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Racial Disparities in Female Breast Cancer Mortality

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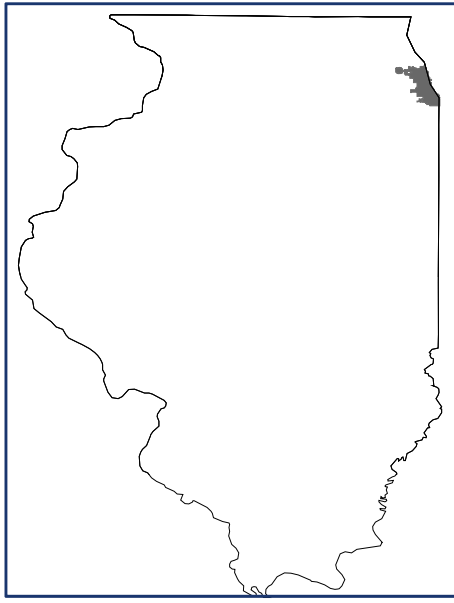
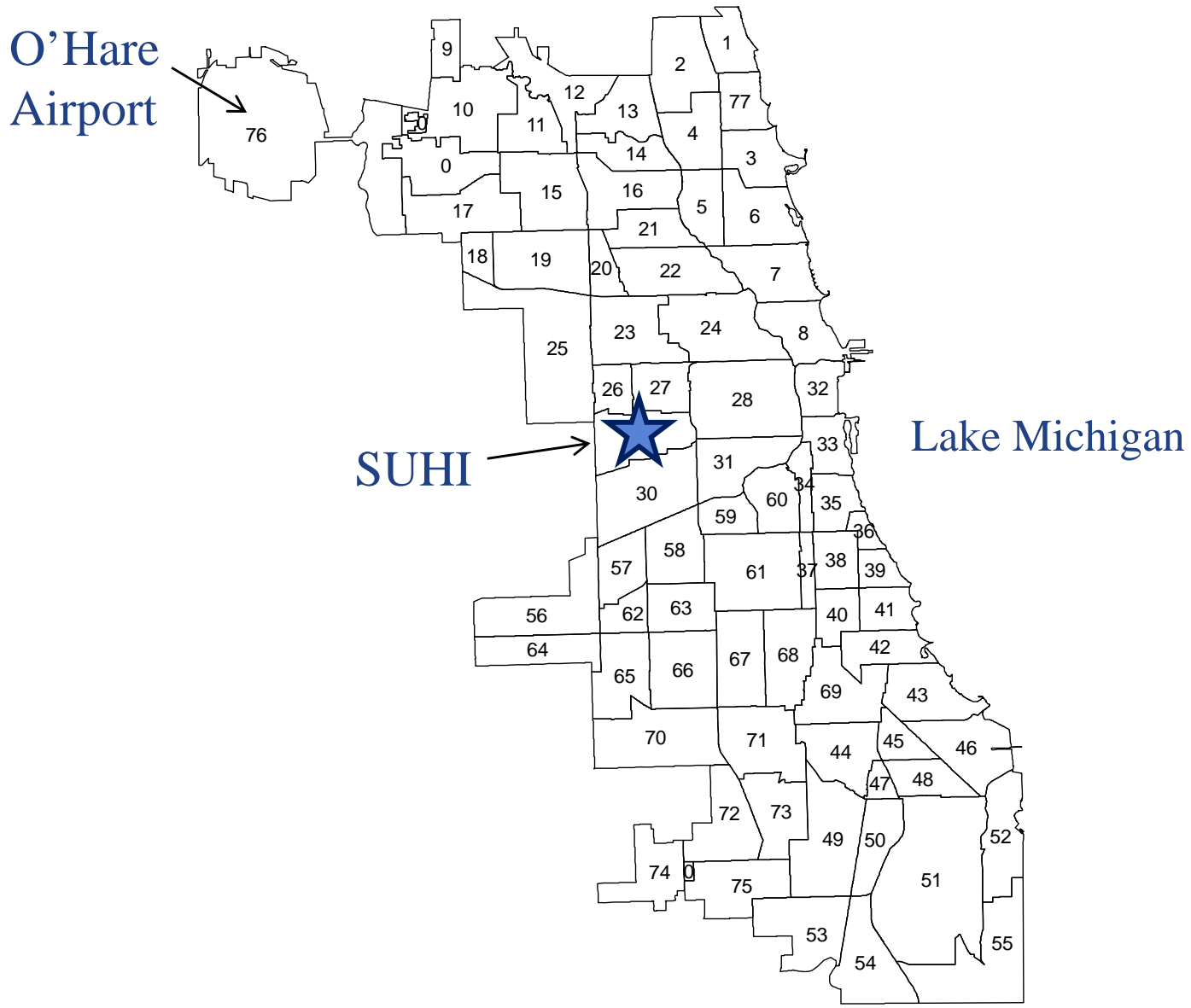
www.suhichicago.org



Presentation Outline

- Documenting Health Disparities in Chicago
- Case Study: Female Breast Cancer Mortality
- Next Steps to Address the Problem

Chicago Community Areas





Sinai Urban Health Institute

- Identifies effective approaches that improve the health of urban communities
- Serves as a focal point for the evidence based examination of community health status, the effectiveness of interventions, and methods of improving health care delivery
- Founded in 2000, epidemiologists and health educators
- A leader in documenting and addressing health disparities in Chicago



SUHI's Work

- Evaluation
 - Asthma intervention, HIV in ED, NIOS project
- Research
 - Disparities, Community Surveys, Deaf Access Survey
- Teaching & Consulting
 - Grand Rounds, Research Technical Assistance
- Publications
 - Disparities articles, Smoking Paper, HIV Research
- Interventions
 - Helping Her Live, Breathing Freedom

Health Disparities: Chicago vs. U.S.



SUHI Publications

- Silva A, Whitman S, Margellos H, Ansell D. **Evaluating Chicago's success in reaching the Healthy People 2000 goal of reducing health disparities.** *Public Health Reports* 2001.
- Margellos H, Silva A, Whitman S. **Comparison of Health Status Indicators in Chicago: Are Black-White disparities worsening?** *American Journal of Public Health* 2004.
- Whitman S, Williams C, Shah AM. **Sinai Health System's Community Health Survey: Report 1.** Chicago, IL: Sinai Health System, 2004.

Summary

- Nationally, B:W disparities are declining slowly for many measures in the U.S.
- In Chicago, disparities were generally increasing.
- Bottom line: If current trends continue, 2010 goal of eliminating disparities will not be reached, in Chicago or U.S.
- Yet, we do not know the extent of these disparities or which communities are most at risk.
 - Is this a unique phenomenon or common to U.S. urban centers?



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Case Study

Female Breast Cancer Mortality

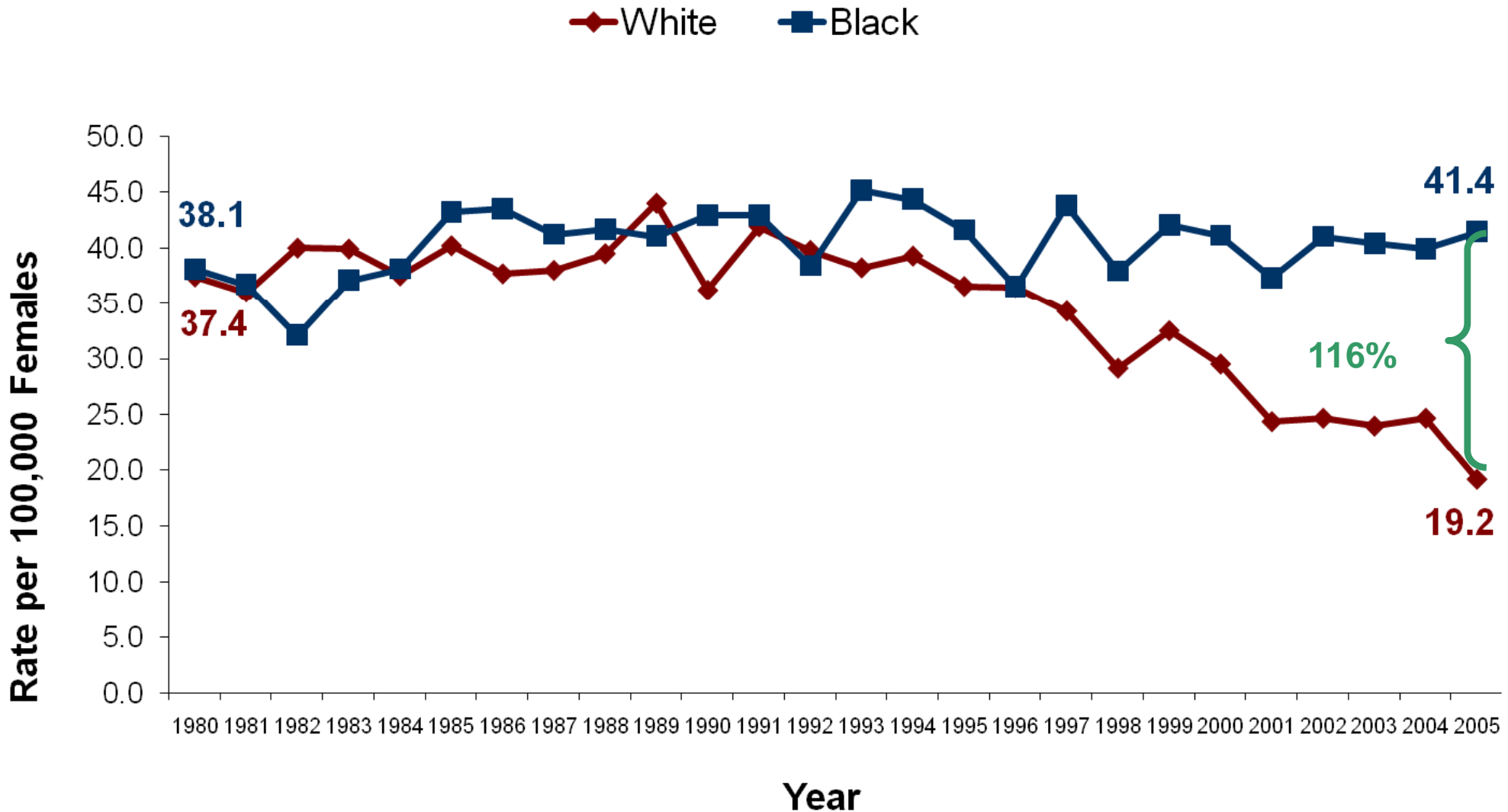


Source for Many Slides

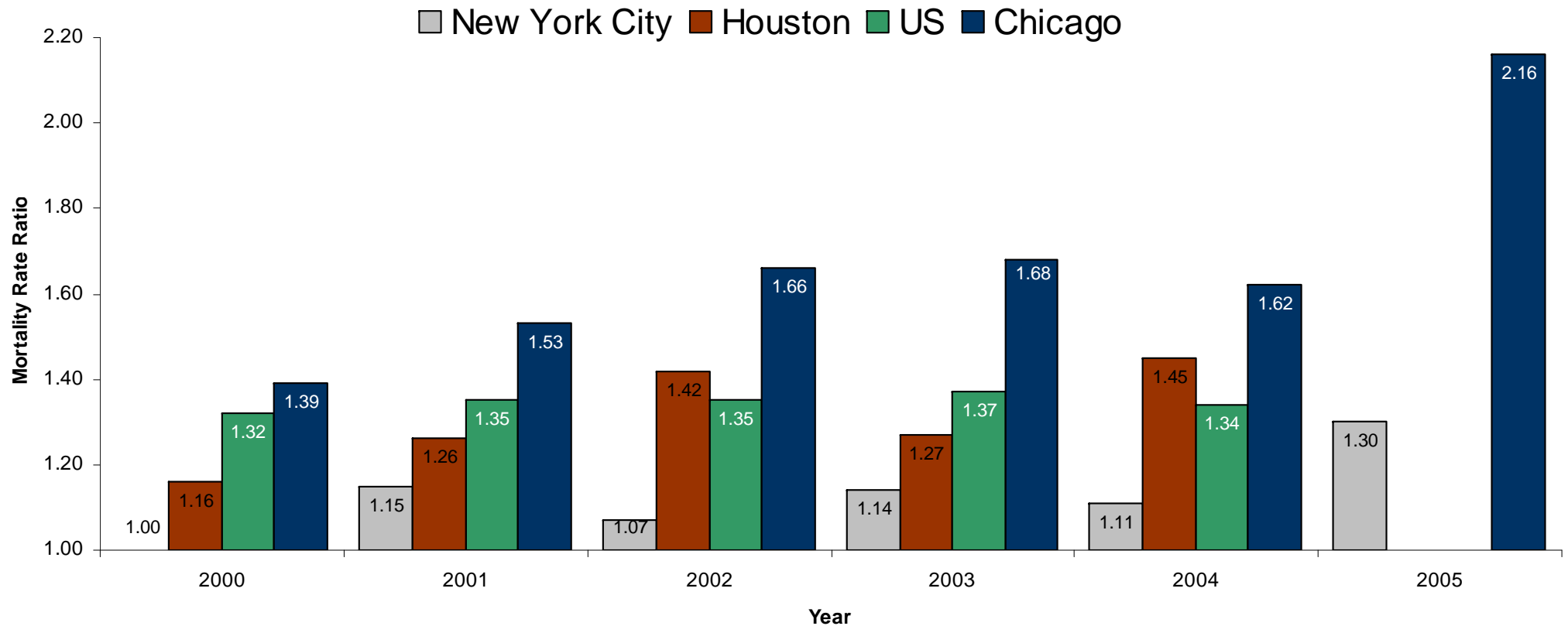
Hirschman J, Whitman S, Ansell D. The black:white disparity in breast cancer mortality: the example of Chicago. *Cancer Causes Control* 18: 323-333, 2007.

Data sources: Vital Records, Census, Illinois State Cancer Registry, Behavioral Risk Factor Surveillance System

Black and White Breast Cancer Mortality, Chicago, 1980-2005



Black:White Rate Ratios for Breast Cancer Mortality, New York City, Houston, US and Chicago, 2000-2005





Excess Breast Cancer Mortality

As a consequence of this disparity, there were 111 “excess” deaths to Black women in Chicago in 2005 because their breast cancer mortality rate was not the same as the White rate. This is almost one-half of the annual Black breast cancer deaths.

Thus, this disparity is literally a matter of life and death.



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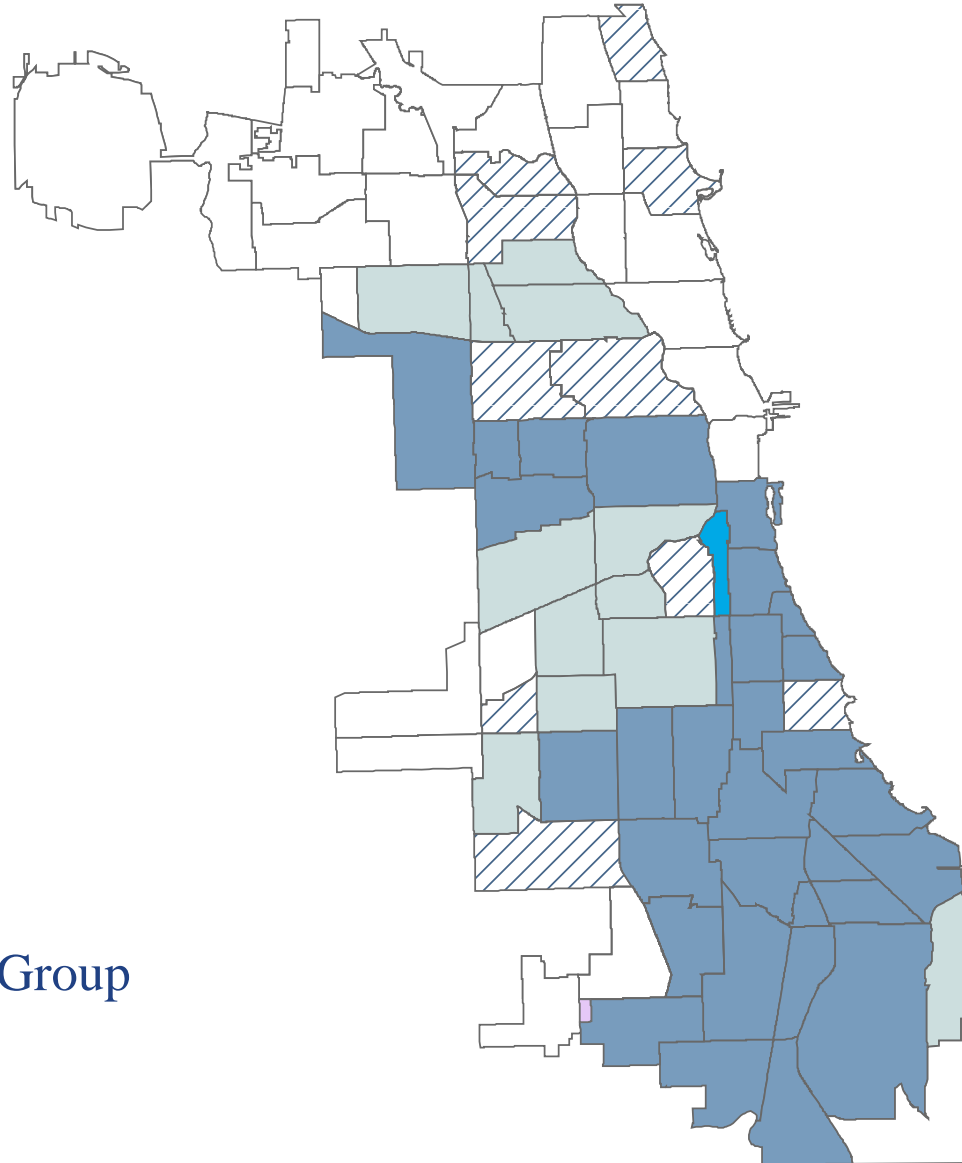
What is the extent of this health disparity at the across the city?

Which communities are most at risk?

Racial/ Ethnic Distribution of Chicago Community Areas



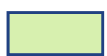

Racial Ethnic Groups

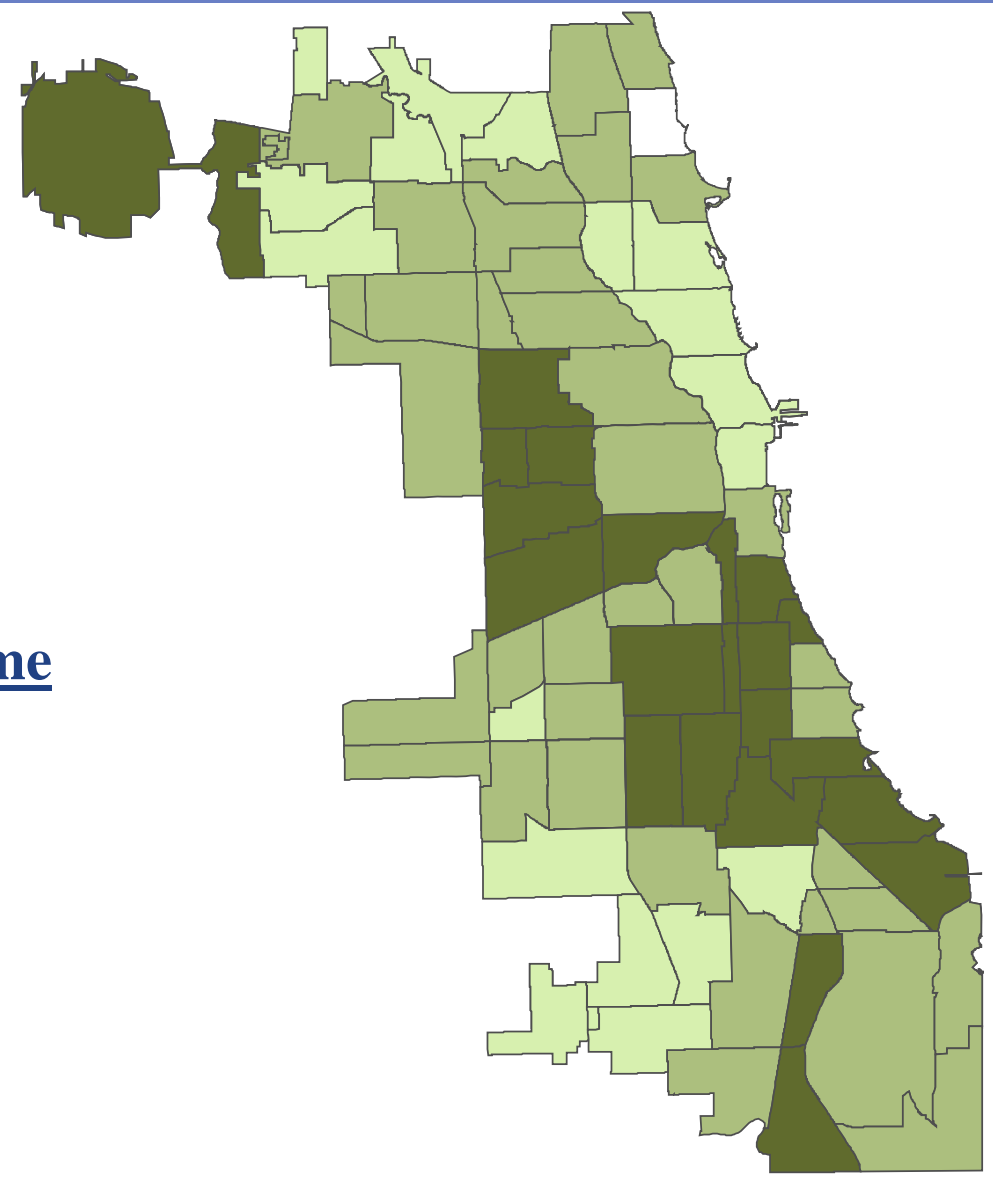
-  NH-White
-  Hispanic
-  NH-Black
-  Other Racial Ethnic Group
-  Mixed Ethnicities



Median Household Income Distribution of Chicago Community Areas

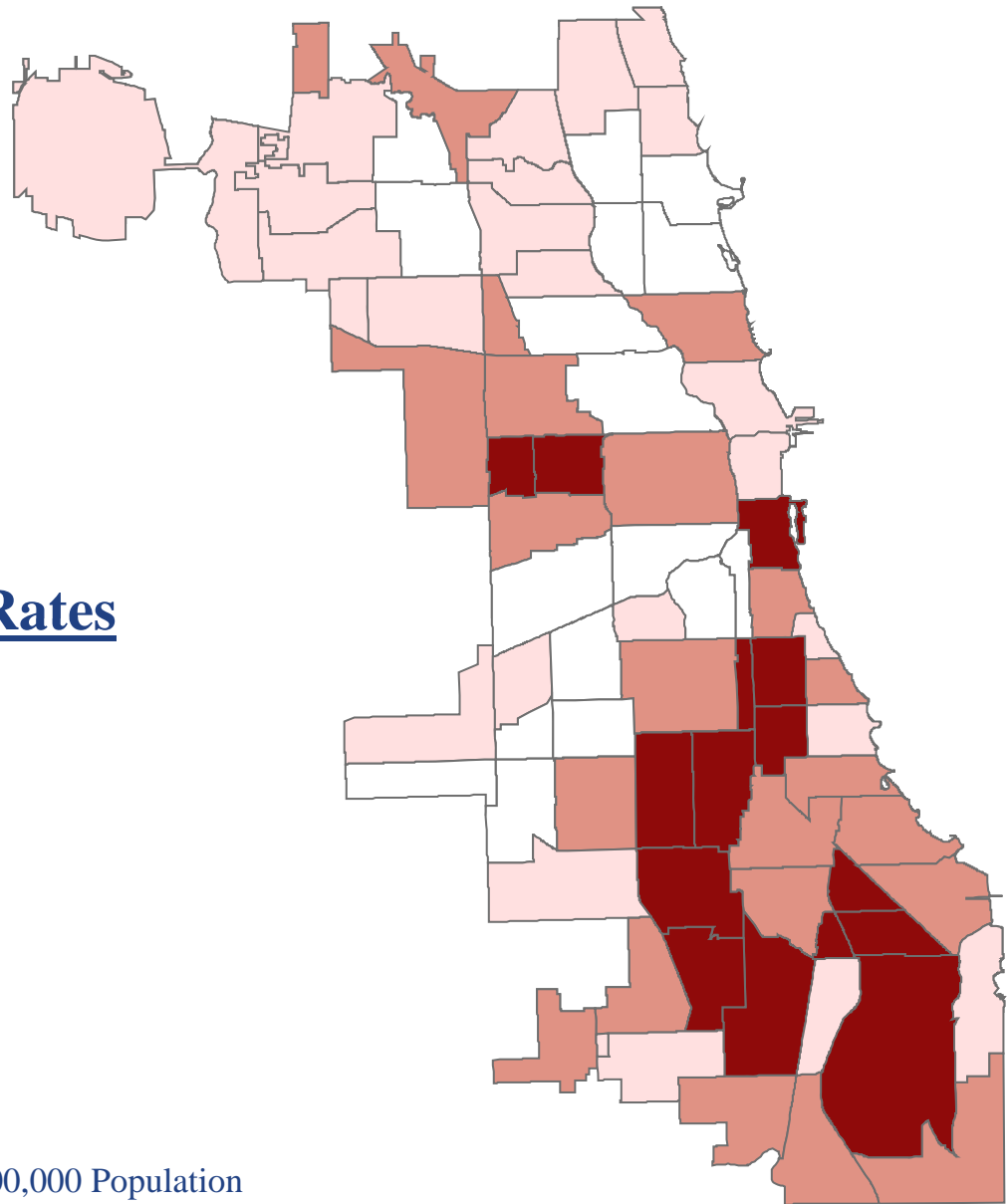
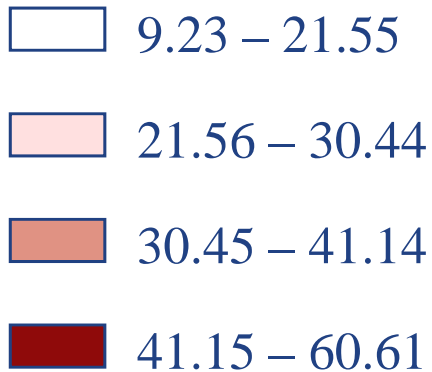
Median Household Income

-  \$10,741 - \$30,090
-  \$30,091 - \$46,694
-  \$46,695 - \$81,241
-  \$81,242 - \$377,945



2000-2005 Average Annual Breast Cancer Mortality Rates By Chicago Community Areas

Female Breast Cancer Mortality Rates



Contributing Factors

Our Three Hypotheses:

- Access to Mammography
- Quality of the Mammography Process
- Access and Quality of Treatment



Access to Mammography

Mammography Capacity Survey: 2007 First time ever done!

50 Mammography Facilities in Chicago

84% response rate (86% in Chicago), including every major site

2007 screening mammograms 207,000

Maximum capacity 384,000

Women 40-70 living in Chicago 588,000

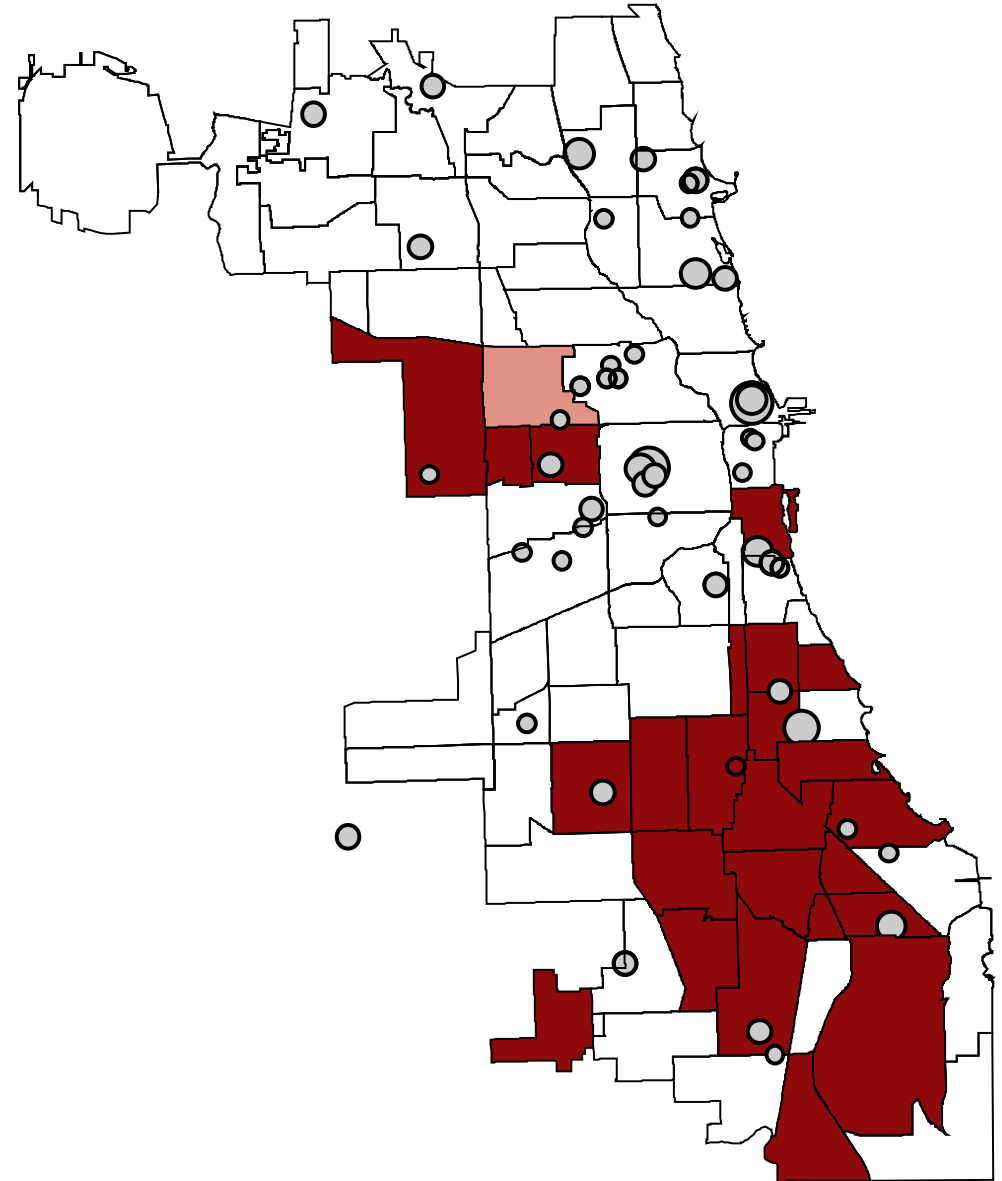
25 Chicago Community Areas with Highest Breast Cancer Mortality Rates, 2000 - 2005

Mammography Machines Per Site

- 1.0
- 1.1 – 2.0
- 2.1 – 4.0
- 4.1 – 6.0
- 6.1 – 8.0

 **Predominately African American Community Areas.**

 **Non- African American Community Areas.**





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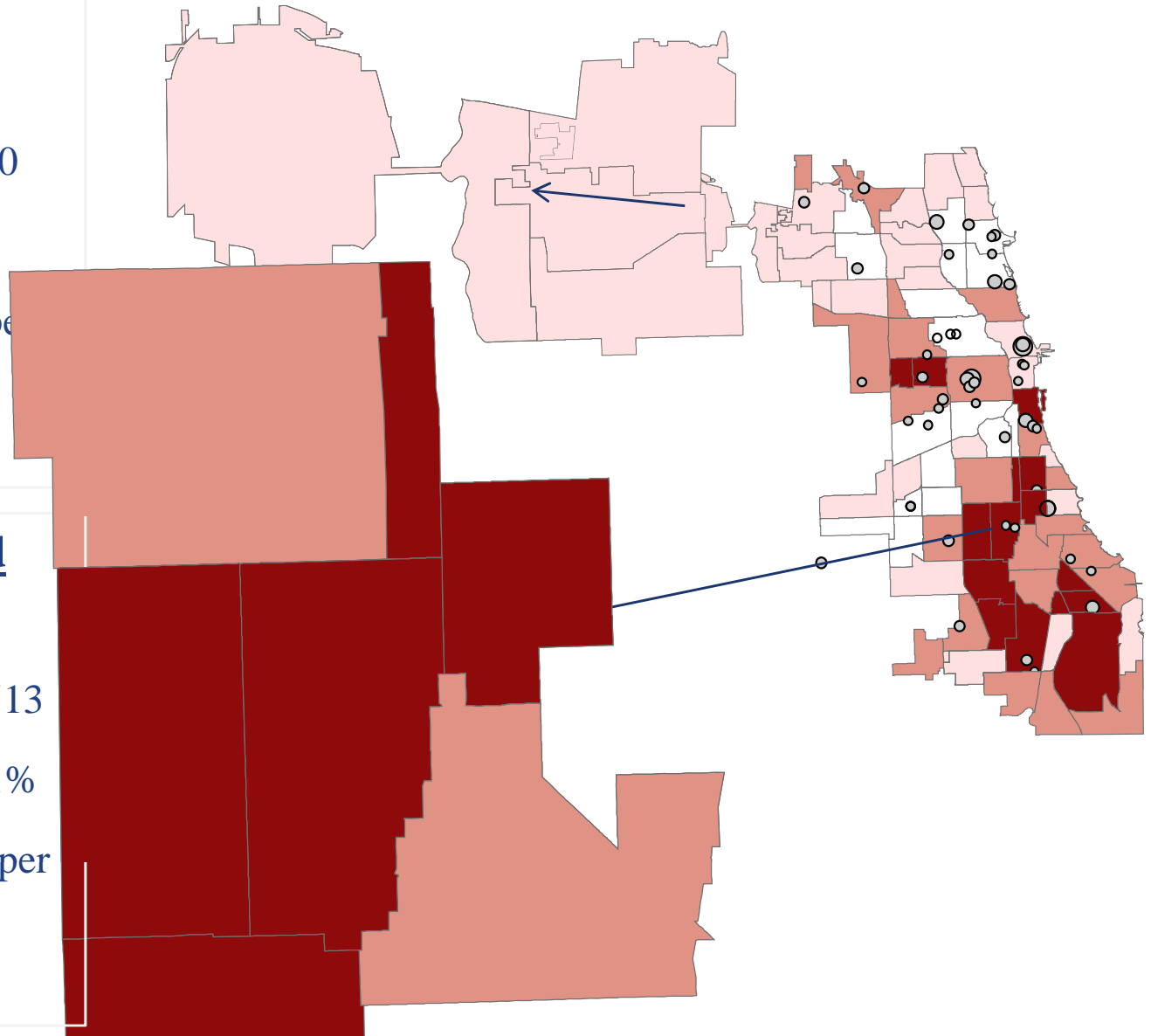
Snapshot of Two Racially Different Communities

Characteristics of O'Hare

- Predominately NH – White
- Median Household Income: \$30090
- % Women 35+ Below Poverty: 2%
- Breast Cancer Mortality Rate: 26 per 100,000 population
- # of Mammography Facilities: 0

Characteristics of Englewood

- Predominately NH- Black
- Median Household Income: \$19,513
- % Women 35+ Below Poverty: 21%
- Breast Cancer Mortality Rate: 41 per 100,000 population
- # of Mammography Facilities: 2



In Summary

- Not Enough Capacity in Chicago
Mammography Capacity is half of what is actually needed!
- Location of Mammography Services –
concentrated to serve affluent women which
are not in communities of color (communities
with the greatest need)
- Women do not know where to go for
screening
- Complexity of the system

Next Steps

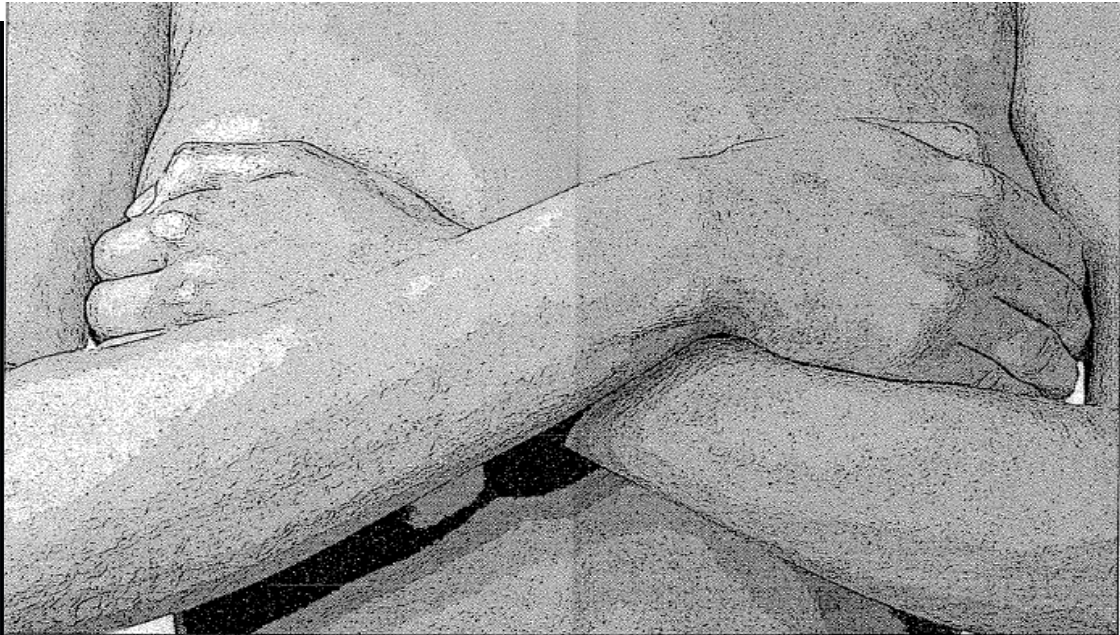
- Further our understanding of the disparity in each community area and the spacial relationships to breast health resources.
- Continue to document resource poor communities in need of targeted intervention.
- Metropolitan Chicago Breast Cancer Taskforce
- Helping Her Live



- Breast Cancer Summit held in March 2007 to organize leaders from prominent health care institutions across Metropolitan Chicago
- Created a Task Force to produce a report of recommendations on how to address disparities in breast cancer mortality
- Released Oct 17, 2007

Improving Quality and Reducing Disparities in Breast Cancer Mortality in Metropolitan Chicago

A pro...



-SUN-TIMES PHOTO ILLUSTRATION

Breast cancer disparity is cause for worry

The recent news about significant decreases in cancer deaths is a welcome relief for the entire health community, especially for those who research mortality rates in breast cancer. According to a report published

Grave disparities in the breast cancer mortality rate for African-American and Caucasian women

tions fail to explain how these biological differences could have manifested themselves in the past 10 years. Such racial disparities in breast cancer mortality are unacceptable. Leaders from Sinai Health System have joined our colleagues from Rush and Northwestern medical centers to remedy these problems in



A Report Prepared by the Metropolitan C...

October 20...

Breast cancer deadlier for blacks

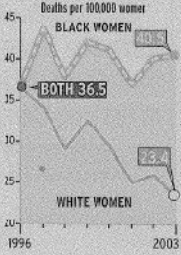
Why? Report blames racism, says mammograms, care may be inferior

BY JIM RITTER
Health Reporter

African-American women in Chicago are much more likely than white women to die from breast cancer, and the racial gap is widening, according to a new study that calls the disparity "morally wrong, medically unacceptable and reversible."

Just 10 years ago, black and white women in Chicago died at the same rate from breast cancer. But the most recent figures available, for 2003, show the mortality rate among black women was 73 percent higher, researchers at Mount Sinai Hospital's Urban Health Institute said.

BREAST CANCER DEATHS IN CHICAGO





Gaining Control of Breast Cancer
Tomando Control Sobre El Cáncer Del Seno

Sinai Urban Health Institute

HELPING HER LIVE

Gaining Control of Breast Cancer
Tomando Control Sobre el Cáncer Del Seno



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Questions?