

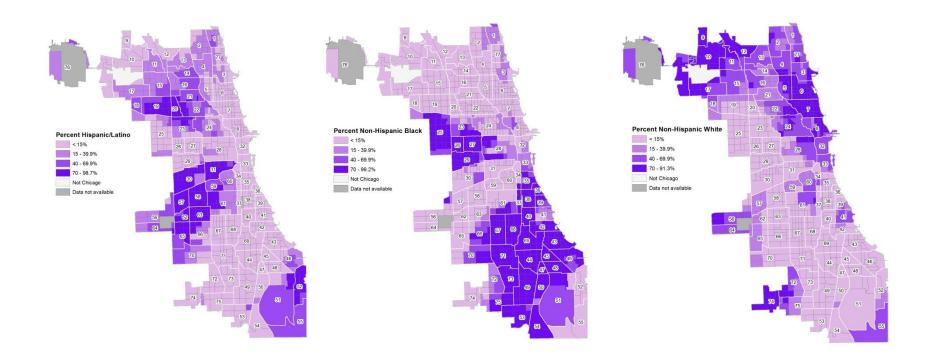
# Community Health Status Assessment: Mini-Compendium

#### Office of Epidemiology & Public Health Informatics

Nikhil G. Prachand, MPH
Director of Epidemiology
Nik.Prachand@cityofchicago.org

## **Overview**

Chicago is a diverse but segregated city, socioeconomically and racially/ethnically, which leads to a disproportionate burden of poor health among certain communities.

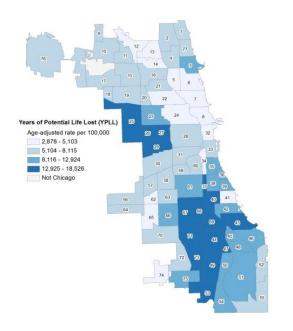


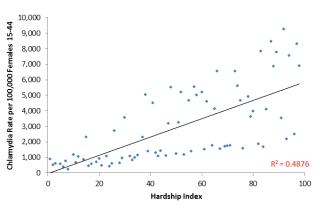
## **Equity**

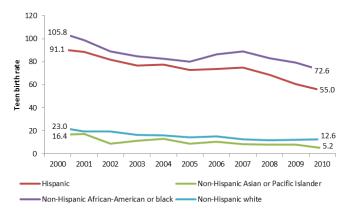
"When it's better for everyone, it's better for everyone."

—Eleanor Roosevelt

#### Equity is related to....







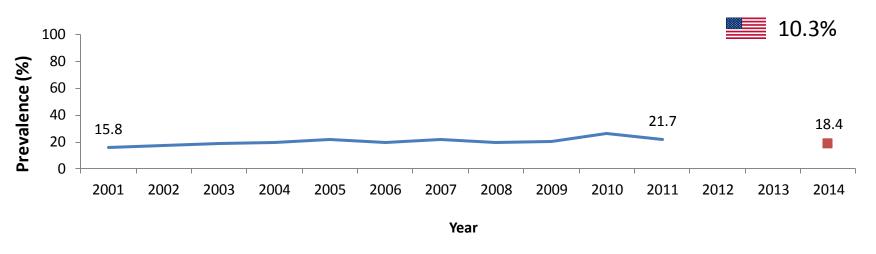
Place Socioeconomic Status Race-Ethnicity

## Length and Quality of Life

### **Fair or Poor Health Status**

18.4%

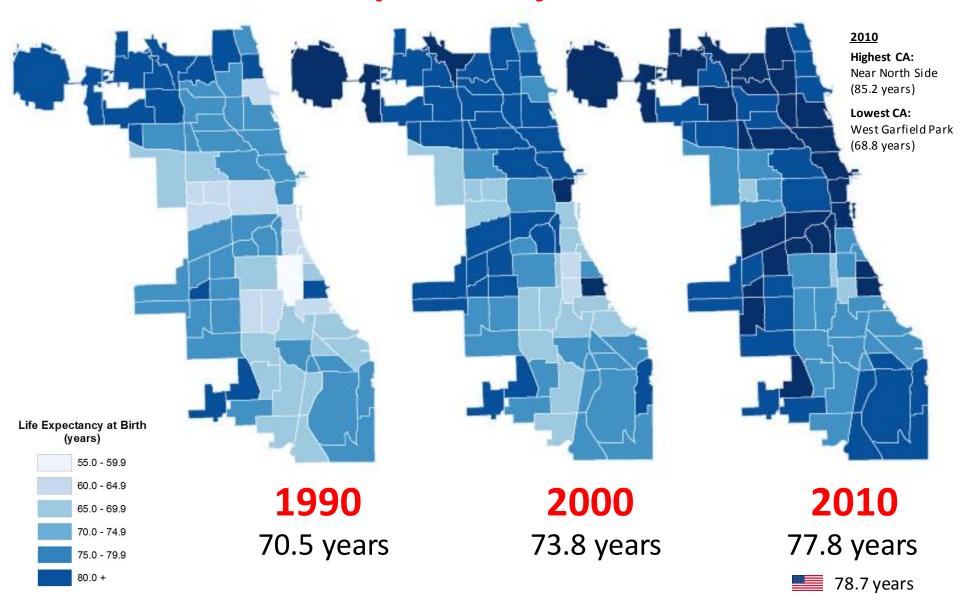
353,000 adults



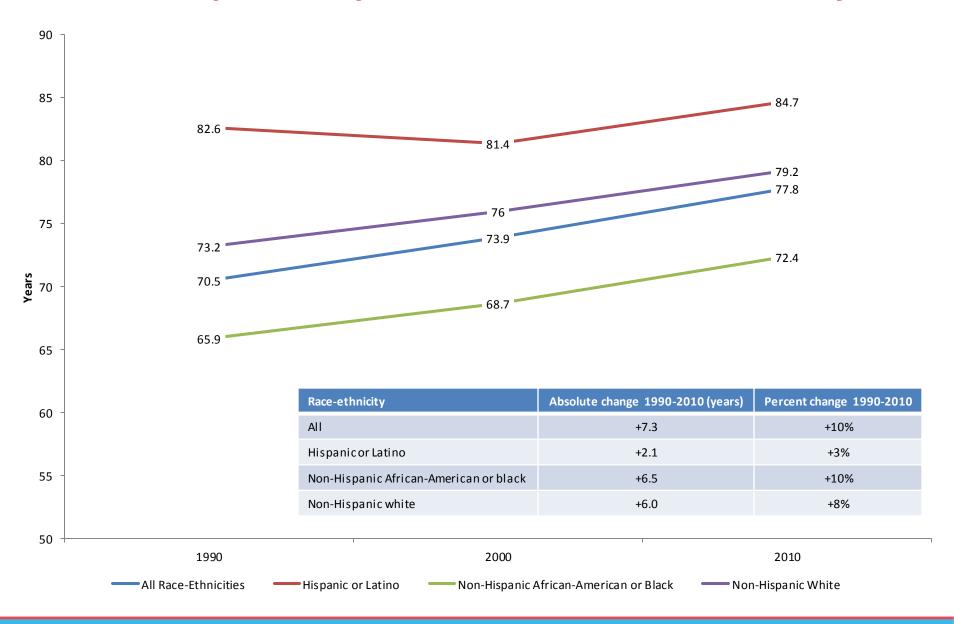
	2014								
Gender		Race-Ethnicity*		Ag	Age*		Hardship*		
	Male	17.1%	Hispanic	28.8%	18-29	12.0%	Low	13.8%	
	Female	19.7%	NH Black	20.1%	30-44	12.2%	Medium	18.3%	
			NH White	11.7%	45-64	25.0%	High	24.6%	
					65+	29.0%			

<sup>\*</sup> Indicates statistically significant difference at  $\alpha$  = 0.05

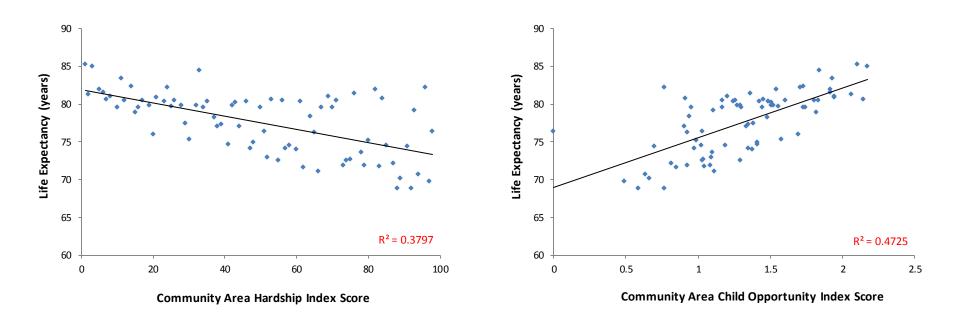
## Life Expectancy at Birth



## Life Expectancy at Birth and Race-Ethnicity



# Life Expectancy at Birth Correlated with Hardship and Opportunity



Life expectancy is higher in community areas with lower hardship and more opportunity.

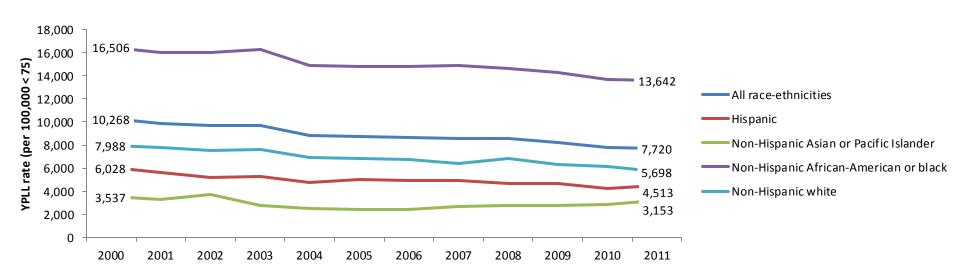
## **Premature Mortality**

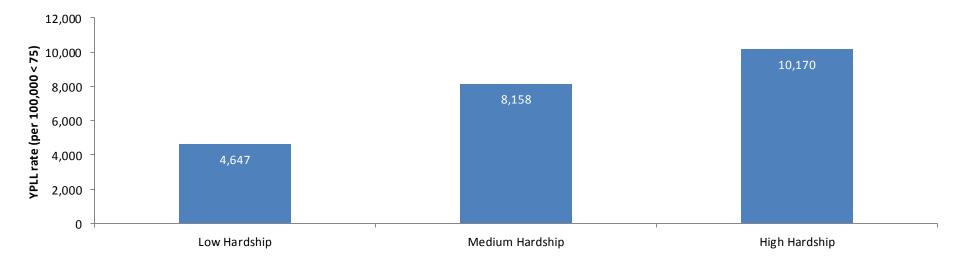
as measured by years potential life lost (YPLL)



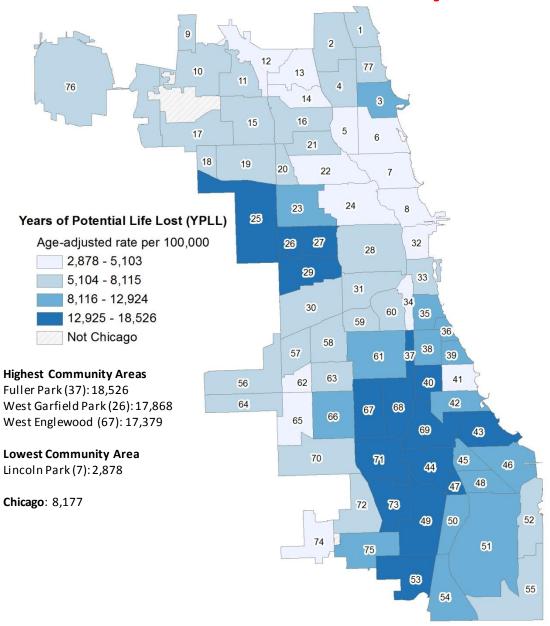
6,512 \_\_\_\_ 7,720







### **Premature Mortality**



# Chronic diseases are the leading causes of morbidity and mortality.

## **2011 Leading Causes of Hospitalization**

Cause of hospitalization	Visits	Crude Rate (per 10,000)	US Rate 2006 (per 10,000)	Rank
All Hospitalizations	401,089	1,487.9	NA	
Pregnancy, childbirth and the purperium	45,723	169.6	NA	
Certain conditions originating in the perinatal period (liveborn)	40,544	150.4	NA	
Heart disease	33,689	125.0	140.9	1
Substance-related disorders (includes alcohol-related disorders)	23,267	86.3	NA	2
Mood disorders	17,778	66.0	15.4	3
Schizophrenic disorders	14,730	54.6	NA	4
Malignant neoplasms	11,029	40.9	40.5	5
Septicemia	9,011	33.4	17.8	6
Pneumonia	8,278	30.7	41.3	7
Cerebrovascular disease	8,093	30.0	29.8	8
Asthma	7,325	27.2	14.9	9
Diabetes mellitus	7,112	26.4	19.6	10

## **2011 Leading Causes of Death**

Rank	Cause of Death	Number	Percent
	All Causes	18,769	
1	Heart Disease	4,991	26.7
2	Cancer	4,316	23.1
3	Stroke	886	4.7
4	Chronic Lower Respiratory Diseases	717	3.8
5	Accidents	636	3.4
6	Diabetes	565	3.0
7	Influenza and Pneumonia	472	2.5
8	Nephritis, Nephrotic Syndrome and Nephrosis	452	2.4
9	Septicemia	413	2.2
10	Homicide	399	2.1
•••	All Other Causes	4,922	25.9

Hospitalization and mortality rates due to disease and injury are decreasing.

## **2011** Hospitalizations At-a-Glance

Cause of Hospitalization	Number	Percent <sup>†</sup>	Percent change 2001-2011	Chicago vs. US <sup>¥</sup>	Correlation to Hardship (R <sup>2</sup> )	Geographic Disparity*	Black:White Disparity**	Hispanic Disparity <sup>€</sup>
Heart Disease	33,689	10.7	35% ♥	0.9	Moderate	3.1	2.0	1.0
Substance-related Disorders	23,267	7.4	36% <b>↑</b>	NA	Weak	45.0	2.0	0.2
Mood Disorders	17,778	5.6	11% 🛧	4.3	Weak	6.0	2.0	0.6
Schizophrenic Disorders	14,730	4.7	6% ♥	NA	None	27.7	3.6	0.6
Asthma	7,325	2.3						
<5 years	663	0.2	55% ♥	2.0	Moderate	14.0	2.3	1.3
≥ 65 years	1,299	0.4	18% 🛧	2.3	None	17.4	3.6	3.8
Diabetes	7,112	2.3	30% ♠	1.3	Strong	4.8	2.4	1.7
Preventable Hospitalizations	42,642	13.5	30% ♥	NA	Moderate	4.8	2.8	1.4

<sup>&</sup>lt;sup>†</sup>Of all non-childbirth-related hospitalizations

<sup>¥</sup> Ratio of Chicago and US rates

<sup>\*</sup>Ratio of zip code with highest age-adjusted rate and zip code with lowest rate

<sup>\*\*</sup>Ratio of Non-Hispanic African-American or black and Non-Hispanic white rates

<sup>€</sup> Ratio of Hispanic and non-Hispanic white rates

## **2011 Mortality At-a-Glance**

Cause of Death	Percent <sup>†</sup>	Percent Change 2000-2011	Chicago vs. US <sup>¥</sup>	Relationship to Hardship	Geographic Disparity*	Black:White Disparity**	Hispanic Disparity <sup>€</sup>	Premature Mortality (YPLL): NH Black	Premature Mortality (YPLL): NH White	Premature Mortality (YPLL): Hispanic
Heart Disease	27%	30% <b>↓</b>	1.2	Moderate	3.3	1.2	0.6	2,537	1,216	549
Cancer	23%	19%↓	1.1	Moderate	2.3	1.3	0.7	2,264	1,367	648
Diabetes	3%	13%↓	1.0	Strong	5.5	1.8	1.4	310	100	86
Stroke	5%	35% <b>↓</b>	1.0	Moderate	3.2	1.7	0.8	369	127	84
Accidents	3%	37%↓	0.6	Strong	5.2	1.3	0.8	968	582	469
Homicide	2%	34% <b>↓</b>	2.5	Strong	81.1	24.9	6.0	1,775	51	479
Suicide	1%	21%↓	0.5	Strong	NA	0.7	0.4	227	282	148
Premature Mortality (YPLL for all cause)		25% <b>↓</b>	1.2	Strong	6.4	2.4	0.8	13,642	5,698	4,513
Life Expectancy		10%个	1.0	Moderate	1.2	0.9	1.1			

†Of all deaths

<sup>¥</sup>Ratio of Chicago and US rates

<sup>\*</sup>Ratio of community area with highest age-adjusted rate and community area with lowest rate

<sup>\*\*</sup>Ratio of Non-Hispanic African-American or black and Non-Hispanic white rates

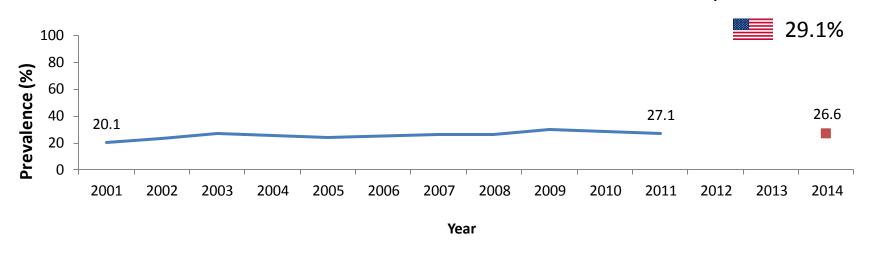
<sup>&</sup>lt;sup>€</sup>Ratio of Hispanic and non-Hispanic white rates

Incidence of chronic disease is increasing.

## **Hypertension**

26.6%

508,000 adults



Gender		Race-Ethnicity*		Ag	Age*		Hardship		
Male	26.7%	Hispanic	18.6%	18-29	6.5%	Low	23.5%		
Female	26.6%	NH Black	29.3%	30-44	16.0%	Medium	28.6%		
		NH White	23.6%	45-64	37.8%	High	28.8%		
				65+	62.2%				

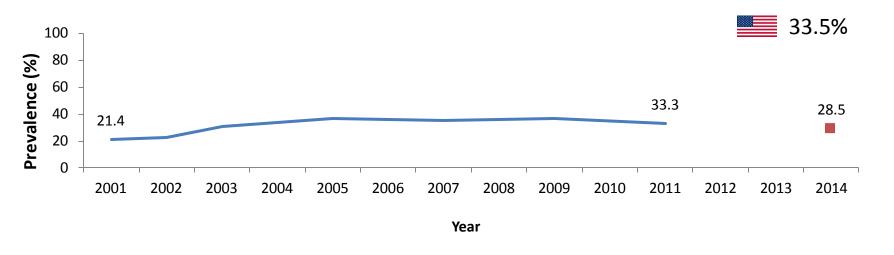
2014

<sup>\*</sup> Indicates statistically significant difference at  $\alpha$  = 0.05

## **High Cholesterol**

28.5%

424,000 adults



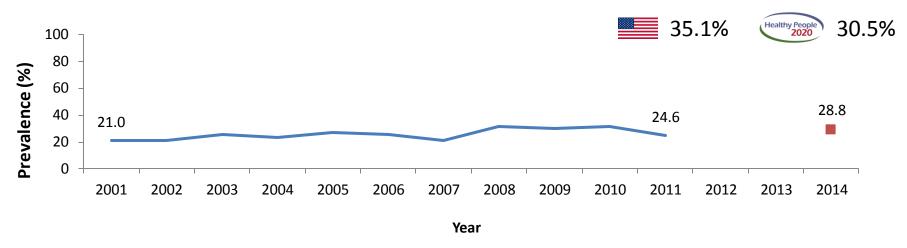
				2	014 —				
	Gender		Race-Ethnicity			Age*		Hardship	
	Male	31.9%	Hispanic	28.5%		18-29	11.9%	Low	27.9%
Fe	male	25.5%	NH Black	26.6%		30-44	14.9%	Medium	30.2%
			NH White	30.0%		45-64	41.7%	High	27.6%
						65+	45.8%		

<sup>\*</sup> Indicates statistically significant difference at  $\alpha$  = 0.05

## **Adult Obesity**

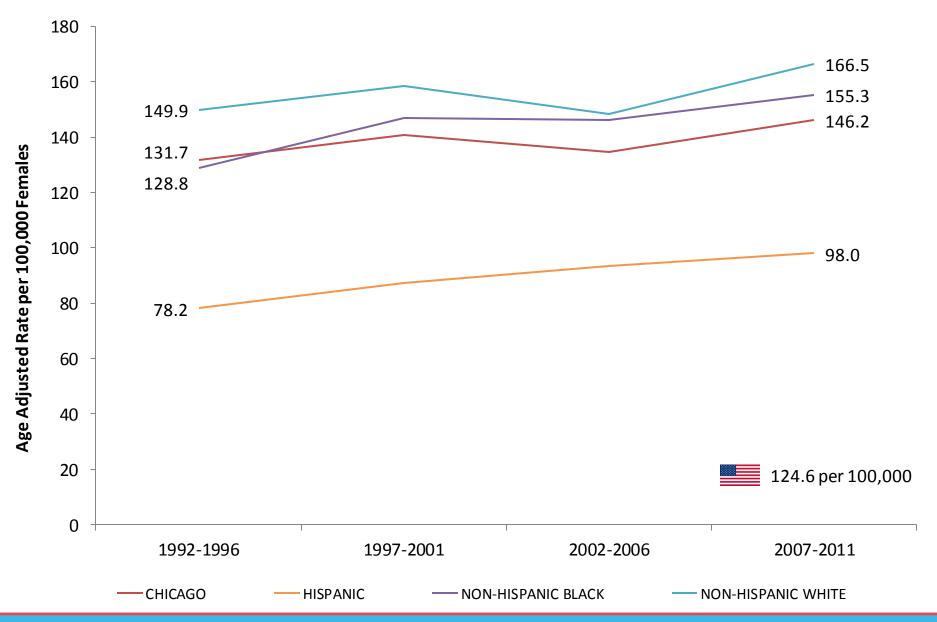
28.8%

552,000 adults



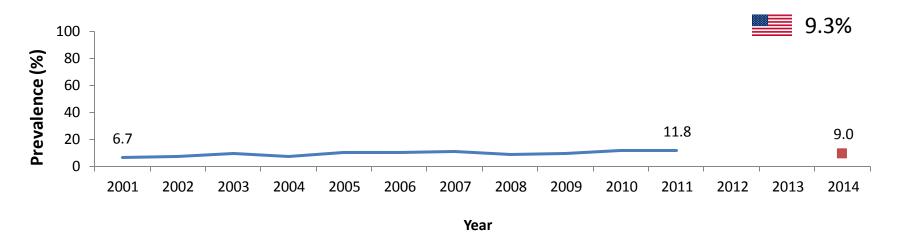
	2014 —								
Gender*		er*	Race-Eth	nicity*	Ag	Age*		Hardship*	
	Male	24.9%	Hispanic	32.1%	18-29	23.2%	Low	21.0%	
	Female	32.3%	NH Black	37.8%	30-44	27.2%	Medium	30.5%	
			NH White	23.7%	45-64	36.8%	High	37.3%	
					65+	24.8%			

### **Female Breast Cancer Incidence**



### **Diabetes Prevalence**

9.0% 172,000 adults



2014									
Gender		Race-Ethnicity		Age	Age*		Hardship		
Male	9.2%	Hispanic	8.6%	18-29	1.0%	Low	7.3%		
Female	8.8%	NH Black	12.3%	30-44	4.7%	Medium	9.8%		
		NH White	5.8%	45-64	14.0%	High	10.4%		
				65+	22.1%				

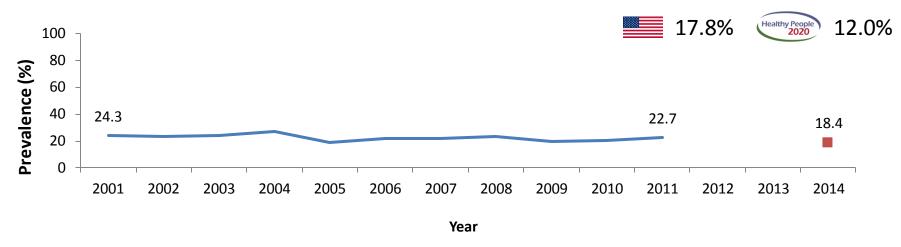
<sup>\*</sup> Indicates statistically significant difference at  $\alpha$  = 0.05

# Little to no improvement in healthy behaviors among adults overall.

## **Current Smoking**

18.4%

351,000 adults



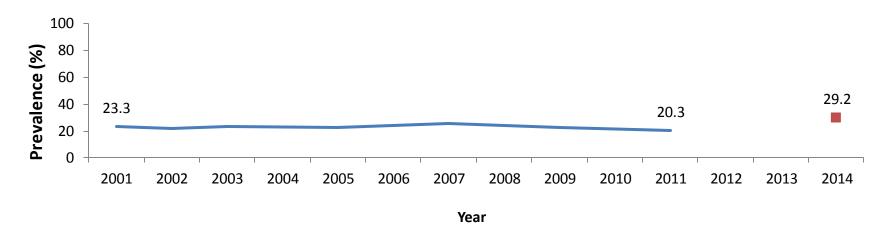
Gender\* Race-Ethnicity\* Hardship\* Age 19.2% Male 21.8% Hispanic 18.5% 18-29 11.5% Low Female 15.4% NH Black 25.3% 18.1% 20.3% 30-44 Medium **NH White** 20.2% 13.7% 45-64 High 25.4% 13.4% 65+

2014

<sup>\*</sup> Indicates statistically significant difference at  $\alpha$  = 0.05

# 5+ Servings Fruits & Vegetables 29.2%

554,000 adults



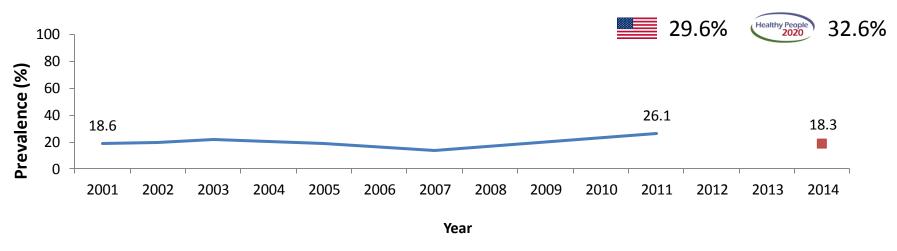
2014 —								
Gender		Race-Ethnicity*		Ag	ge	Hardship*		
Male	25.7%	Hispanic	23.6%	18-29	27.8%	Low	36.1%	
Female	32.3%	NH Black	18.9%	30-44	34.2%	Medium	29.8%	
		NH White	41.3%	45-64	27.5%	High	19.5%	
				65+	24.3%			

<sup>\*</sup> Indicates statistically significant difference at  $\alpha$  = 0.05

## **No Physical Activity**

18.3%

350,000 adults



2014 Gender Race-Ethnicity\* Hardship\* Age Hispanic Male 15.5% 20.3% 18-29 15.8% 13.5% Low **Female** 20.8% NH Black 22.4% 14.9% 17.3% 30-44 Medium 45-64 20.9% NH White 12.3% High 25.4% 24.4% 65+

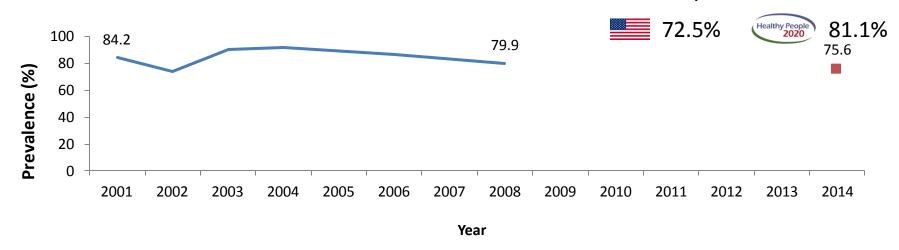
<sup>\*</sup> Indicates statistically significant difference at  $\alpha$  = 0.05

## Mammogram

Women aged 50-74 years reporting having a mammogram in the past two years

75.6%

236,000 women



2014

#### Gender

Male	NA
Female	75.6%

#### Race-Ethnicity

Hispanic	70.4%
NH Black	84.2%
NH White	71.3%

#### Age

18-29	NA
30-44	NA
45-64	74.0%
65+	80.2%

#### Hardship

Low	76.9%
Medium	77.7%
High	72.2%

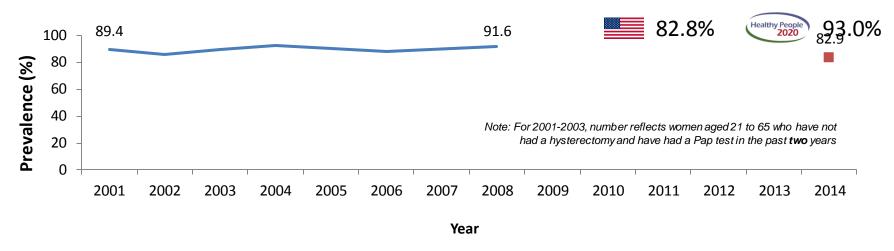
<sup>\*</sup> Indicates statistically significant difference at  $\alpha$  = 0.05

## Pap Test

Women aged 21-65 years, who have not had a hysterectomy, reported having a Pap test within the past three years

82.9%

574,000 women



Gender Age\* Race-Ethnicity Hardship Male NA Hispanic 81.0% 21-29 70.3% 91.3% Low **Female** 82.9% **NH Black** 83.5% 92.6% 88.4% 30-44 Medium NH White 83.6% 45-64 82.1% High 92.3% 57.9% 65

2014

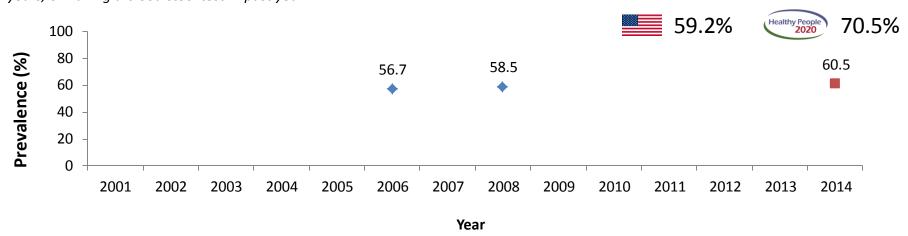
<sup>\*</sup> Indicates statistically significant difference at  $\alpha$  = 0.05

## **Colorectal Screening**

Adults aged 50 to 75 reporting having a sigmoidoscopy/colonoscopy in past 10 years, having a sigmoidoscopy/colonoscopy in the past 5 years and a blood stool test in past 3 years, or having a blood stool test in past year

60.5%

363,000 adults



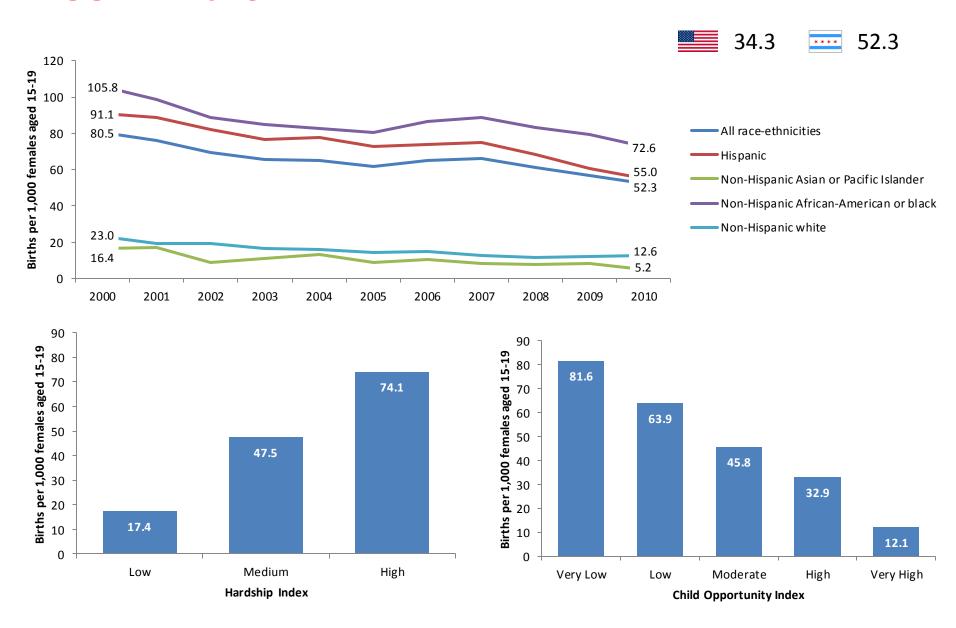
2014									
Gender		Race-Ethnicity*		Age	Age*		Hardship*		
Ma	e 63.4%	Hispanic	48.8%	18-29	NA	Low	67.5%		
Fema	e 58.0%	NH Black	60.0%	30-44	NA	Medium	60.8%		
		NH White	64.4%	45-64	57.0%	High	50.6%		
				65+	69.6%				

2014

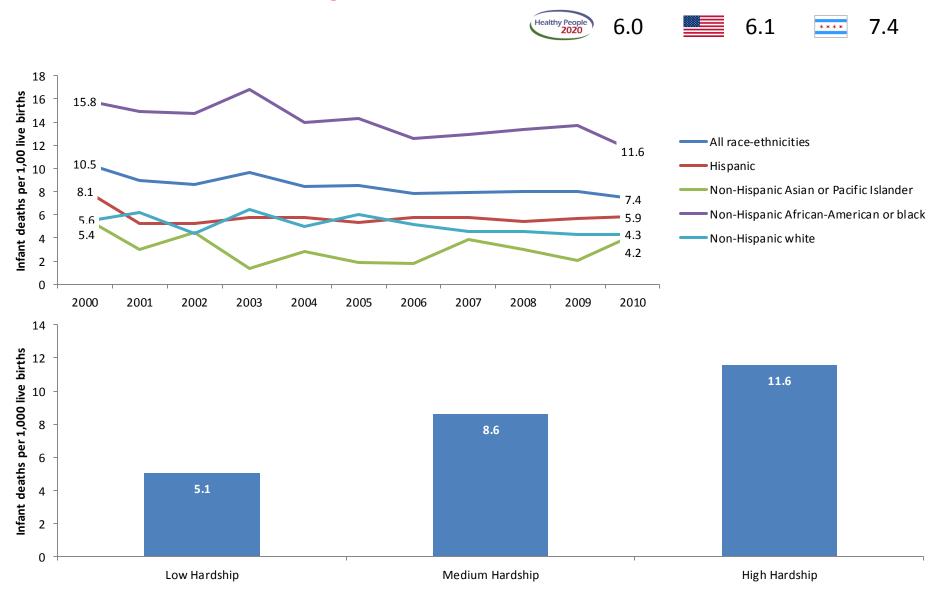
<sup>\*</sup> Indicates statistically significant difference at  $\alpha$  = 0.05

# Gains have been made in reducing teen births and infant mortality.

### **Teen Births**



## **Infant Mortality**



## **2010 Natality At-A-Glance**

Natality Indicator	Percent change 2000-2010	Chicago vs. US <sup>¥</sup>	Correlation to Hardship	Geographic Disparity*	Black:White Disparity**	Hispanic Disparity <sup>€</sup>
Early and adequate prenatal care (%)	19% 🛧	1.1	Moderate	1.7	0.8	1.0
First trimester prenatal care (%)	12% 🛧	1.2	Strong	1.5	0.8	0.9
Teen birth rate	35% ♥	1.5	Strong	17.9	5.8	4.4
Preterm (%)	6% ♥	0.9	Weak	3.6	1.4	1.0
Low birth weight (%)	1% ♥	1.2	Moderate	6.5	1.9	1.0
Very low birth weight (%)	10% ♥	1.4	Moderate	40.0	2.4	1.1
Infant mortality rate	30% ♥	1.2	Strong	9.6	2.7	1.4

<sup>&</sup>lt;sup>¥</sup>Ratio of Chicago and US rates/percentages

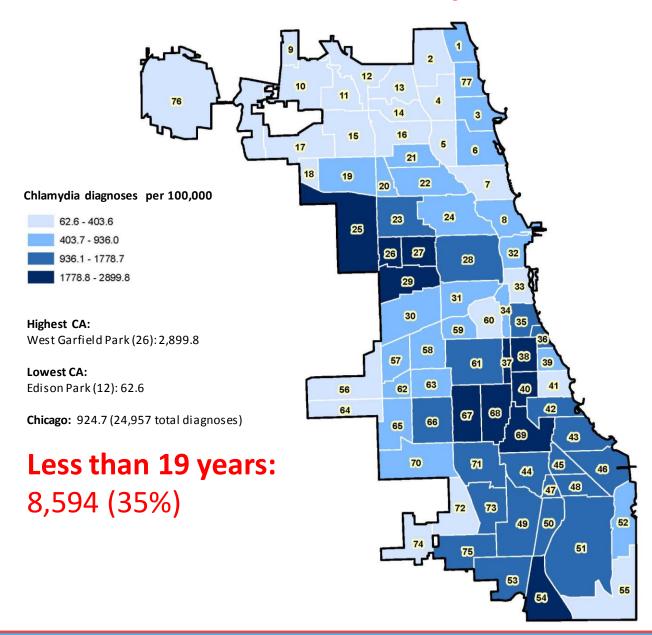
<sup>\*</sup>Ratio of community area with highest rate/percent and community area with lowest rate/percentage

<sup>\*\*</sup>Ratio of Non-Hispanic African-American or black and Non-Hispanic white rates/percentages

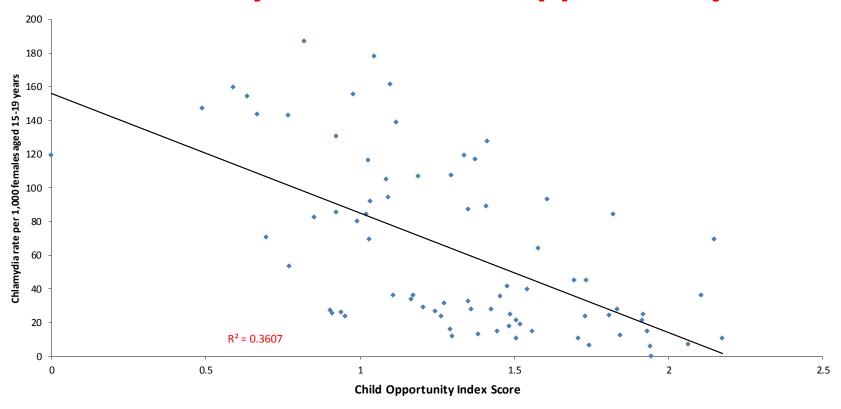
<sup>€</sup> Ratio of Hispanic and non-Hispanic white rates/percentages

Sexually transmitted infections and violence embody the most extreme inequities, especially among adolescents and young adults.

### 2013 Chlamydia

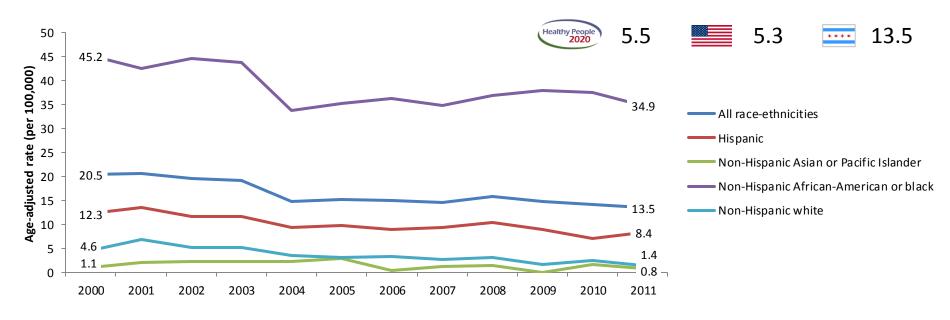


## **Chlamydia and Child Opportunity**

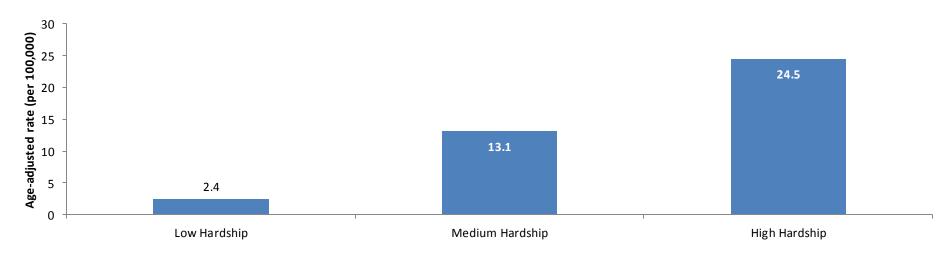


Chlamydia among females aged 15-19 years is higher in community areas with less opportunity.

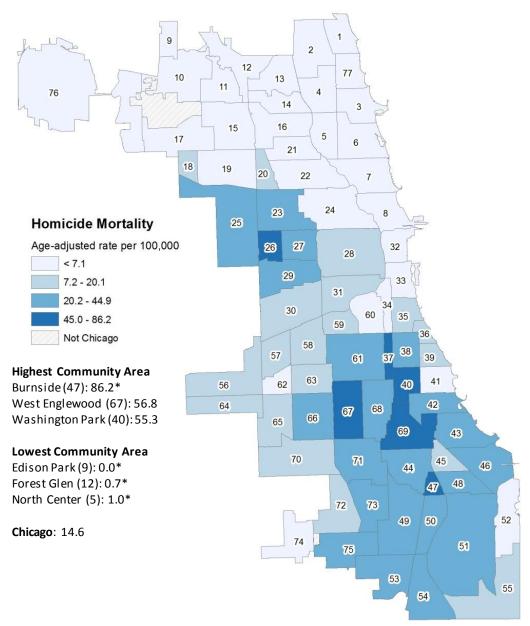
## **Homicide**



Since 2006, 47% of all homicide victims were less than 25 years old.



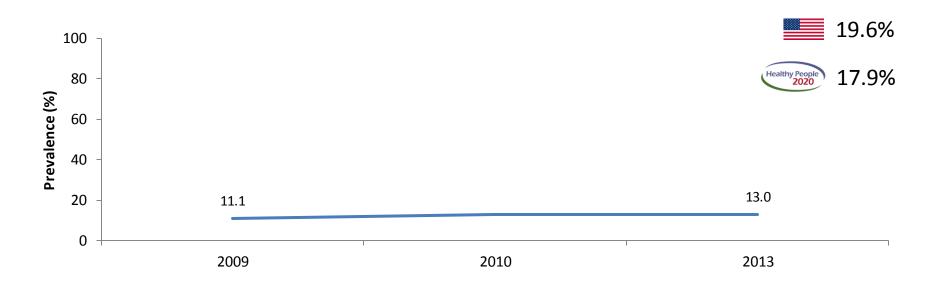
#### **Homicide**



<sup>\*</sup> Rates are unreliable due to the low number of reported deaths due to this cause during this period.

LGB youth experience higher rates of healthrisk behaviors than their heterosexual peers.

## **Bullied on school property**



~	^	4	
•	"	1	~
_	u	_	

#### Gender

Male	13.1%
Female	12.7%

#### Race-Ethnicity

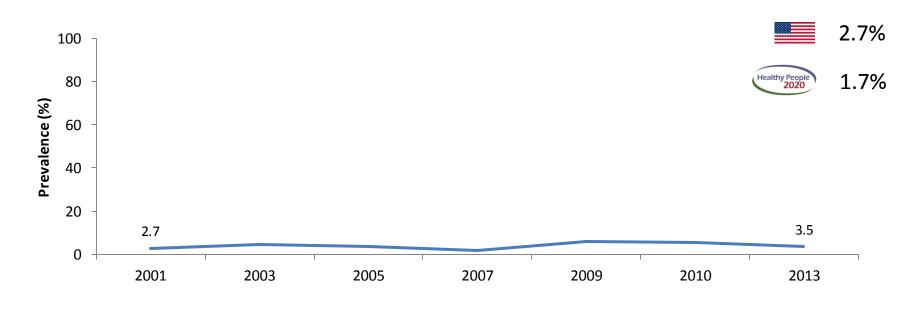
Hispanic	12.9%
NH Black	9.3%
NH White	21.3%

#### Grade\*

9 <sup>th</sup>	18.5%
10 <sup>th</sup>	11.9%
11 <sup>th</sup>	11.8%
12 <sup>th</sup>	9.0%

Heterosexual	10.2%
LGB/ unsure	30.4%

## Suicide attempt resulting in injury



2013

G	er	١d	er
_	•		

Male	3.2%
Female	3.8%

#### Race-Ethnicity

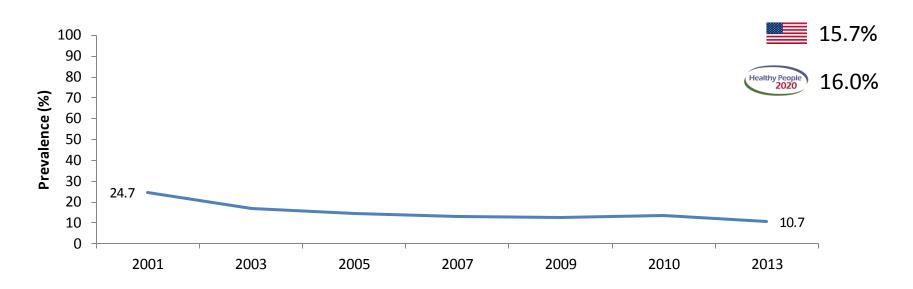
Hispanic	2.7%
NH Black	3.9%
NH White	2.3%

#### Grade

9 <sup>th</sup>	4.5%
10 <sup>th</sup>	3.6%
11 <sup>th</sup>	2.6%
12 <sup>th</sup>	2.6%

Heterosexual	1.9%
LGB/ unsure	11.3%

## **Currently smoke cigarettes**



2013

#### Gender

Male	14.0%
Female	7.5%

### Race-Ethnicity\*

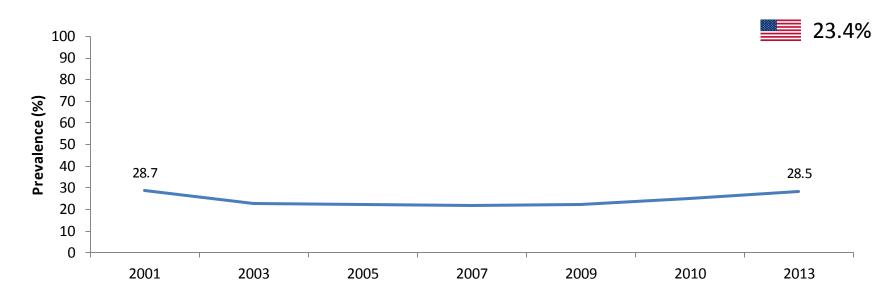
Hispanic	13.1%
NH Black	5.5%
NH White	18.4%

#### Grade

9 <sup>th</sup>	7.0%
10 <sup>th</sup>	8.1%
11 <sup>th</sup>	14.1%
12 <sup>th</sup>	12.5%

Heterosexual	9.0%
LGB/ unsure	19.3%

## **Currently use marijuana**



2013

#### Gender

Male	31.7%
Female	25.3%

#### Race-Ethnicity

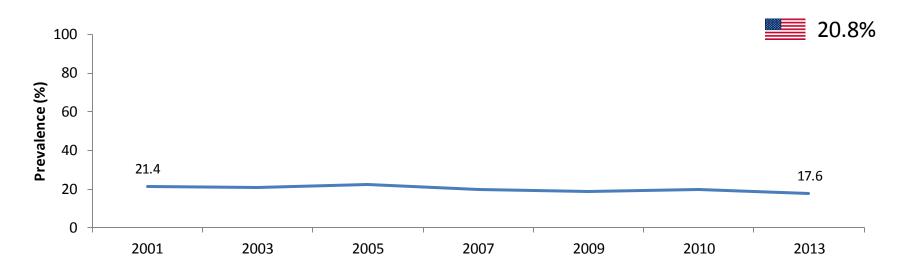
Hispanic	27.8%
NH Black	31.4%
NH White	24.5%

#### Grade

9 <sup>th</sup>	27.4%
10 <sup>th</sup>	29.2%
11 <sup>th</sup>	28.4%
12 <sup>th</sup>	29.2%

25.9%

## Binge drinking



2013

#### Gender

Male	19.1%
Female	16.1%

### Race-Ethnicity\*

Hispanic	21.0%
NH Black	10.9%
NH White	24.3%

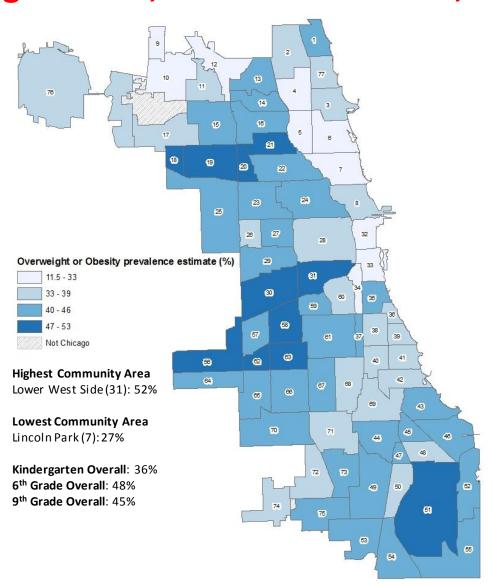
#### Grade

9 <sup>th</sup>	13.8%
10 <sup>th</sup>	15.1%
11 <sup>th</sup>	19.7%
12 <sup>th</sup>	23.3%

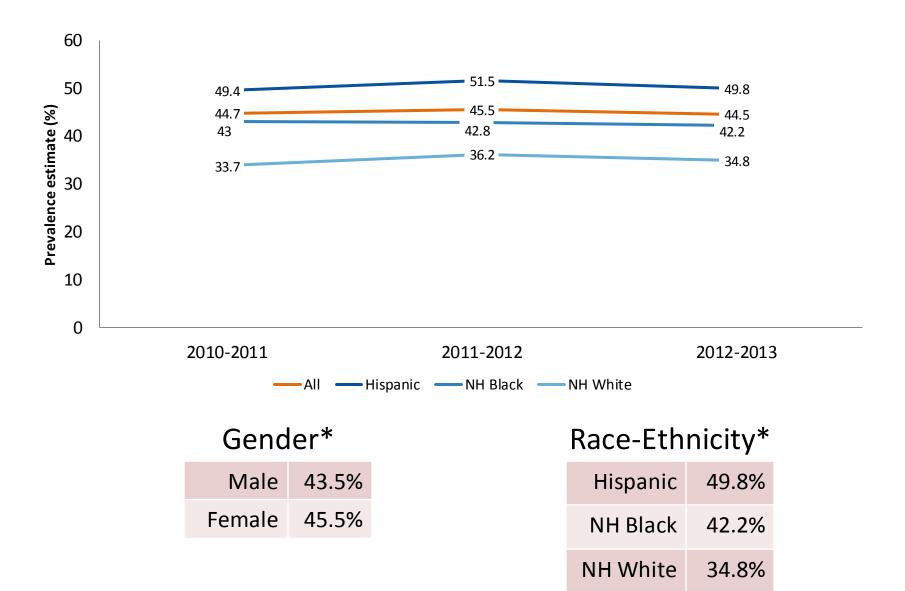
Heterosexual	16.0%
LGB/ unsure	25.1%

Over one-third of Chicago's school-aged children are overweight or obese.

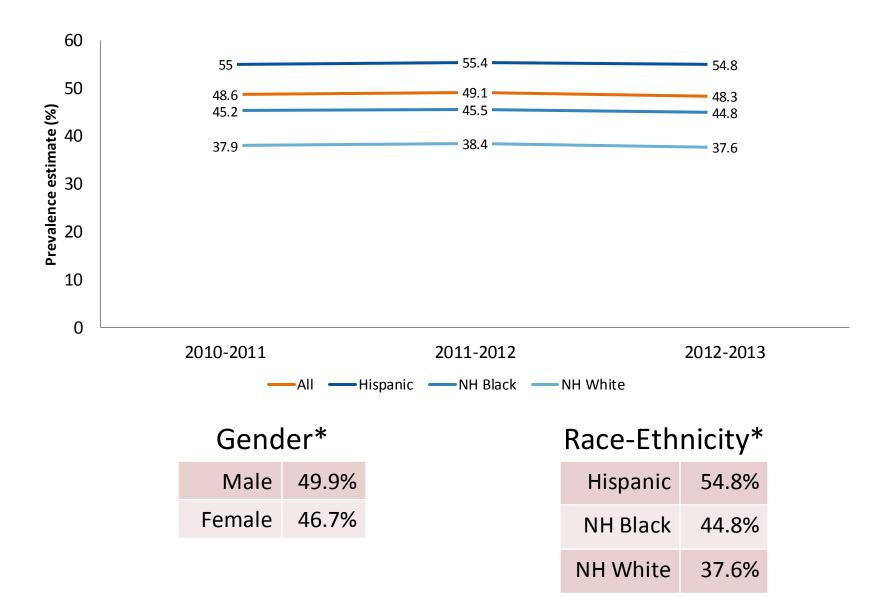
## Obesity and Overweight in Kindergarteners, 6<sup>th</sup> and 9<sup>th</sup> Graders, 2012-13



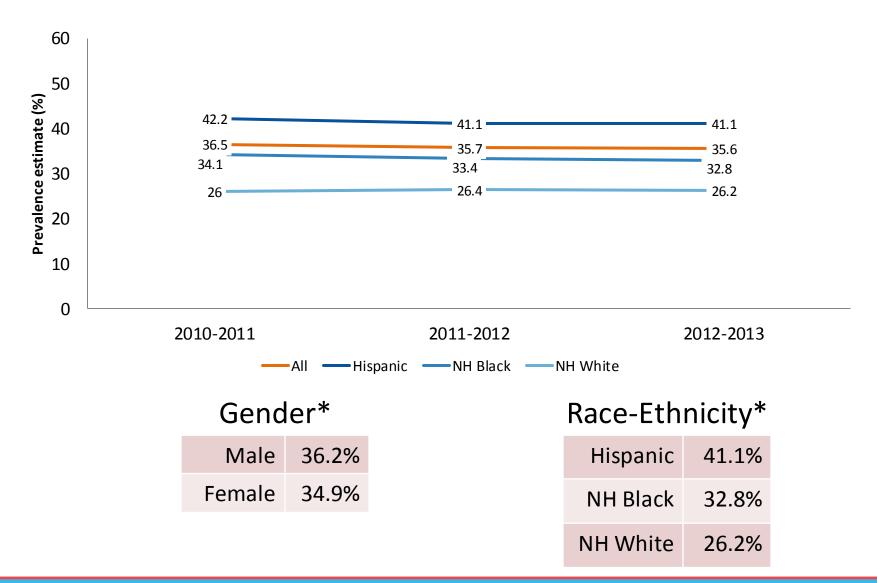
## Overweight or Obese, 9th grade



## Overweight or Obese, 6th grade

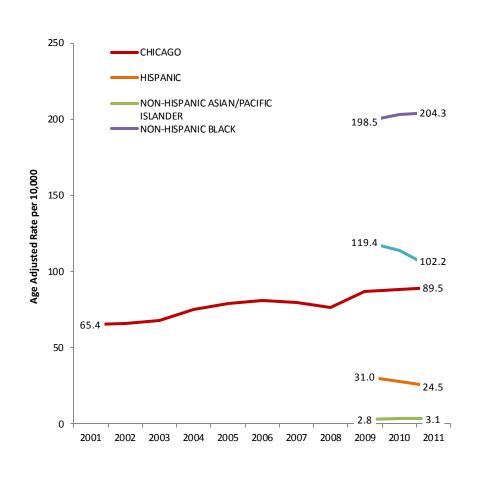


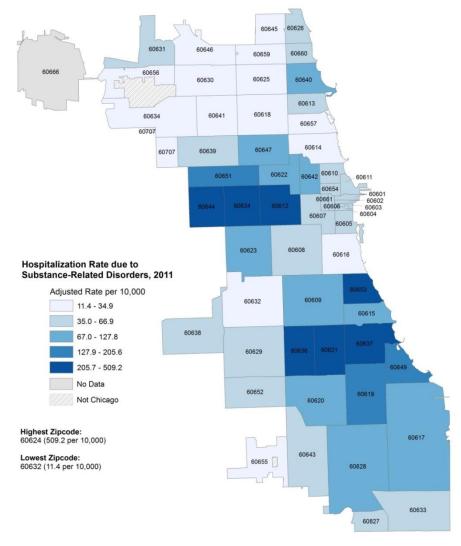
## Overweight or Obese, Kindergarten



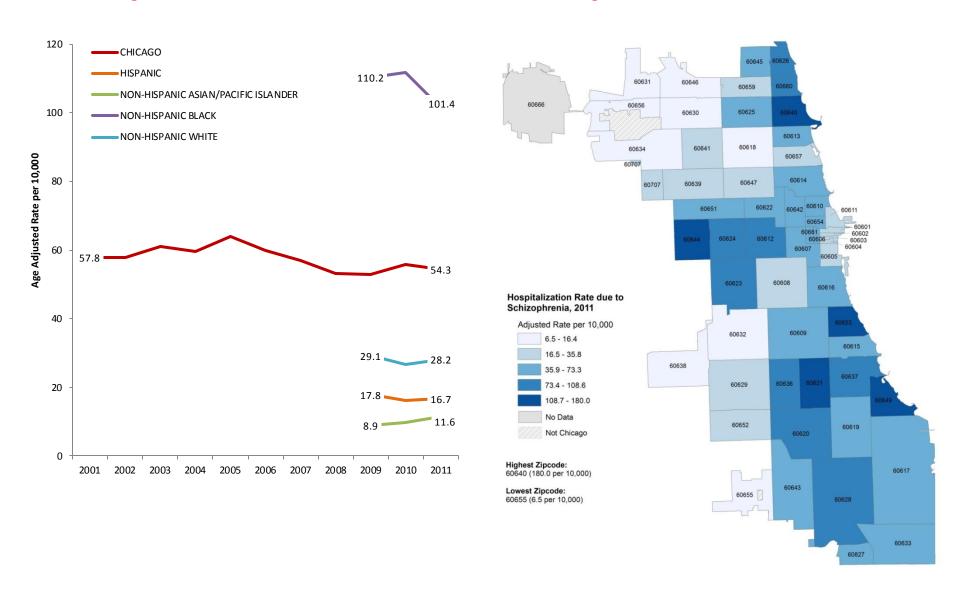
# Mental illness is a leading cause of hospitalizations.

## Hospitalizations due to Substance-related Disorders

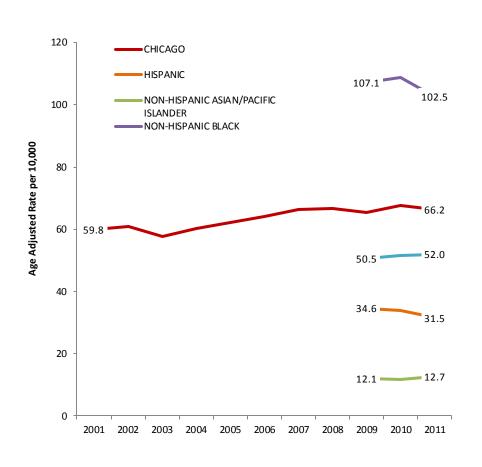


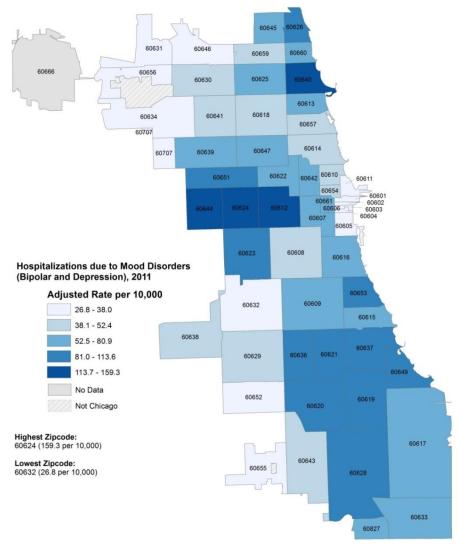


## Hospitalizations due to Schizophrenic Disorders



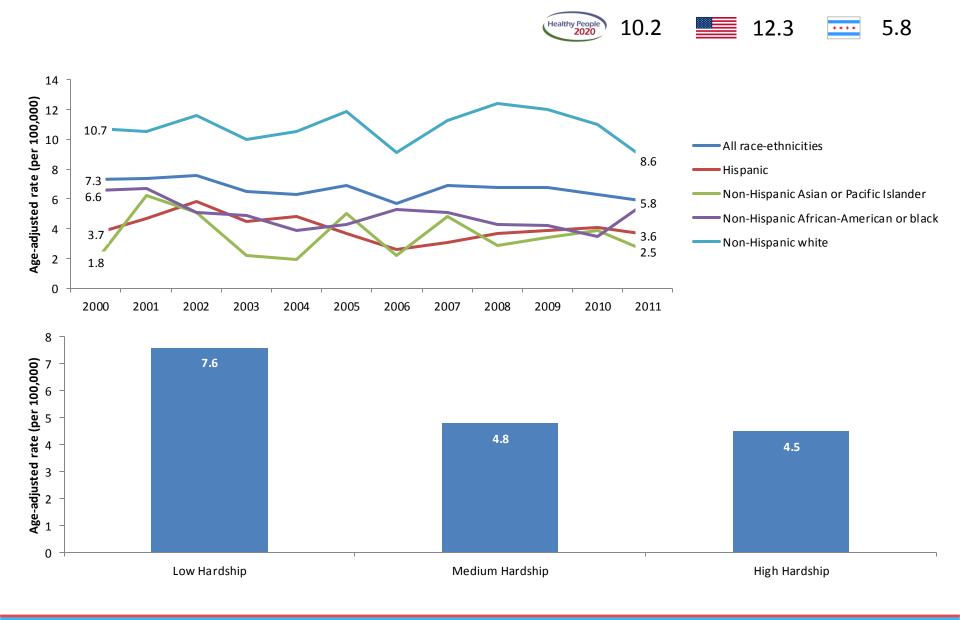
## **Hospitalizations due to Mood Disorders**

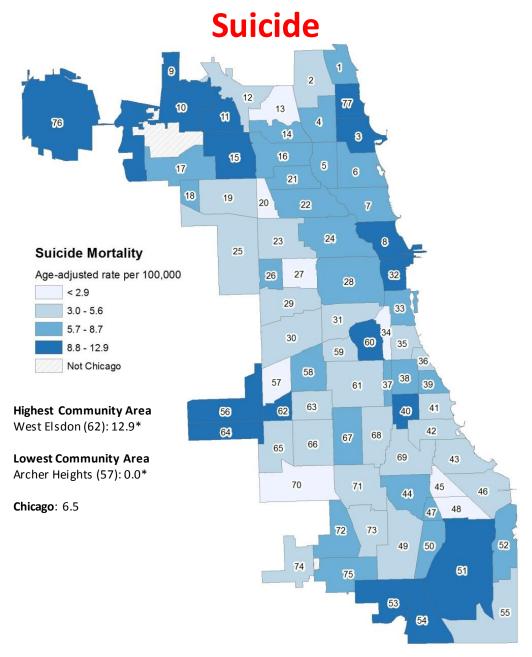




## Mental Health

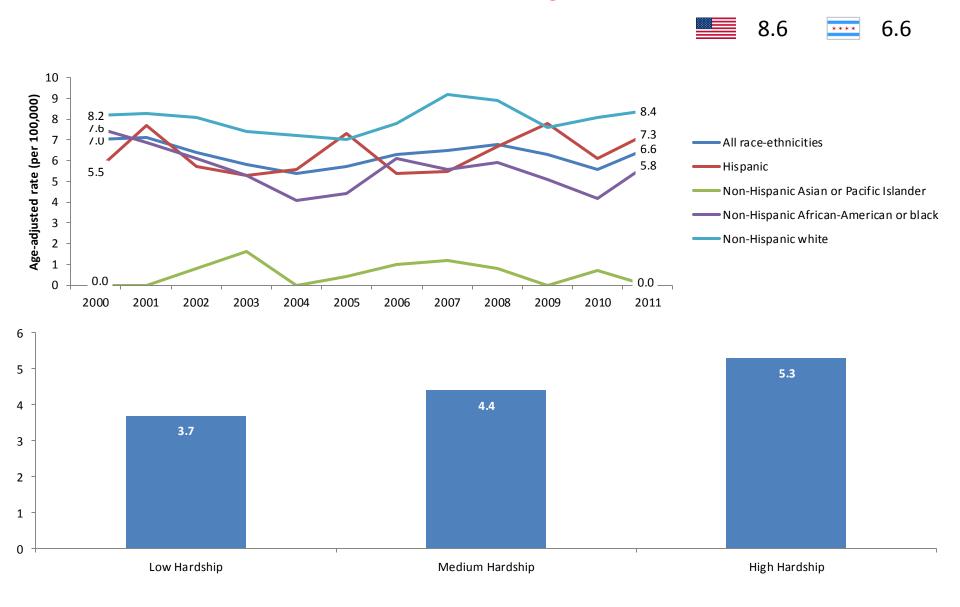
## Suicide

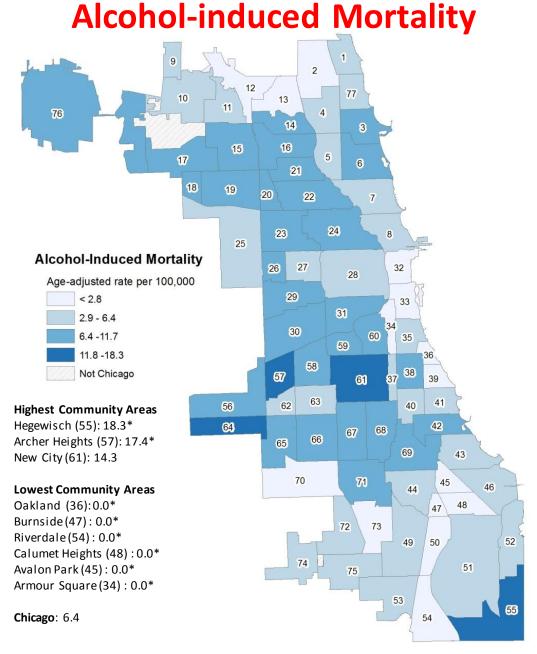




<sup>\*</sup> Rates are unreliable due to the low number of reported deaths due to this cause during this period.

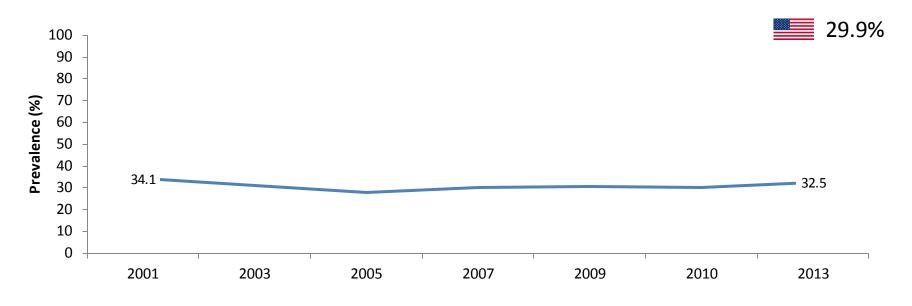
## **Alcohol-induced Mortality**





<sup>\*</sup> Rates are unreliable due to the low number of reported deaths due to this cause during this period.

## Felt sad or hopeless



2013

Ge	nd	ler*	
UC	HU	וכו	

Male	23.5%
Female	40.7%

Race-Ethnicity

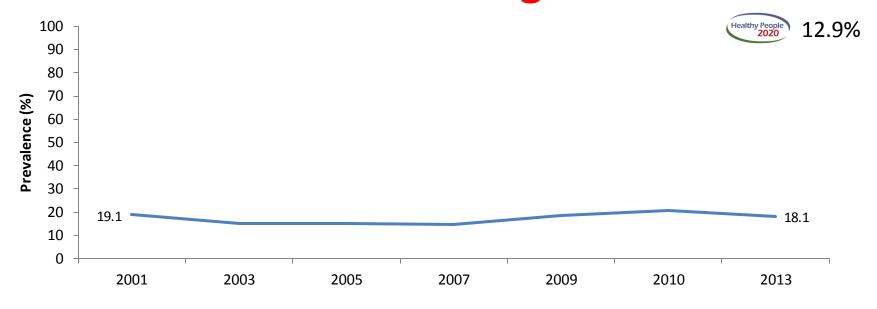
Hispanic	37.6%
NH Black	29.8%
NH White	24.6%

#### Grade

9 <sup>th</sup>	30.9%
10 <sup>th</sup>	33.8%
11 <sup>th</sup>	34.4%
12 <sup>th</sup>	30.7%

Heterosexual	28.8%
LGB/ unsure	55.1%

## **Exhibited disordered eating**



2013

#### Gender\*

Male	13.2%	
Female	22.5%	

#### Race-Ethnicity

Hispanic	20.5%
NH Black	16.8%
NH White	12.2%

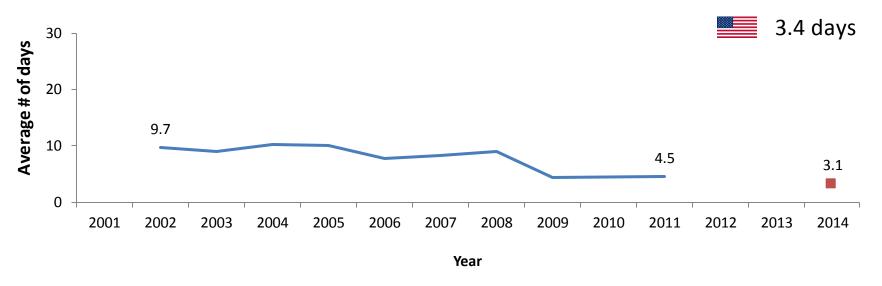
#### Grade

9 <sup>th</sup>	21.3%
10 <sup>th</sup>	19.3%
11 <sup>th</sup>	17.2%
12 <sup>th</sup>	13.1%

Heterosexual	14.5%
LGB/ unsure	37.5%

## **Mentally Unhealthy Days**

## 3.1 days



			<del></del> 20	14			
Gende	er	Race-Ethn		Ag	e	Hards	ship*
Male	2.7	Hispanic	3.6	18-29	2.8	Low	2.6
Female	3.5	NH Black	3.4	30-44	3.5	Medium	3.9
		NH White	2.8	45-64	3.4	High	3.1
				65+	2.4		

<sup>\*</sup> Indicates statistically significant difference at  $\alpha$  = 0.05

## Psychological Distress (Kessler 6 Score)

- About how often in the past 30 days did you feel...
  - Nervous?
  - Hopeless?
  - Restless or Fidgety?
  - So depressed that nothing could cheer you up?
  - That everything was an effort?
  - Worthless?

No psychological distress

87%

Mild/Moderate distress

8%

Serious distress

5%

## **Mental Health**

**Frequent Mental Distress** 

(14+ days where mental health was not good)

9.2%

10.2%

**Ever Had Depression** 

16.7%

16.9%

**Current Mental Health Treatment** 

10.4%

## **Access to Mental Health Treatment**

During the past 12 months, was there any time when you needed mental health treatment for yourself but didn't get it? 5.8%

## Why didn't you get the treatment you needed?

Couldn't afford it	43.1%
Did not know where to go for services	24.1%
Health insurance doesn't cover or pay enough for mental health treatment	16.9%
Worried about stigma or privacy	8.1%
Concerned I'd be committed to a psychiatric hospital	7.5%

## **Binge Drinking**

Males having five or more drinks on one occasion or females having four or more drinks on one occasion in the past 30 days.

29.0%

600,000 adults

17.1%

Gender\*

Male	38.1%
Female	20.3%

Race-Ethnicity\*

Hispanic	33.2%
NH Black	18.6%
NH White	38.6%

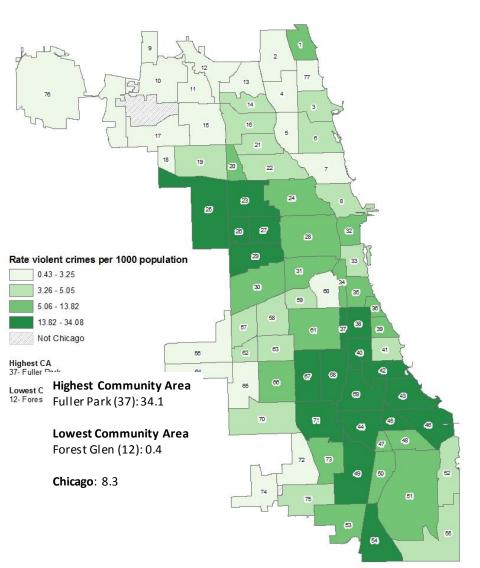
Age

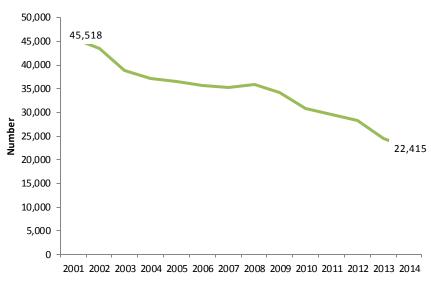
18-29	37.7%
30-44	37.4%
45-64	20.8%
65+	5.7%

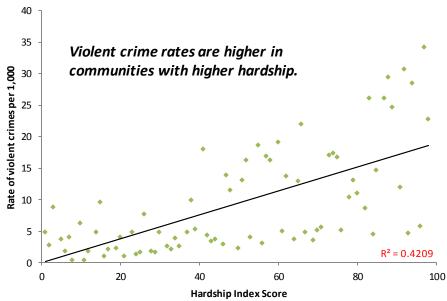
<sup>\*</sup> Indicates statistically significant difference at  $\alpha$  = 0.05

## Crime and Violence

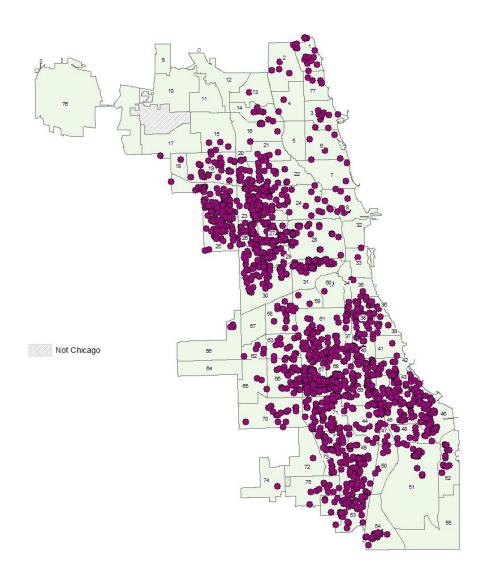
## **Violent** Crime

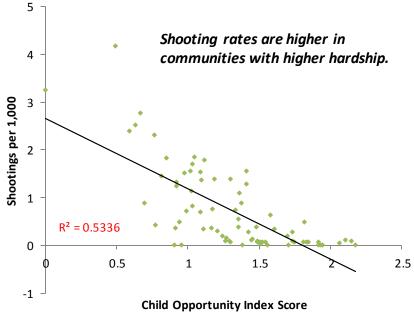






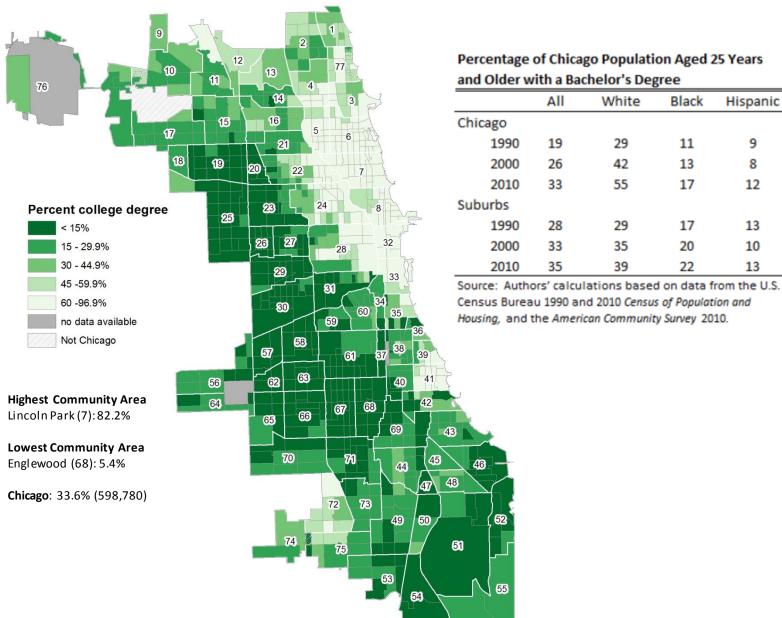
## **Non-fatal Shootings**



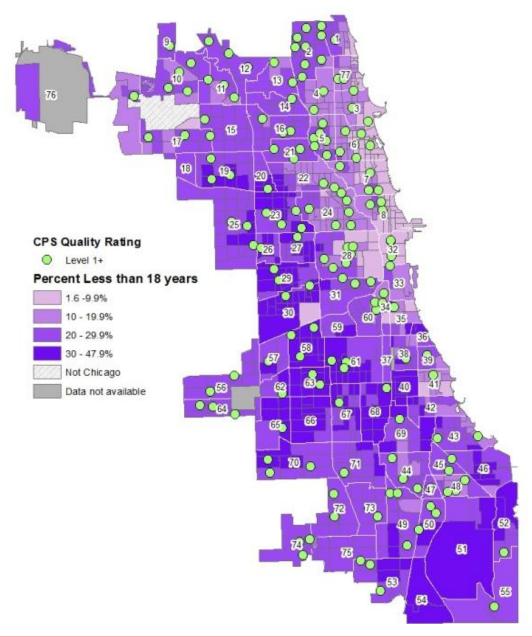


## Education

## Population with at Least a College Diploma

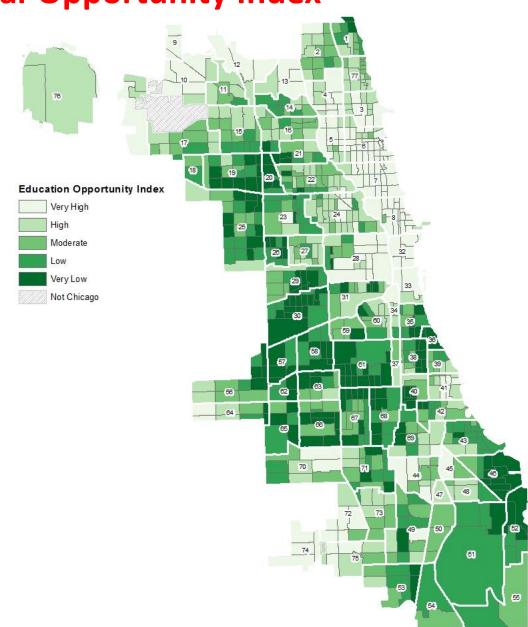


#### **Lots of Kids ≠ Good Schools**

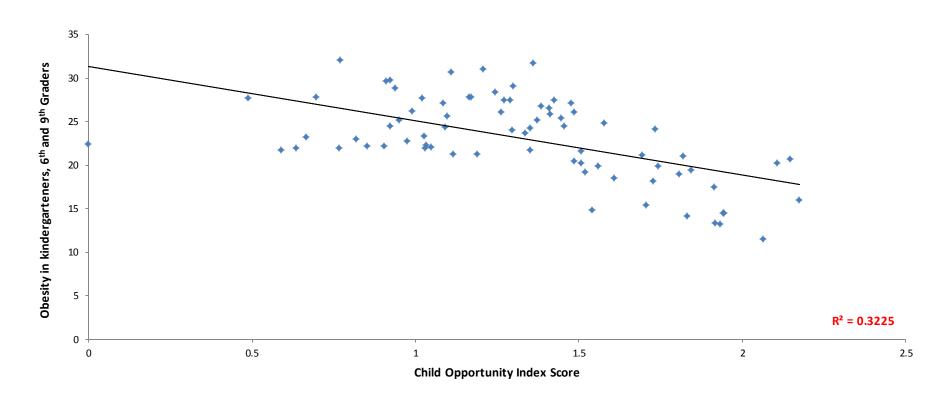


## **Educational Opportunity Index**

- Adult educational attainment
- Student (school) poverty rate
- Reading proficiency rate
- Math proficiency rate
- Early childhood education neighborhood participation patterns
- High school graduation rate
- Proximity to high-quality early childhood education centers
- Proximity to early childhood education centers of any type



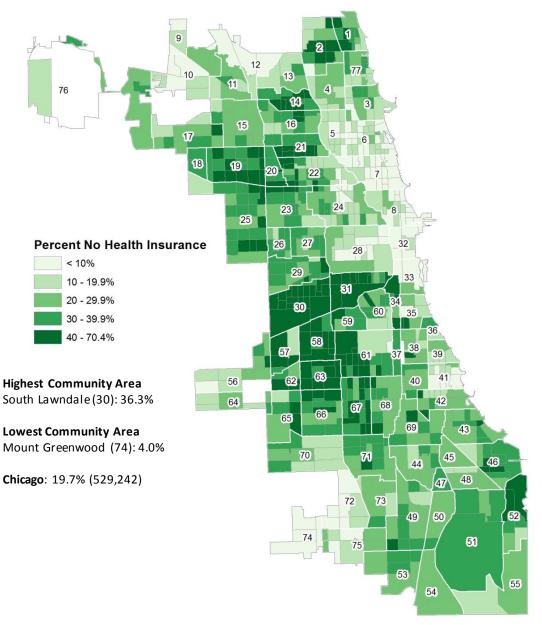
### **Educational Opportunity and Obesity**



Obesity among CPS kindergarteners, sixth and ninth graders in greater in children with more educational opportunity.

### Access to Health Care

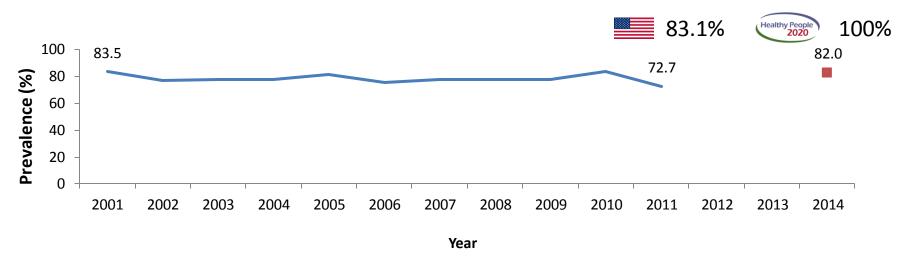
### **Uninsured among 18-64 Year Olds**



## **Has Health Coverage**

82.0%

1,558,000 adults

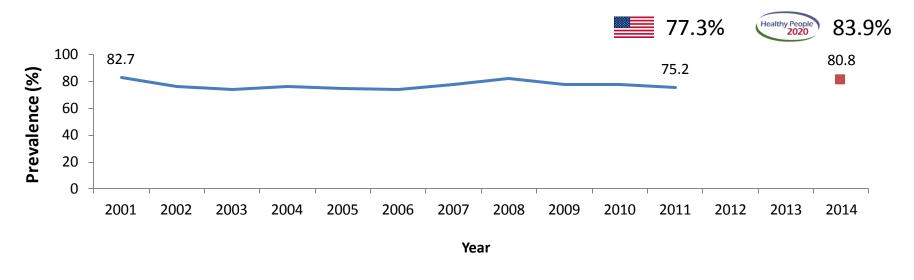


2014									
Gender*		Race-Ethnicity*		Age*		Hardship*			
Male	77.1%	Hispanic	65.3%	18-29	75.4%	Low	89.5%		
Female	86.3%	NH Black	83.3%	30-44	78.7%	Medium	79.0%		
		NH White	91.8%	45-64	84.1%	High	75.0%		
				65+	96.6%				

## **Have Primary Care Provider**

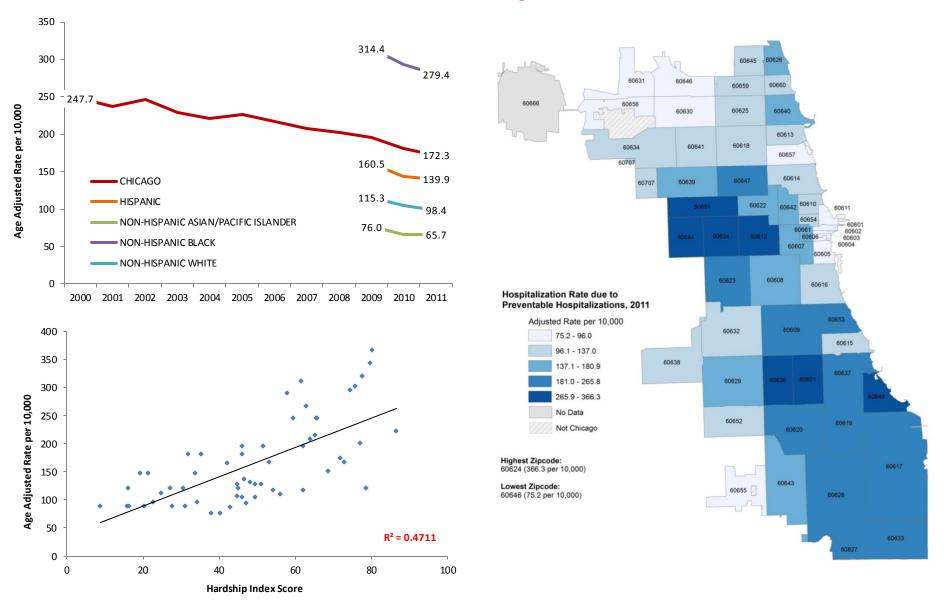
80.8%

1,539,000 adults

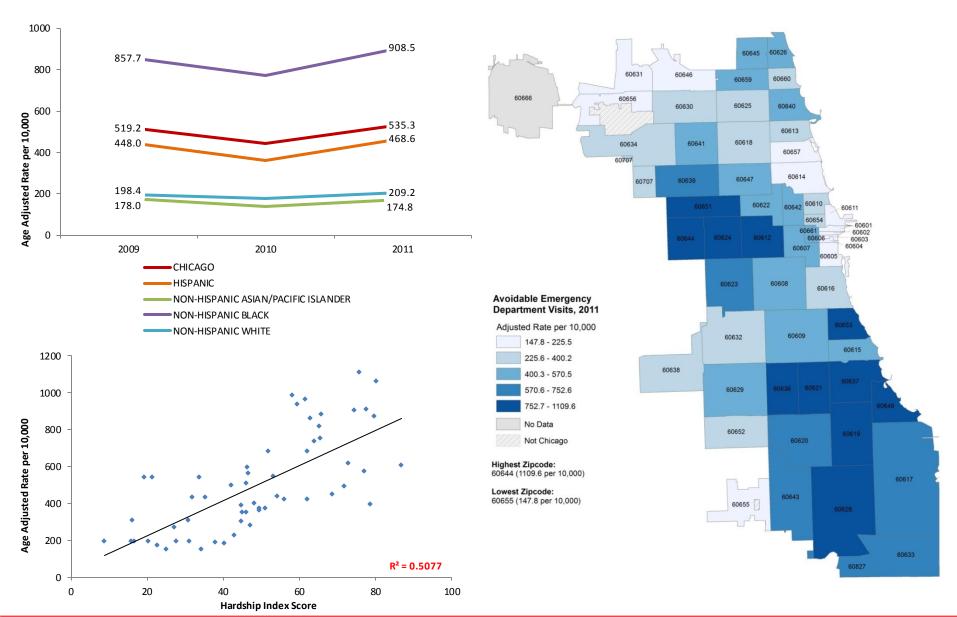


2014 —										
	Gender*		Race-Ethnicity*		Age*		Hardship*			
	Male	72.6%	Hispanic	68.4%	18-29	71.3%	Low	85.8%		
	Female	88.2%	NH Black	79.4%	30-44	76.6%	Medium	80.9%		
			NH White	89.7%	45-64	86.8%	High	74.1%		
					65+	94.0%				

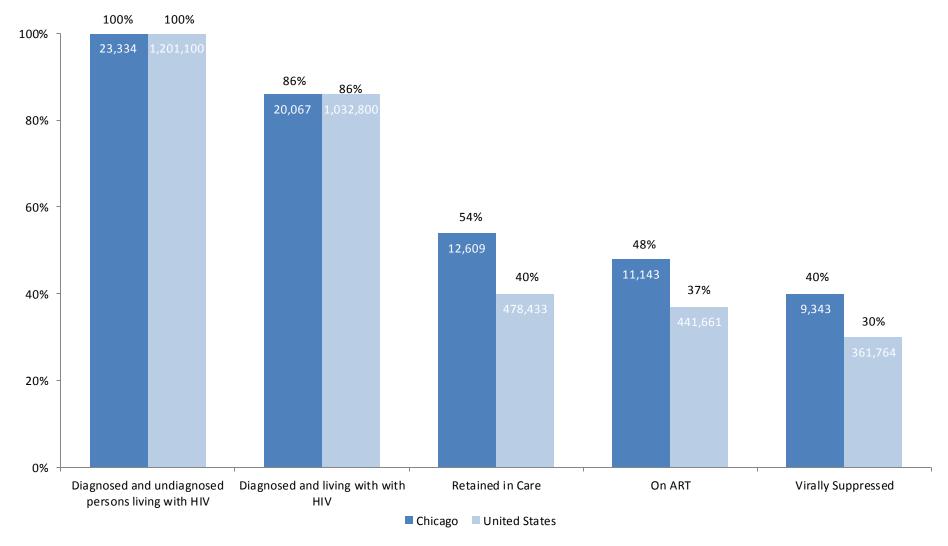
### **Preventable Hospitalizations**



### **Avoidable Emergency Department Visits**



### **HIV Continuum of Care, 2011**



<sup>&</sup>lt;sup>a</sup> CDC National Estimate of Persons Living with HIV (Diagnosed and Undiagnosed)

b Number of persons ≥18 years of age on 12/31/2010 diagnosed with HIV infection through 12/31/2010, and living with HIV on 12/31/2011.

<sup>&</sup>lt;sup>c</sup> Total weighted population estimate of HIV-infected adults who had at least 1 documented HIV medical care visit in 2011.

d Total HIV-infected adults (# of Retained, % of Living) who had at least 1 documented HIV medical care visit in 2011 with a documented prescription for antiretroviral therapy (ART) in 2011.

e Total HIV-infected adults (# of on ART, % of Living) who had at least 1 documented HIV medical care visit in 2011 and had a documented HIV viral load of undetectable or ≤ 200 copies/mL at most recent viral load test.

# **Economic Stability**

### **Hardship Index**

#### Dependency

 Percentage of the population under 18 or over 64 years of age

### Crowded housing

 Percentage of occupied housing with more than one person per room

#### Poverty

 Percentage of persons living below the federal poverty level

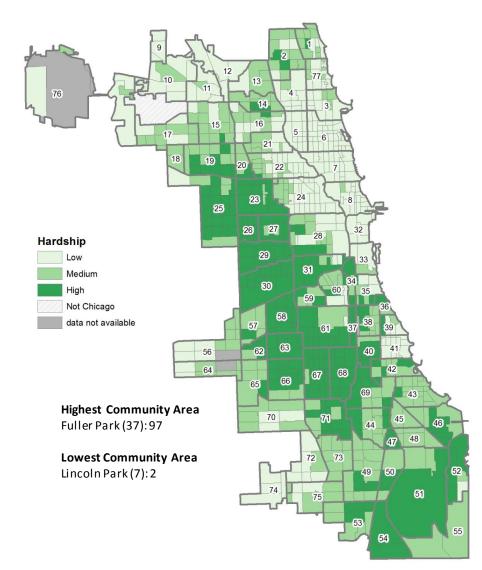
### Per capita income

### Unemployment

 Percentage of persons in the labor force over the age of 16 years that are unemployed

### No high school graduation

Percentage of person over the age of 25 years without a high school diploma



### **Population Characteristics by Hardship**

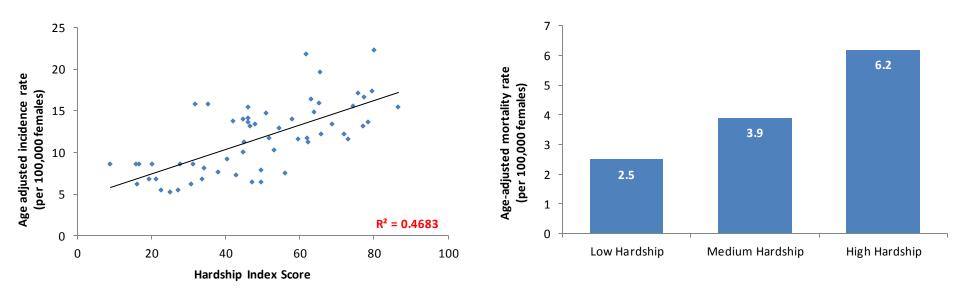
	Low		Medium		High	
	Number	Percent	Number	Percent	Number	Percent
Total Population	907,911	33.4	949,202	34.9	864,172	31.8
Race-Ethnicity						
Hispanic or Latinos	136,867	17.5	284,258	36.3	362,353	46.2
Non-Hispanic African American or black	96,011	10.9	356,149	40.6	424,661	48.4
Non-Hispanic Asian or Pacific Islander	68,288	46.4	56,546	38.4	22,346	15.2
Non-Hispanic white	586,752	67.5	236,014	27.2	46,508	5.4
Age (years)						
Less than 5	49,400	26.4	64,271	34.3	73,707	39.3
5-14	66,993	20.1	122,775	36.8	144,067	43.2
15-24	123,492	30.2	139,063	34.0	146,886	35.9
25-34	238,561	46.0	148,740	28.7	131,390	25.3
35-44	137,611	36.1	131,113	34.4	112,911	29.6
45-54	109,376	31.9	127,489	37.2	105,720	30.9
55-64	89,121	33.5	101,510	38.2	75,360	28.3
65-74	50,133	32.8	61,003	39.9	41,821	27.3
74-85	29,772	32.7	37,151	40.8	24,182	26.5
85 and older	13,452	35.7	16,087	42.7	8,128	21.6
Gender						
Male	444,605	33.7	455,580	34.5	420,353	31.8
Female	463,306	33.1	493,622	35.2	443,819	31.7
Households	181,496	31.1	214,648	36.8	187,127	32.1
Households with children less than 18 years	72,031	27.1	96,150	36.2	97,686	36.7
Households with female head of household and children less than 18 years	13,668	15.0	34,180	37.4	43,437	47.6
Seniors living alone (65 and older)	35,819	39.3	34,721	38.1	20,498	22.5

# **Economic Stability and Health Outcomes**

- High Hardship strongly correlates to:
  - Inadequate prenatal care
  - Teen births
  - Self-reported poor or poor health status
  - Smoking
  - Low fruit and vegetable consumption
  - No physical activity
  - Adult obesity
  - Poor mental health
  - Chlamydia incidence
  - Hospitalizations related to heart disease, diabetes and COPD
  - Cervical cancer incidence and mortality
  - Premature mortality
  - Homicides
  - Drug-induced mortality
  - Infant mortality

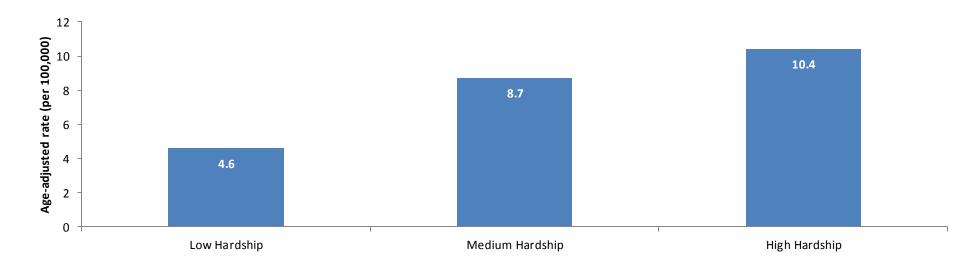
- Low hardship correlates to:
  - Breast cancer incidence
  - Suicide

### Hardship and Cervical Cancer Incidence and Mortality

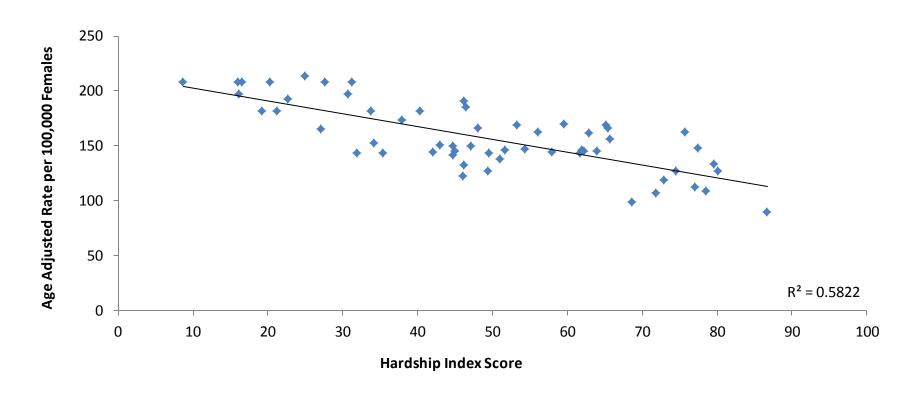


Cervical cancer incidence and mortality rates are higher in communities with higher hardship.

# **Drug-induced Mortality and Hardship**

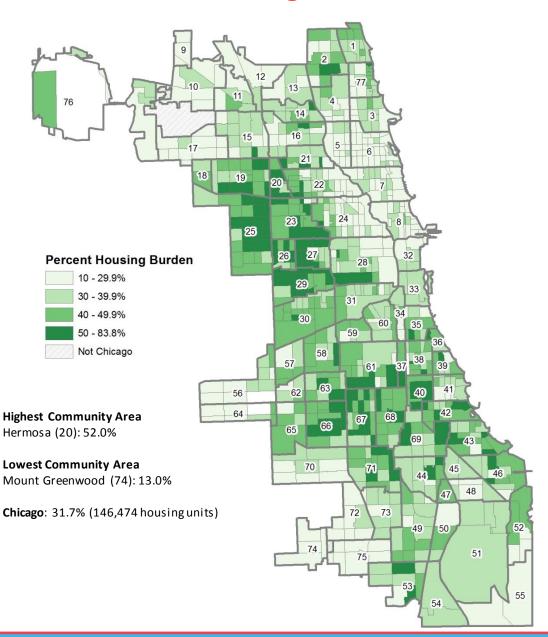


### Female Breast Cancer Incidence and Hardship

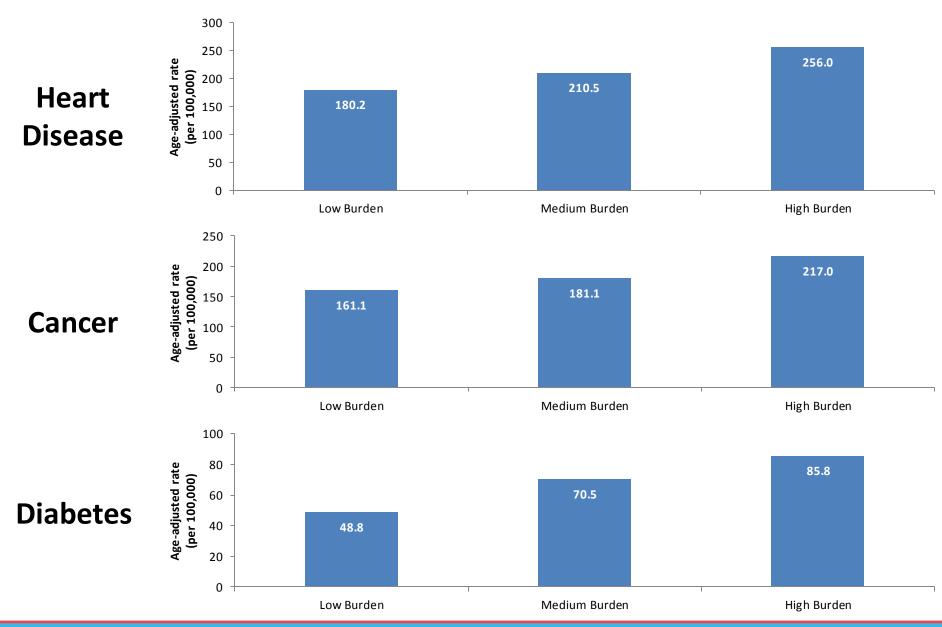


Female breast cancer incidence is higher in communities with lower hardship.

### **Severe Housing Cost Burden**



### **Severe Housing Cost Burden and Chronic Disease Mortality**



# Neighborhood and Built Environment

### **Child Opportunity Index**

#### **Educational**

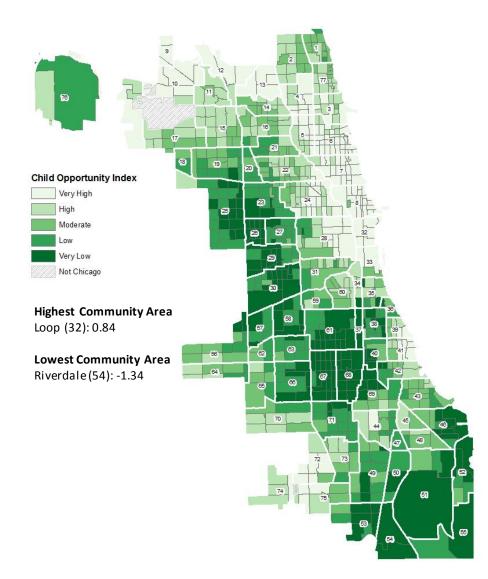
- Adult educational attainment
- Student (school) poverty rate
- Reading proficiency rate
- Math proficiency rate
- Early childhood education neighborhood participation patterns
- High school graduation rate
- Proximity to high-quality early childhood education centers
- Proximity to early childhood education centers of any type

#### **Health and Environmental**

- Retail healthy food index
- Proximity to toxic waste release sites
- Volume of nearby toxic release
- Proximity to parks and open spaces
- Housing vacancy rates
- Proximity to health care facilities

#### **Economic**

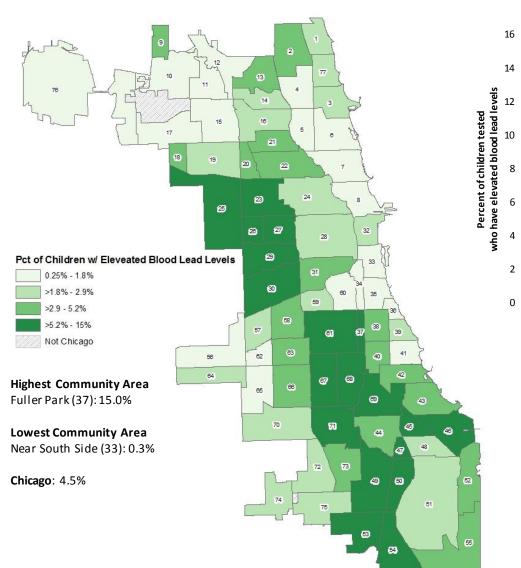
- Neighborhood foreclosure rate
- Poverty rate
- Unemployment rate
- Public assistance rate
- Proximity to employment

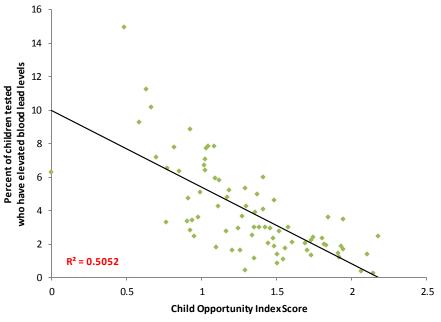


### **Child Opportunity and Health Outcomes**

- Less child opportunity in a neighborhood is strongly correlated with:
  - Shootings
  - Elevated blood lead levels
  - Obesity in children
  - Life expectancy at birth
  - Diabetes-related mortality
  - Diet-related mortality
  - Teen births

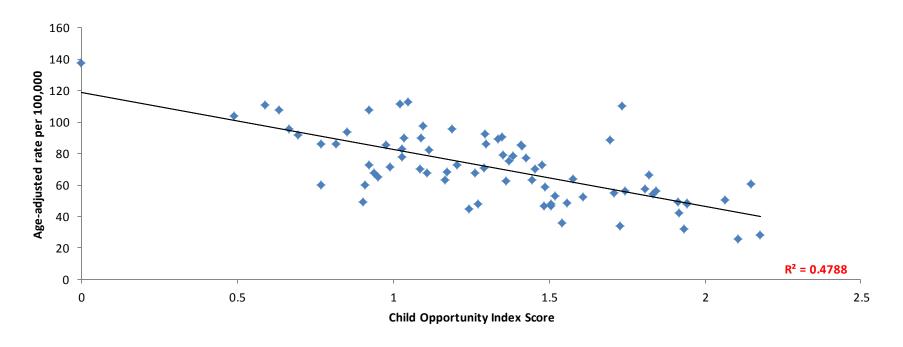
### **Elevated Blood Lead Level and Child Opportunity**





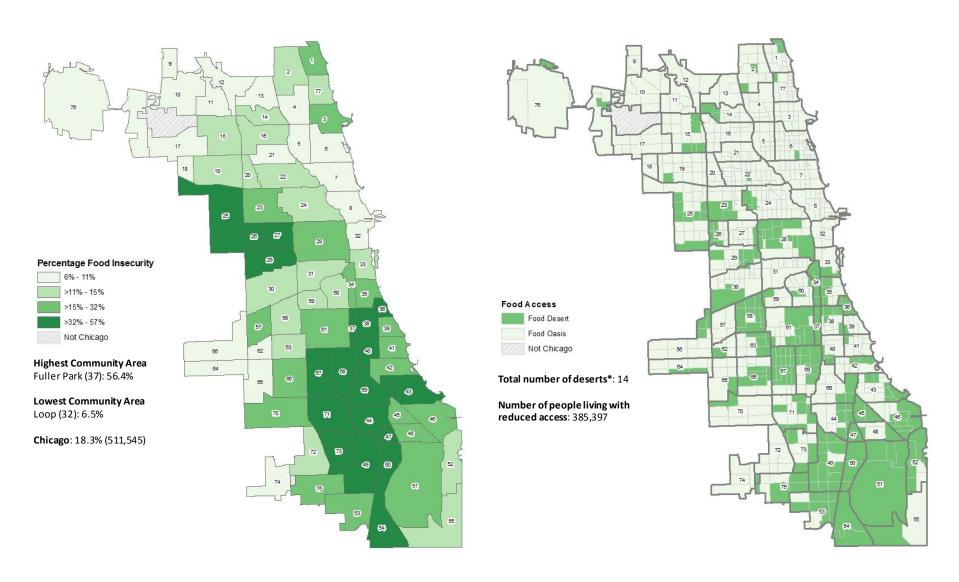
Communities with less opportunity have higher percentages of children with elevated blood lead levels.

## **Diabetes Mortality and Child Opportunity**



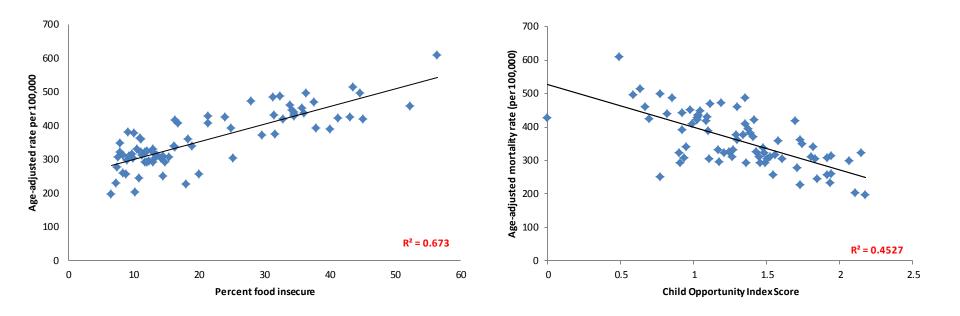
Diabetes-related mortality rates are higher in communities with less opportunity.

### **Food Insecurity and Access**



\*Defined as two or more contiguous census tracts

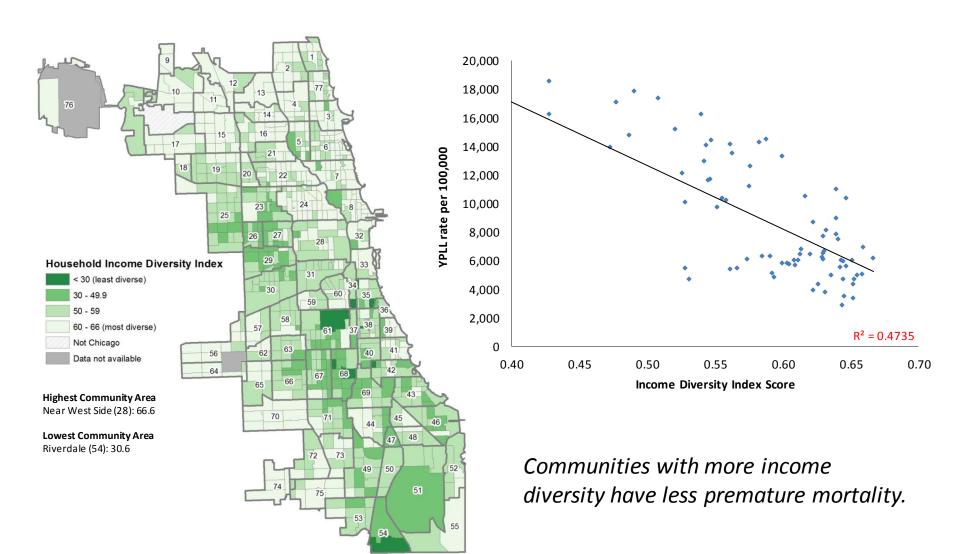
### **Diet-related Mortality, Food Insecurity and Child Opportunity**



Diet-related mortality rates are higher in communities with more food insecurity and less opportunity.

# Diversity and Equity

### **Household Income Diversity and Premature Mortality**



# All data analysis and interpretation done by the Chicago Department of Public Health - Office of Epidemiology

- Kirsti Bocskay
- Dana Harper
- Emily Laflamme

- Nikhil Prachand
- Margarita Reina
- Kingsley Weaver







