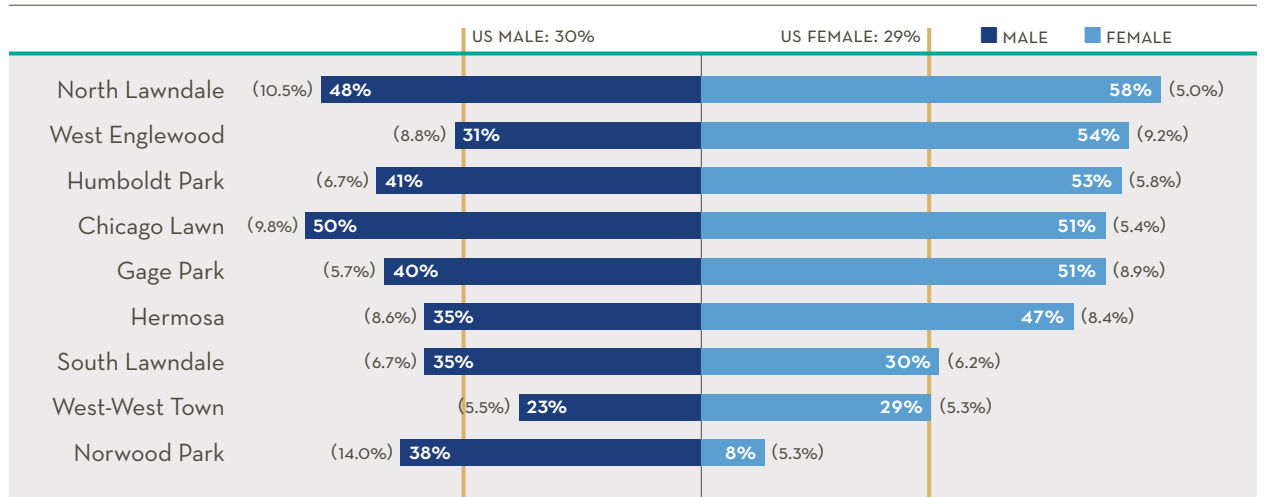
WHICH COMMUNITIES ARE MOST AFFECTED?

- In North Lawndale, West Englewood, Humboldt Park, Chicago Lawn, and Gage Park, over half of female residents were obese.

- The majority of obese adults in the nine surveyed communities tried to lose weight during the past year.

WHO IS MOST AFFECTED?

- At least 50% of non-Hispanic Black females and females of Puerto Rican origin were obese.

- One in four adults of Mexican origin who were obese considered themselves the right weight or underweight.

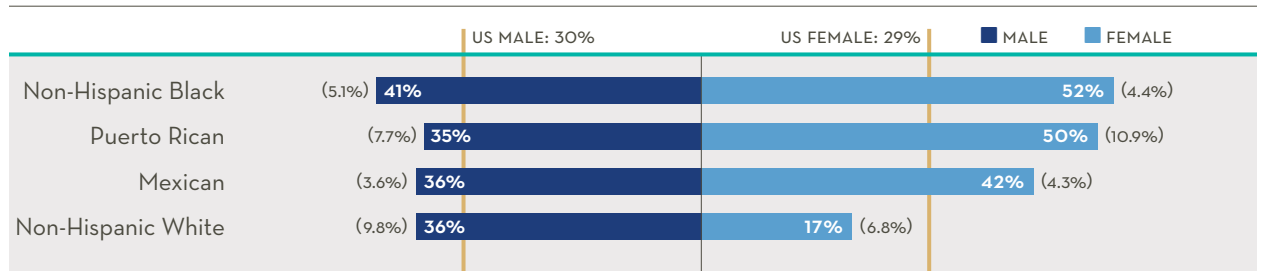FIGURE 1: **Prevalence of obesity by community area and sex**

US MALE: 30%   US FEMALE: 29%   ■ MALE   ■ FEMALE

Community Area	Male	Female
North Lawndale	(10.5%) 48%	58% (5.0%)
West Englewood	(8.8%) 31%	54% (9.2%)
Humboldt Park	(6.7%) 41%	53% (5.8%)
Chicago Lawn	(9.8%) 50%	51% (5.4%)
Gage Park	(5.7%) 40%	51% (8.9%)
Hermosa	(8.6%) 35%	47% (8.4%)
South Lawndale	(6.7%) 35%	30% (6.2%)
West-West Town	(5.5%) 23%	29% (5.3%)
Norwood Park	(14.0%) 38%	8% (5.3%)

PREVALENCE (STANDARD ERROR)

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 obesity ranged from a high of 58% for females in North Lawndale to a low of 8% for females in Norwood Park.
- Among males, the prevalence of obesity ranged from a high of 50% for males in Chicago Lawn to a low of 23% for males in west-West Town.

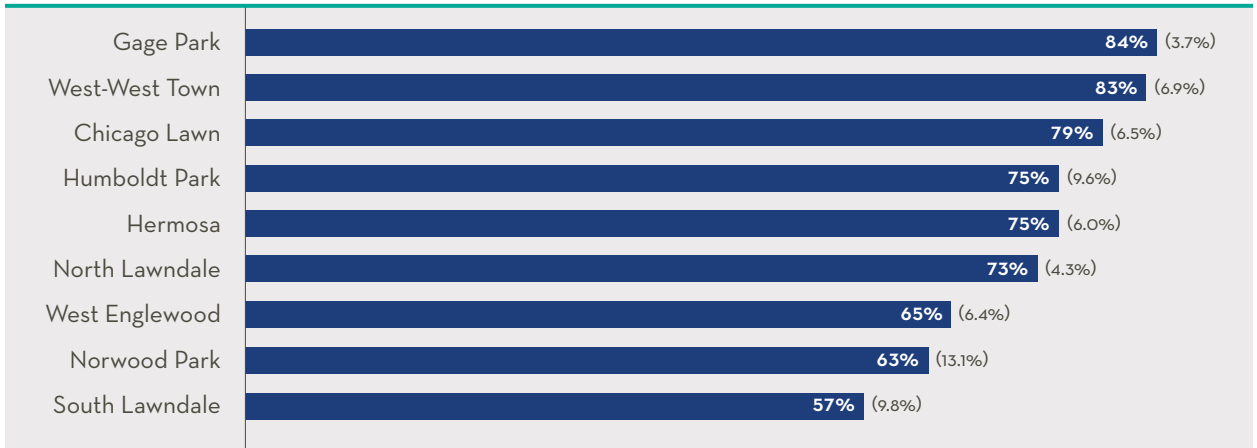FIGURE 2: **Prevalence of obesity by race/ethnicity and sex**

US MALE: 30%   US FEMALE: 29%   ■ MALE   ■ FEMALE

Race/Ethnicity	Male	Female
Non-Hispanic Black	(5.1%) 41%	52% (4.4%)
Puerto Rican	(7.7%) 35%	50% (10.9%)
Mexican	(3.6%) 36%	42% (4.3%)
Non-Hispanic White	(9.8%) 36%	17% (6.8%)

PREVALENCE (STANDARD ERROR)

US DATA SOURCE: *National Health Interview Survey, 2015 (age-adjusted)*
Rao-Scott Chi-Square p-value = 0.8394 (males); p = 0.0036 (females)

- There was a statistically significant difference in the prevalence of obesity by race/ethnic group for females, which was highest for non-Hispanic Black females (52%) and lowest for non-Hispanic White females (17%).
- Among males, the prevalence of obesity was highest for non-Hispanic Black males (41%) and lowest for males of Puerto Rican origin (35%). These differences were not statistically significant.

FIGURE 3: **Percent of obese adults who tried to lose weight in the past year by community area**

Community Area	Percent	(Standard Error)
Gage Park	84%	(3.7%)
West-West Town	83%	(6.9%)
Chicago Lawn	79%	(6.5%)
Humboldt Park	75%	(9.6%)
Hermosa	75%	(6.0%)
North Lawndale	73%	(4.3%)
West Englewood	65%	(6.4%)
Norwood Park	63%	(13.1%)
South Lawndale	57%	(9.8%)

PREVALENCE (STANDARD ERROR)

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

- In the nine communities surveyed, the percentage of obese adults who tried to lose weight in the past year ranged from a high of 84% in Gage Park to a low of 57% in South Lawndale.
- In West Englewood, Norwood Park, and South Lawndale, less than 70% of obese adults tried to lose weight in the past year.

FIGURE 4: **Percent of obese adults who tried to lose weight in the past year by race/ethnicity**
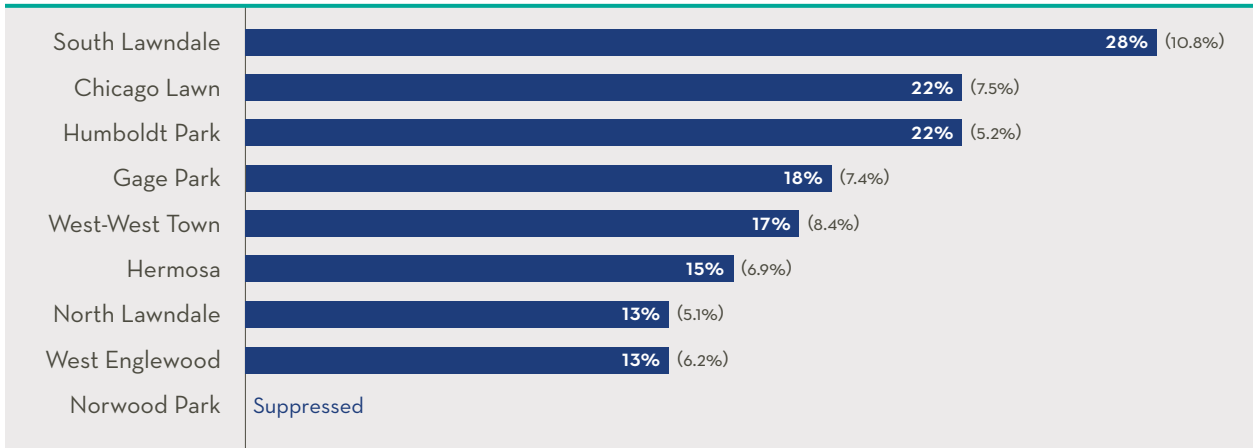
Race/Ethnicity	Percent	(Standard Error)
Puerto Rican	84%	(5.8%)
Mexican	75%	(4.0%)
Non-Hispanic Black	74%	(4.3%)
Non-Hispanic White	69%	(8.0%)

PREVALENCE (STANDARD ERROR)

No national comparison data available
Rao-Scott Chi-Square p-value = 0.6009

- The percentage of obese adults who tried to lose weight in the past year was highest for adults of Puerto Rican origin (84%) and lowest for non-Hispanic White adults (69%). These differences were not statistically significant.

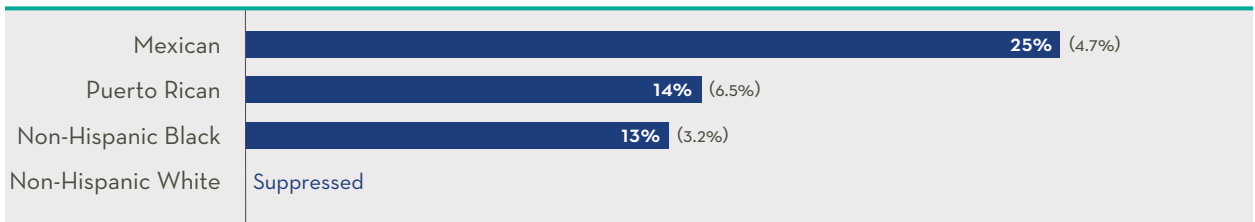**Percent of obese adults who considered themselves the right weight or underweight by community area**

Community Area	Prevalence	(Standard Error)
South Lawndale	28%	(10.8%)
Chicago Lawn	22%	(7.5%)
Humboldt Park	22%	(5.2%)
Gage Park	18%	(7.4%)
West-West Town	17%	(8.4%)
Hermosa	15%	(6.9%)
North Lawndale	13%	(5.1%)
West Englewood	13%	(6.2%)
Norwood Park	Suppressed	

PREVALENCE (STANDARD ERROR)

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

- The percentage of obese adults who considered themselves the right weight or underweight ranged from a high of 28% in South Lawndale to a low of 13% in North Lawndale and West Englewood.
- In South Lawndale, over one in four obese adults considered themselves the right weight or underweight.

FIGURE 6: **Percent of obese adults who considered themselves the right weight or underweight by race/ethnicity**

Race/Ethnicity	Prevalence	(Standard Error)
Mexican	25%	(4.7%)
Puerto Rican	14%	(6.5%)
Non-Hispanic Black	13%	(3.2%)
Non-Hispanic White	Suppressed	

PREVALENCE (STANDARD ERROR)

No national comparison data available
Rao-Scott Chi-Square p-value = 0.1194

- The percentage of obese adults who considered themselves the right weight or underweight was highest for adults of Mexican origin (25%) and lowest for non-Hispanic Black adults (13%). These differences were not statistically significant.

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

Obesity was defined as having a measured body mass index (BMI) of 30.0 or greater.

Tried to lose weight in the past year was defined as having tried to lose weight during the past 12 months.

Consider yourself the right weight or underweight was defined as responding either 'about the right weight' or 'underweight' when asked whether you consider yourself now to be overweight, underweight, or about the right weight.

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 overall or by sex, as appropriate. Findings were suppressed when the number of observations was less than five.

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