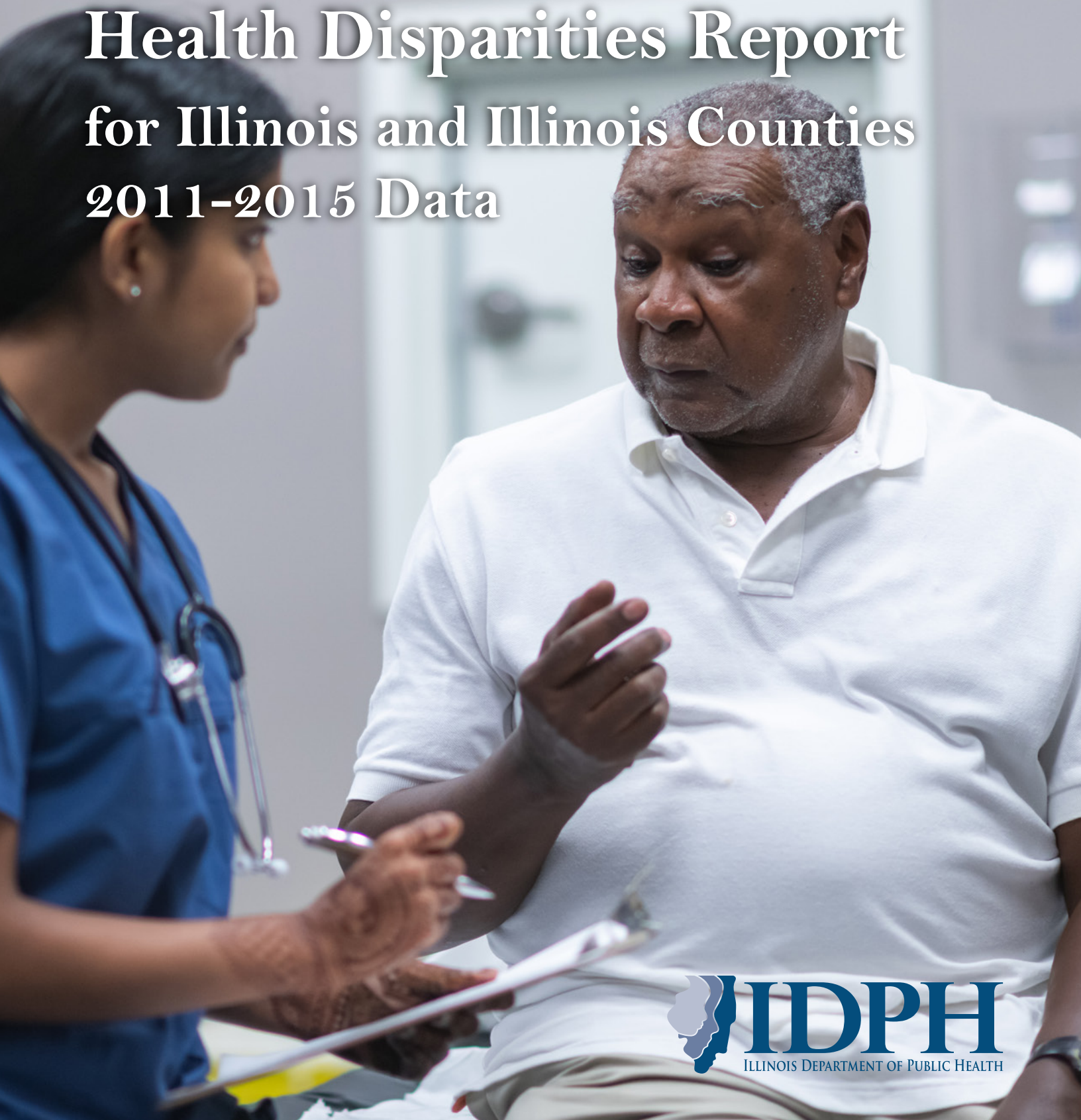




State of Illinois
Illinois Department of Public Health

Health Disparities Report for Illinois and Illinois Counties 2011-2015 Data



STATE OF ILLINOIS



Health Disparities Report for Illinois and Illinois Counties 2011-2015 Data

Prepared by

The Center for Minority Health Services, Office of the Director

and

Division of Health Data and Policy, Office of Policy, Planning and Statistics

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Introduction and Background

The U.S. Department of Health and Human Services' (HHS) Healthy People 2020¹ establishes a set of national health objectives designed to identify the most significant preventable threats to health and to establish national goals to reduce these threats. The HHS Office of Minority Health also established the National Partnership for Action to End Health Disparities (NPA)², with the mission of increasing the effectiveness of programs that eliminate health disparities through coordination of partners, leaders, and stakeholders committed to ending health disparities.

In April 2017, the Illinois Department of Public Health (IDPH) released its first Illinois Health Disparities Data Report with the intent to monitor disparities and progress made over time using data available to IDPH. This 2019 report updates data included in the previous report, such as new graphs and tables on opioids, infant and maternal health, and oral health. This new report also highlights new efforts undertaken by IDPH to address health inequity and reduce health disparities in Illinois by tracking inequity status of select indicators across two timeframes.

In the Healthy Illinois 2021 State Health Improvement Plan (SHIP)³, access to care and social determinants of health were identified as fundamental overarching issues to consider when addressing the three priorities - Maternal and Child Health, Chronic Disease, and Behavioral Health.

This report establishes benchmarks for improvements made by IDPH towards reducing health disparities in some key areas. The report is relevant for minority health, rural health, health promotion, health protection, disability, aging, emergency preparedness, maternal and child health, programs, policy makers, and other stakeholders, to tailor approaches for reducing health disparities. The data can also be used by local health departments, community health organizations, legislators, and academic institutions to improve planning, policy making, evaluation, data collection, and service delivery.

The report contains sections on demographics, social determinants of health, health status, health behaviors, morbidity, mortality, quality of life, and access to care. For data analysis we used both single-year and five-year data (depending on data availability) and tracked progress towards reducing health inequities using Whites as the reference group, and 2009 as the baseline year. Health inequities are measured by select indicators under four categories; Social Determinants; Health Status, Behaviors, and Health care Access; Morbidity and Mortality; and Infant Mortality. The comparisons are shown in tables 1–5 on pages 7 through 10 of this report. For health inequity analyses data for tables 2–4, data were collected for two points in time, 2009 and 2015.

¹ <https://www.healthypeople.gov/>

² <https://www.minorityhealth.hhs.gov/npa/>

³ <http://www.idph.state.il.us/ship/icc/documents/SHIP-FINAL.pdf>

Key findings by topic:

• The Health Inequity Status

Tables 1–7, show the widening of disparities in unemployment between Whites and all other race categories. There is also a widening disparity between infant mortality rates of Whites and all other race categories, as well as homicide and opioid overdose death rates. Disparity in high school education attainment for Hispanics has increased over time. Hispanics in Illinois had widening disparities in 14 out of the 19 indicators tracked in in this report. (See Table 1, page 7).

- The number of people who self-reported fair or poor health, unhealthy physical and mental days in the past 8-30 days, increased in the “All Other Race” category. The number of unhealthy mental days also increased for Hispanics.
- Disparities in obesity prevalence and tobacco use during pregnancy increased among Blacks and Hispanics.
- High mortality and morbidity rates were prevalent among Hispanics in all areas reported from 2009 to 2015, except for diabetes.
- Homicide, opioid overdose death, and all cancer rates were highest among Blacks.

Demographics:

- Illinois had a growing number of older populations, which seemed to follow the same pattern as the U.S. However, in Illinois, life expectancy for females 80 years of age and older, is double that of Illinois men in the same age category.
- The size of Illinois’ White and Black populations shrunk between 2010 and 2015, Hispanic and Asian populations increased.
- Illinois has a high percentage of Hispanics (34.5%) and Others (31.5%) who speak English less than very well.

Social Determinants of Health:

- In Illinois, Blacks had the highest rate of poverty and unemployment, and were more dependent on food stamp.
- Blacks in Illinois attained less education than all other race and ethnic groups and had the highest rate of high school dropout.
- Several counties in Illinois had high concentrations of minorities who live in poverty. In 11 counties, 80% of Blacks live in poverty. In 20 counties, 40% of Hispanics live in poverty.
- Four out of 10 Black children lived below the federal poverty level in Illinois compared to one out of 10 White

children.

- Blacks had the lowest median household income compared to Whites and Hispanics in Illinois. The median household income for Blacks was half that of the median household income for Whites, and approximately \$13,000 less than Hispanic households. It is also worth noting that Whites and Hispanics in Illinois had a median household income greater than the national average in their categories, while Blacks was the only category in Illinois whose median household income was below the national average for Blacks.

Maternal and Child Health:

- Even though it appears that Illinois is on track to meet the Healthy People 2020 goals for maternal and child health, and had met the goals in 2015, a high level of disparity in teenage births, prenatal health care, and children born with a low birth weight were observed among Blacks. These inequities persist for Blacks regardless of their socio-economic background.
- The breastfeeding rate was very low among Black mothers in Illinois.
- Black children had the highest rate of both accidental and homicide death rates. While homicide rates have trended downwards between 2013 and 2015 for White and Hispanic children, the opposite is true for Illinois' Black children.
- Suicide rates for children 14 years of age or younger was highest among Hispanics and doubled in a single year between 2014 and 2015 in Illinois.
- In Illinois, rates of very low birth weight babies (3.3lbs or less) were nearly three times higher among Black babies than all other race categories. Similarly, rates of low birth weight babies (less than 5.5lbs) were nearly two times higher in Black babies than all other race categories. In 2015, there was a reduction in the number of very low birth weight White and Other babies born, but the trend did not show a similar reduction for the number of Black and Hispanic babies born at very low birth weight.
- Twelve counties in Illinois had 10% or more children 6 years of age and younger who tested high for elevated blood lead levels (≥ 5 microgram/dL).

Behavioral Health and Health Care Access:

- More Blacks reported not having good physical health in the past month than all other race and ethnic groups, and they participate less in physical exercise, which may, in part, explain the high obesity rate among this group.
- Higher rates reporting suffering from adverse childhood experience (ACE) was observed among women and

Blacks. ACEs have been shown to have tremendous impact on lifelong overall health and well-being.⁴

- Black children were least likely to visit a dentist and were suffering more due to oral health problems.
- The percentage of people uninsured decreased for all race and ethnic groups from 2013, but the rate was still disproportionately higher among Hispanics.
- The percentage of the population who reported having more than seven poor mental health days in a month was highest amongst 18–24-year-olds.

Chronic Diseases and Disabilities:

- Even though Illinois is on the right track to achieve the Healthy People 2020 Goals to reduce the mortality rates for suicide, cancer, stroke, and motor vehicle accidents, disparities persist among all minority groups in most cases when compared to Whites.
- Of all race groups in Illinois, incidence of breast cancer is disproportionately higher in Black women, and incidence of prostate cancer is disproportionately higher in Black men.
- Suicide rates in Illinois were disproportionately higher for Whites at approximately twice the rate of all other race and ethnicity. The disparity is even greater for males than females, at a 16:2 ratio per 100,000 people.
- The diabetes rate is nearly double for Blacks compared to any other race and ethnic category. Nearly 15% of all Blacks had been told they had diabetes in 2015, compared to 10% of Whites.
- Illinois had achieved the Healthy People 2020 goals for reducing the number of new cases of gonorrhea, yet alarming disparities persist among Blacks with reported cases in 2015 approximately 25 times higher for Blacks compared to Whites.
- Though the number of HIV diagnoses decreased significantly for all race and ethnic groups, Illinois is still far from achieving the Agency for Health Care Research and Quality (AHRQ) benchmark. HIV diagnoses among Blacks in Illinois was more than twice the rate of all other race and ethnicity in Illinois.
- Tuberculosis prevalence rate for Others is approximately 18 times higher than the rate for Whites, and four times higher than Blacks and Hispanics.
- In Illinois, Blacks are at least 13 times more likely than Whites to be the victims of homicide deaths.

⁴ Adverse Childhood Experiences ACEs <https://www.childwelfare.gov/topics/preventing/preventionmonth/resources/ace/>

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Health Inequity Status

Health inequity status in Illinois:

- Table 1 shows the directions of changes in the selected health indicators by race and ethnicity between 2009 and 2015. The rates measuring health inequity status were calculated using the White as the reference group. The rates of the baseline year (mostly 2009) and the rates of the most recent year (mostly 2015) were used to calculate the percent changes.
- The downward arrows indicate that the rates in recent years for the corresponding indicators decreased. The upward arrows indicate rate increase. For example, the rate for Black children at or below federal poverty level decreased in 2015 compared to that of 2009.
- According to the health disparity calculation, a high number of disparities are present among the Hispanic population. Out of 19 indicators, 14 indicators denote existence of disparities for the Hispanic population. For Blacks and all other races, disparity continues for 7 and 8 health indicators respectively.

Note:
 $Rate\ Difference = Minority\ Estimate - White\ Estimate$
 (reference group), $Rate\ Ratio = \frac{Minority\ Estimate}{White\ Estimate}$,
 $\% \text{ Change in Rate Ratio} = \frac{(Time\ 2\ rate\ ratio - Time\ 1\ rate\ ratio)}{Time\ 1\ rate\ ratio} * 100$
 ↓ Disparity decreases (% change in rate ratio is negative), ↑ Disparity increases (% change in rate ratio is positive),
 ↔ No change, ◆ No Available Data.

Table 1. Health Inequity Summary Table: Change in Health Inequity over Time, By Race, and Ethnicity in Illinois, 2009 and 2015

Indicators	Black	All Other Races	Hispanic/Latino
Social Determinants			
Children at or below federal poverty level, %	↓	↓	↓
Unemployment rate, %	↑	↑	↑
Educational Attainment <High School, %	↓	↓	↑
Health Status, Behaviors, Healthcare Access			
	Black	All Other Races	Hispanic/Latino
Self-reported fair/poor health, %	↓	↑	↓
Unhealthy physical days for 8-30 days in past month, %	↓	↑	↓
Unhealthy mental days for 8-30 days in past month, %	↓	↑	↑
Obesity prevalence, %	↑	↓	↑
Tobacco use-current smoker, %	↓	↓	↓
Tobacco use during pregnancy-current smoker, %	↑	◆	↑
Percent without health insurance	↓	↑	↑
Morbidity and Mortality			
	Black	All Other Races	Hispanic/Latino
Heart disease mortality rate, per 100,000	↓	↓	↑
Diabetes prevalence, %	↓	↔	↓
All-cancer mortality rate, per 100,000	↑	↓	↑
Gonorrhea incidence, per 100,000	↓	↓	↑
HIV infection rate, per 100,000	↓	↓	↑
Homicide mortality rate, per 100,000	↑	↑	↑
Opioid overdose deaths, per 100,000	↑	↑	↑
Accident Death rate, per 100,000	↓	↓	↑
Infant Mortality Rate			
	Black	All Other Races	Hispanic/Latino
Infant Mortality Rate	↑	↑	↑

Health Inequity Status: For Blacks

Table 2. Health Inequity - Blacks Compared to Whites as the Reference Group, Illinois, 2009 and 2015

Indicators	Time 1 (Baseline)					Time 2 (Most Recent Data)					Percent Change in Rate Ratio	Inequity Status (Disparity)
	Year	Black Rate	White Rate	Rate Difference	Rate Ratio	Year	Black Rate	White Rate	Rate Difference	Rate Ratio		
Social Determinants												
Children at or below federal poverty level, %	2009	11.5	2.9	8.6	3.97	2015	10.1	2.9	7.2	3.48	-12.34	↓
Unemployment rate, %	2009	11.9	6.0	5.9	1.98	2015	9.6	3.4	6.2	2.82	42.42	↑
Educational Attainment <High School, %	2009	17.8	10.8	7.0	1.65	2015	14.0	9.1	4.9	1.54	-6.66	↓
Health Status, Behaviors, Healthcare Access												
Self-reported fair/poor health, %	2009	5.5	3.3	2.2	1.67	2015	4.0	3.2	0.8	1.25	-25.15	↓
Unhealthy physical days for 8-30 days in past month, %	2009	20.7	12.8	7.9	1.62	2015	14.2	13.8	0.4	1.03	-36.42	↓
Unhealthy mental days for 8-30 days in past month, %	2009	21.1	12.7	8.4	1.66	2015	13.6	12.6	1	1.08	-34.94	↓
Obesity prevalence, %	2009	36.6	26.5	10.1	1.38	2015	40.8	29.1	11.7	1.40	1.45	↑
Tobacco use-current smoker, %	2009	24.3	18.4	5.9	1.32	2015	16.0	16.1	-0.1	0.99	-25.00	↓
Tobacco use during pregnancy-current smoker, %	2009	8.2	9.8	-1.6	0.84	2014	8.6	8.4	0.2	1.02	21.43	↑
Without health insurance, %	2009	20.6	12.3	8.3	1.67	2015	9.1	6.7	2.4	1.36	-18.56	↓
Morbidity and Mortality												
Heart disease mortality rate, per 100,000	2009	244.0	197.2	46.8	1.24	2015	223.4	184.0	39.4	1.21	-2.42	↓
Diabetes prevalence, %	2009	13.8	7.3	6.5	1.89	2015	14.8	9.4	5.4	1.57	-16.93	↓
All-cancer mortality rate, per 100,000	2009	222.7	190.4	32.3	1.17	2015	214.2	175.6	38.6	1.22	4.27	↑
Gonorrhea incidence, per 100,000	2009	768.5	29.4	739.1	26.14	2015	480.0	30.4	449.62	15.80	-39.56	↓
HIV infection rate, per 100,000	2009	48.1	4.3	43.82	11.19	2015	39.7	3.6	36.1	11.03	-1.43	↓
Homicide mortality rate, per 100,000	2009	29.3	2.1	27.2	13.95	2015	32.7	1.4	31.3	23.36	67.46	↑
Opioid overdose deaths, per 100,000	2013	10.5	9.3	1.2	1.13	2016	24.9	15.6	9.3	1.60	41.59	↑
Accident death rate, per 100,000	2009	31.4	35.9	-4.5	0.87	2015	37.1	45.6	-8.5	0.81	-6.90	↓
Infant Mortality Rate												
Infant mortality rate	2009	12.8	5.6	7.2	2.29	2015	12.6	4.4	8.2	2.86	24.89	↑

Health Inequity Status: For All Other Races.

Table 3. Health Inequity - All Other Races Compared to Whites as the Reference Group, Illinois, 2009 and 2015

Indicators	Time 1 (Baseline)					Time 2 (Most Recent Data)					Percent Change in Rate Ratio	Inequity Status (Disparity)	
	Year	All Other Races Rate	White Rate	Rate Difference	Rate Ratio	Year	All Other Races Rate	White Rate	Rate Difference	Rate Ratio			
Social Determinants													
Children at or below federal poverty level, %	2009	7.2	2.9	4.3	2.48	2015	6.8	2.9	3.9	2.34	-5.65	↓	
Unemployment rate, %	2009	7.9	6.0	1.9	1.32	2015	5.1	3.4	1.7	1.50	13.64	↑	
Educational Attainment <High School, %	2009	27.6	10.8	16.8	2.56	2015	23.1	9.1	14	2.54	-0.78	↓	
Health Status, Behaviors, Healthcare Access													
Self-reported fair/poor health, %	2009	3.0	3.3	-0.3	0.91	2015	3.3	3.2	0.1	1.03	13.19	↑	
Unhealthy physical days for 8-30 days in past month, %	2009	10.0	12.8	-2.8	0.78	2015	10.9	13.8	-2.9	0.79	1.28	↑	
Unhealthy mental days for 8-30 days in past month, %	2009	11.3	12.7	-1.4	0.89	2015	17.1	12.6	4.5	1.36	52.81	↑	
Obesity prevalence, %	2009	11.6	26.5	-14.9	0.44	2015	11.1	29.1	-18	0.38	-13.64	↓	
Tobacco use-current smoker, %	2009	14.8	18.4	-3.6	0.80	2015	7.9	16.1	-8.2	0.49	-38.75	↓	
Tobacco use during pregnancy-current smoker, %	2009	◆	9.8	◆	◆	2014	◆	8.4	◆	◆	◆	◆	
Without health insurance, %	2009	18.5	12.3	6.2	1.50	2015	13.8	6.7	7.1	2.06	37.33	↑	
Morbidity and Mortality													
Heart disease mortality rate, per 100,000	2009	75.3	197.2	-121.9	0.38	2015	69.0	184.0	-115	0.37	-2.63	↓	
Diabetes prevalence, %	2009	6.6	7.3	-0.7	0.9041	2015	8.5	9.4	-0.9	0.9043	0.02	↔	
All-cancer mortality rate, per 100,000	2009	91.7	190.4	-98.7	0.48	2015	82.4	175.6	-93.2	0.47	-2.08	↓	
Gonorrhea incidence, per 100,000	2009	446.0	29.4	416.6	15.17	2015	51.7	30.4	21.32	1.70	-88.79	↓	
HIV infection rate, per 100,000	2009	23.8	4.3	19.48	5.53	2015	12.2	3.6	8.6	3.39	-38.69	↓	
Homicide mortality rate, per 100,000	2009	1.8	2.1	-0.3	0.86	2015	1.5	1.4	0.1	1.07	24.42	↑	
Opioid overdose deaths, per 100,000	2013	1.7	9.3	-7.6	0.18	2016	3.3	15.6	-12.3	0.21	16.67	↑	
Accident death rate, per 100,000	2009	10.6	35.9	-25.3	0.30	2015	12.1	45.6	-33.5	0.27	-10.00	↓	
Infant Mortality Rate													
Infant mortality rate	2009	3.4	5.6	-2.2	0.61	2015	3.4	4.4	-1.0	0.77	26.23	↑	

Health Inequity Status: For Hispanic/Latino

Table 4. Health Inequity - Hispanic/Latino Compared to Whites as the Reference Group, Illinois, 2009 and 2015

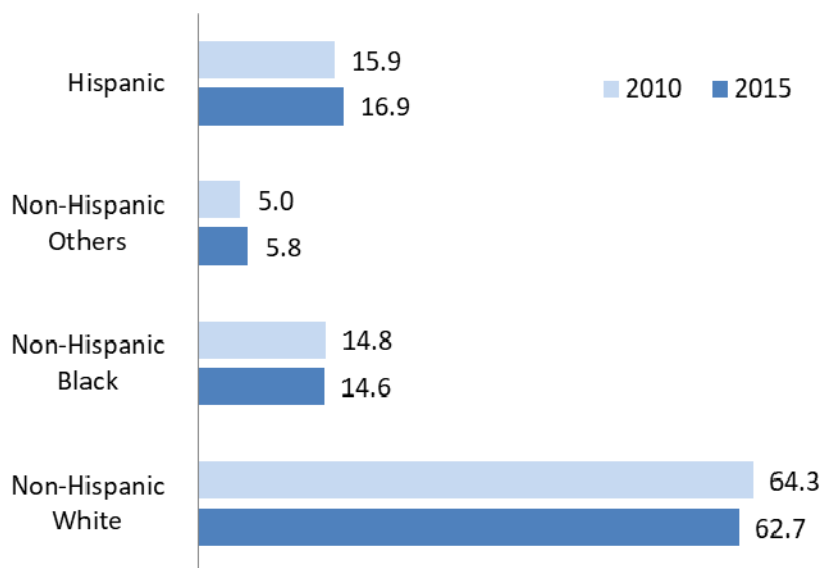
Indicators	Time 1 (Baseline)					Time 2 (Most Recent Data)					Percent Change in Rate Ratio	Inequity Status (Disparity)
	Year	Hispanic Rate	White Rate	Rate Difference	Rate Ratio	Year/s	Hispanic Rate	White Rate	Rate Difference	Rate Ratio		
Social Determinants												
Children at or below federal poverty level, %	2009	9.2	2.9	6.3	3.17	2015	9.1	2.9	6.2	3.14	-0.98	↓
Unemployment rate, %	2009	9.0	6.0	3	1.50	2015	5.5	3.4	2.1	1.62	8.00	↑
Educational Attainment <High School, %	2009	40.8	10.8	30	3.78	2015	35.4	9.1	26.3	3.89	2.91	↑
Health Status, Behaviors, Healthcare Access												
Self-reported fair/poor health, %	2009	5.5	3.3	2.2	1.67	2015	5.0	3.2	1.8	1.56	-6.58	↓
Unhealthy physical days for 8-30 days in past month, %	2009	15.2	12.8	2.4	1.19	2015	14.7	13.8	0.9	1.07	-10.08	↓
Unhealthy mental days for 8-30 days in past month, %	2009	15.2	12.7	2.5	1.20	2015	15.3	12.6	2.7	1.21	0.83	↑
Obesity prevalence, %	2009	29.7	26.5	3.2	1.12	2015	35.6	29.1	6.5	1.22	8.93	↑
Tobacco use-current smoker, %	2009	18.1	18.4	-0.3	0.98	2015	10.6	16.1	-5.5	0.66	-32.65	↓
Tobacco use during pregnancy-current smoker, %	2009	2.0	9.8	-7.8	0.20	2014	2.5	8.4	-5.9	0.30	50.00	↑
Without health insurance, %	2009	27.8	12.3	15.5	2.26	2015	18.2	6.7	11.5	2.72	20.35	↑
Morbidity and Mortality												
Heart disease mortality rate, per 100,000	2009	80.0	197.2	-117.2	0.41	2015	84.0	184.0	-100	0.46	12.20	↑
Diabetes prevalence, %	2009	8.3	7.3	1.0	1.14	2015	8.8	9.4	-0.6	0.94	-17.54	↓
All-cancer mortality rate, per 100,000	2009	85.6	190.4	-104.8	0.45	2015	93.5	175.6	-82.1	0.53	17.77	↑
Gonorrhea incidence, per 100,000	2009	37.7	29.4	8.3	1.28	2015	53.8	30.4	23.42	1.77	38.28	↑
HIV infection rate, per 100,000	2009	16.4	4.3	12.1	3.81	2015	14.9	3.6	11.3	4.14	8.67	↑
Homicide mortality rate, per 100,000	2009	6.7	2.1	4.6	3.19	2015	5.7	1.4	4.3	4.07	27.59	↑
Opioid overdose deaths, per 100,000	2013	4.9	9.3	-4.4	0.53	2016	9.4	15.6	-6.2	0.60	13.21	↑
Accident death rate, per 100,000	2015	13.8	35.9	-22.1	0.38	2015	17.9	45.6	-27.7	0.39	2.63	↑
Infant Mortality Rate												
Infant mortality rate	2009	6.4	5.6	0.8	1.14	2015	5.5	4.4	1.1	1.25	9.65	↑

Demographics:

Illinois Population:

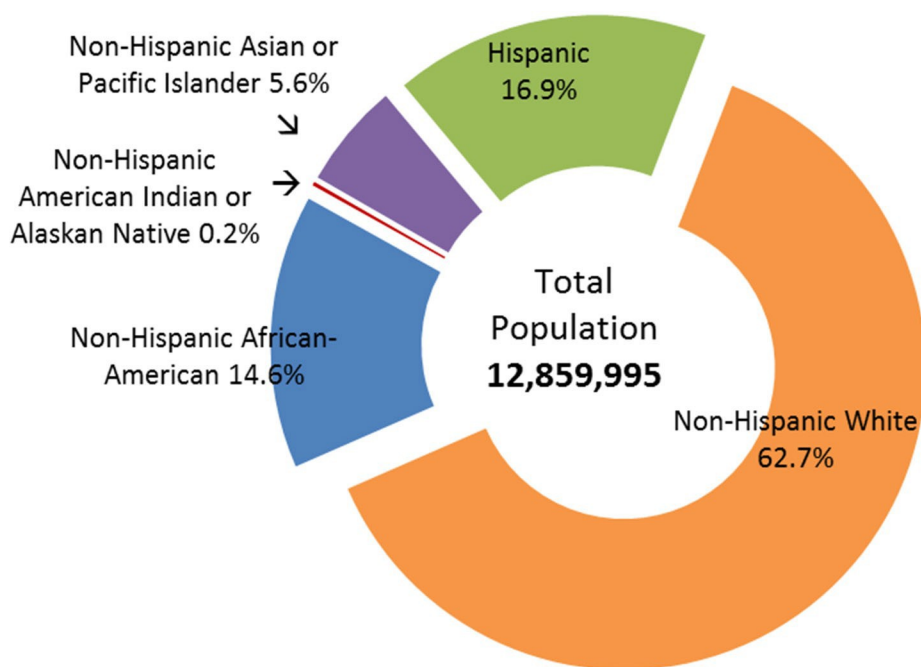
- Illinois population has decreased since 2010 for two race categories, Non-Hispanic Black and Non-Hispanic White.
- But it has increased for Non-Hispanic Others and Hispanic population.
- 62.7% of the Illinois population are Non-Hispanic Whites, 14.6% are Non-Hispanic Blacks, and 16.9% are Hispanics.

Figure 1. Population Estimates by Race and Ethnicity in Illinois, 2010 and 2015



Source: National Center for Health Statistics (NCHS), Vintage 2010 & 2015

Figure 2. Population Estimates by Race and Ethnicity in Illinois, 2015



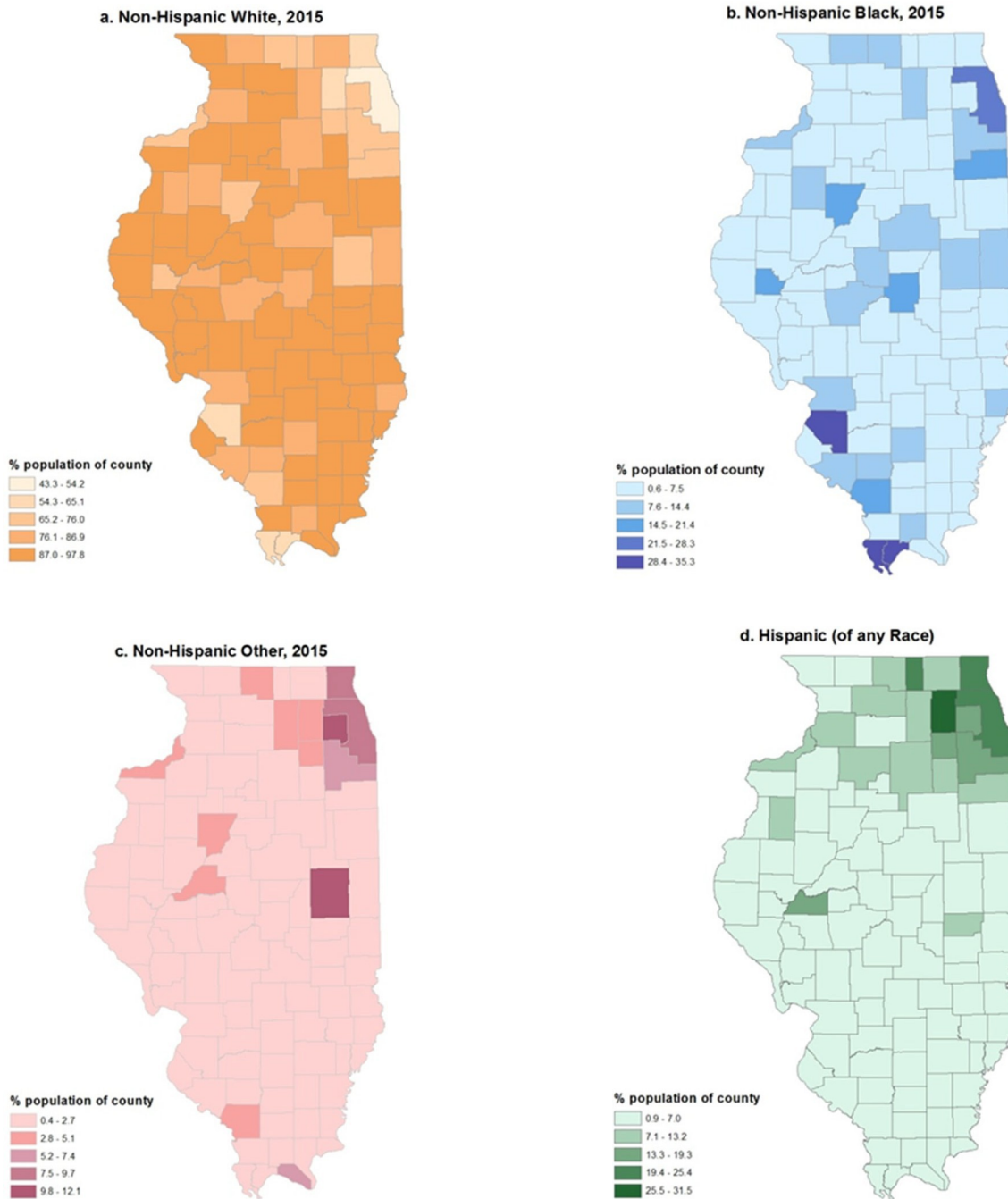
Source: National Center for Health Statistics (NCHS), Vintage 2015

Demographics:

Racial and Ethnic Estimates of Population by County in Illinois:

- The White population accounts for 90% or more of the total population in 56 counties.
- The Black population represents 30-35% of the total population in three counties.
- The Hispanic population accounts for more than 10% of the total population in three counties.

Figure 3. Population Estimates by Race and Ethnicity for Illinois by Counties, 2015



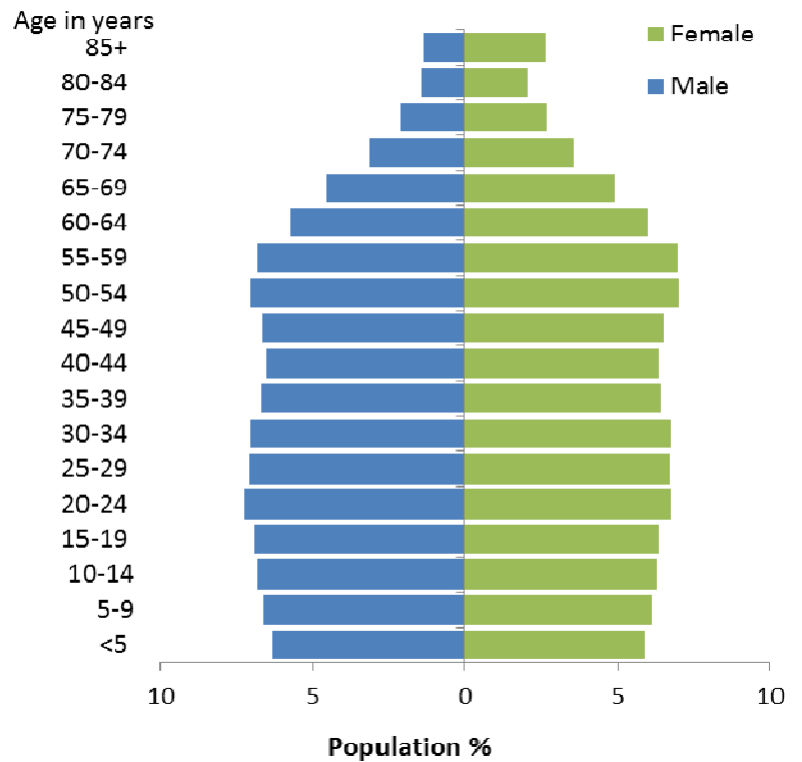
Source: National Center for Health Statistics (NCHS), 2015

Demographics:

Illinois population by age and sex:

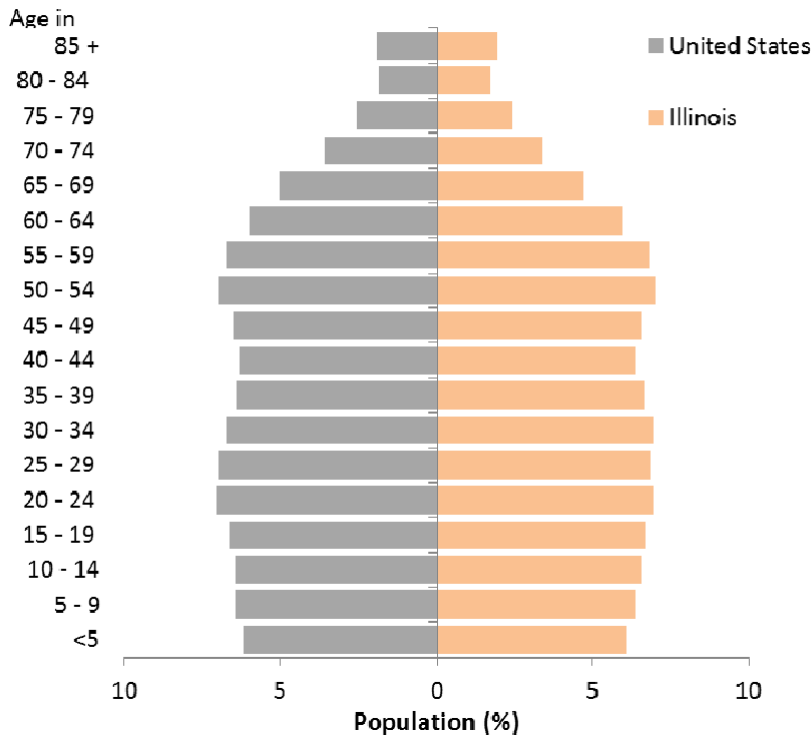
- Population distribution for male and female varied in some age groups. The highest population distribution for male was in the 20-24 years category, and in the female category, 50-59 years.
- Proportions of the population in the age group less than five years of age are similar. Population distributions by age and sex for Illinois and the U.S. are very similar.

Figure 4. Percent Distribution of Population by Age and Sex for Illinois, 2015



Source: National Center for Health Statistics (NCHS), Vintage 2015

Figure 5. Percent Distribution of Population by Age for Illinois and United States, 2015



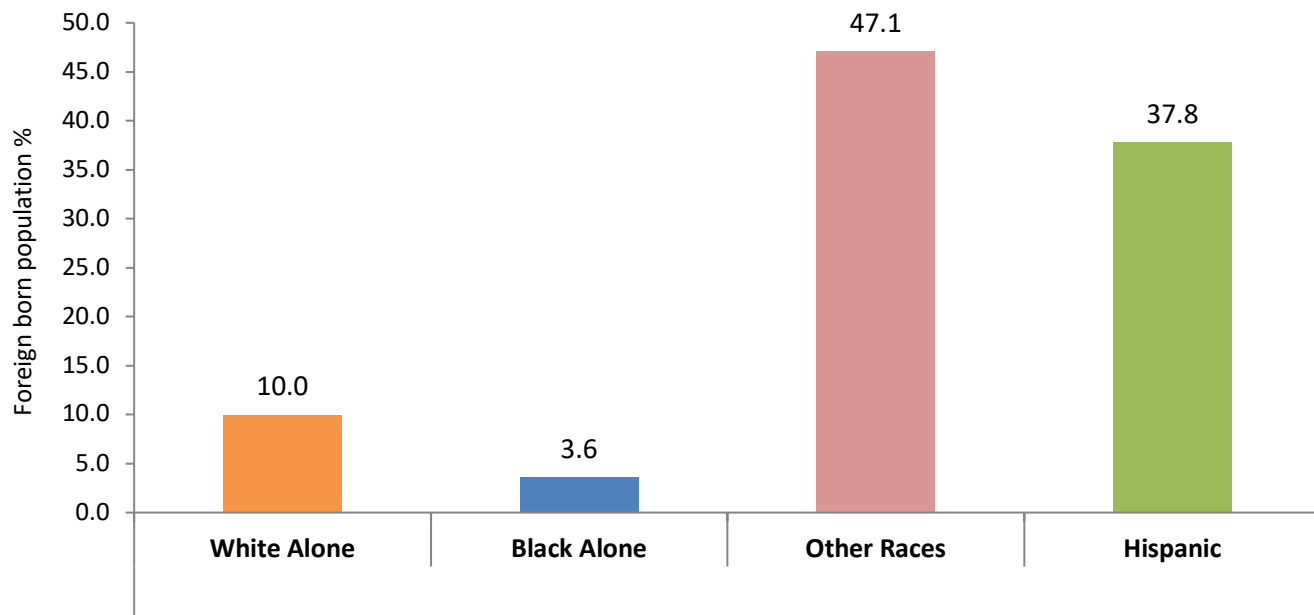
Source: US Census Bureau, American Community Survey Data 1-Year Estimates, 2015

Demographics:

Foreign born population:

- Forty seven percent of populations in the Other Race category were foreign born. Other races include American-Indian and Alaska-Native, Asian, Native Hawaiian and Pacific Islander, and multiracial.
- Hispanic is the second highest (37.8%) foreign born category in Illinois.

Figure 6. Percent of Foreign-Born Population by Race and Ethnicity for Illinois, 2011-2015



Source: US Census Bureau, 2011-2015 American Community Survey, 5 year estimates

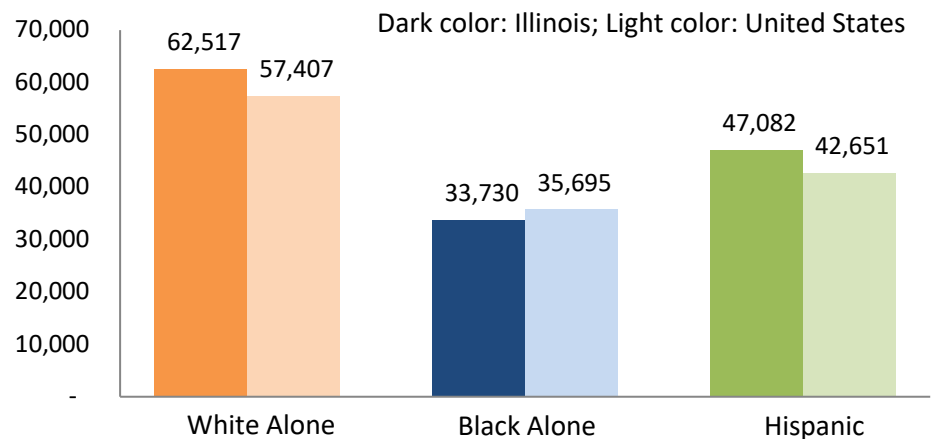
Social Determinants of Health

Social Determinants of Health are conditions in which people are born, grow, live, work, and age that affect their health. Often these are shaped by the distribution of money, power, and resources⁵.

Median Household Income:

- Blacks alone have the lowest median household income both in Illinois and the U.S., compared to Whites and Hispanics. The median household income for Whites and Hispanics were higher in Illinois than in the U.S.

Figure 7. Median Household Income in Dollars by Race and Ethnicity for Illinois and United States, 2011-2015



Source: U.S Census Bureau, 2011-2015 American Community Survey, 5-year estimates

⁵ World Health Organization https://www.who.int/social_determinants/sdh_definition/en/

Social Determinants of Health

Unemployment and Food Stamp Status:

- Blacks have the highest (11.9%) unemployment rate of all racial and ethnic groups in Illinois. The second highest percent is among Hispanic or Latino.
- Black households have the highest percentage of recipients receiving food stamps in Illinois. The second highest percentage of food stamp recipients are the Hispanic or Latino group.
- White households have the lowest percentage of food stamp recipients, although in absolute numbers, more whites receive food stamps in Illinois.

Figure 8. Unemployment Rate for Population 16 years of age and over in Illinois by Race/Ethnicity, 2011-2015

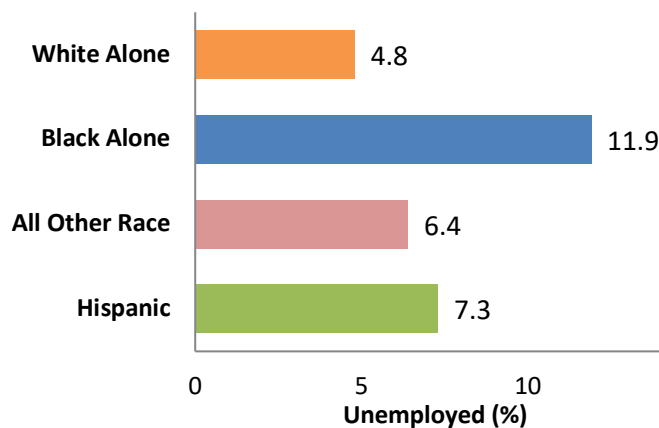
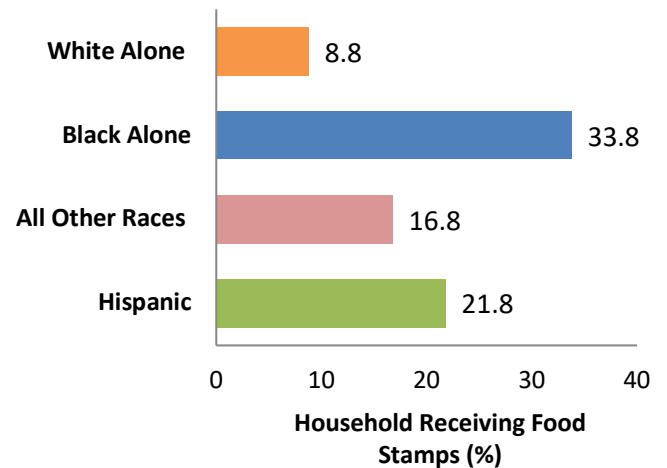


Figure 9. Percent of Total Households Receiving Food Stamps Within a Race in Illinois, 2011-2015



Source: U.S. Census Bureau, 2011-2015 American Community Survey, 5-year estimates

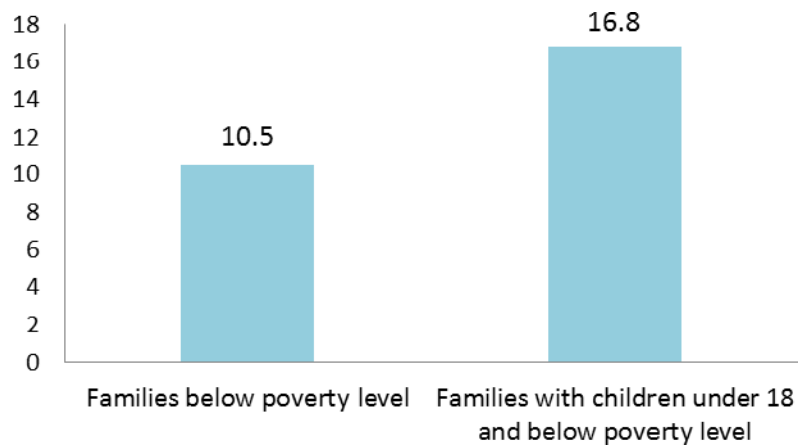
Social Determinants of Health

Poverty is defined as living without the necessities of life such as food, housing, and clothing.⁶ The Federal Poverty Level (FPL) is an economic measure used to decide whether the income level of an individual or family qualifies them for federal assistance to meet those basic needs.

Families Living Below 100% Poverty:

- In Illinois, 10.5% of families live below 100% of the federal poverty level.
- 16.8% of families have children younger than 18 years of age who live in poverty.
- The poverty threshold is determined by the size of the family and the number of related children younger than 18 years. For example, for a two-person household (age <65 years), including one child (age <18 years), the U.S. poverty threshold is \$16,337 per year. For four-person household (age <65 years) with two children (age <18 years), the poverty threshold is 24,036 in 2015. [source: U.S. Census Bureau, 2015]

Figure 10. Percent of Families Living Below 100% Federal Poverty Level in Illinois, 2011-2015

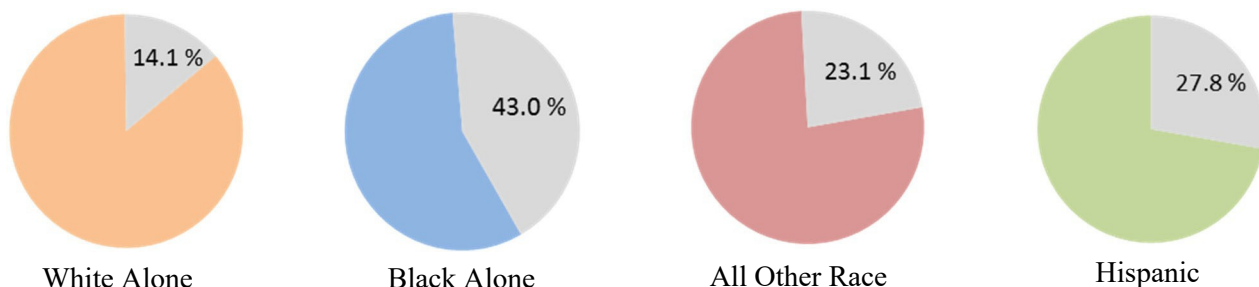


Source: U.S. Census Bureau, 2011-2015 American Community Survey, 5 years estimates

Children <18 years Living Below Poverty:

- Among all racial and ethnic groups, Blacks have the highest percentage of children younger than 18 years of age who lived below the 100% poverty level. Close to half of all Black children (43%) in Illinois lived in poverty compared to 14% of their White counterparts.
- The second highest percent belongs to Hispanics, who account for approximately 27.8% of all children 18 and under who lived below the poverty level.

Figure 11. Percent of Children Less Than 18 Years of Age Who Are Below 100% Poverty Level in Illinois by Race and Ethnicity, 2011-2015



Source: U.S. Census Bureau, 2011-2015 American Community Survey, 5-year estimates.

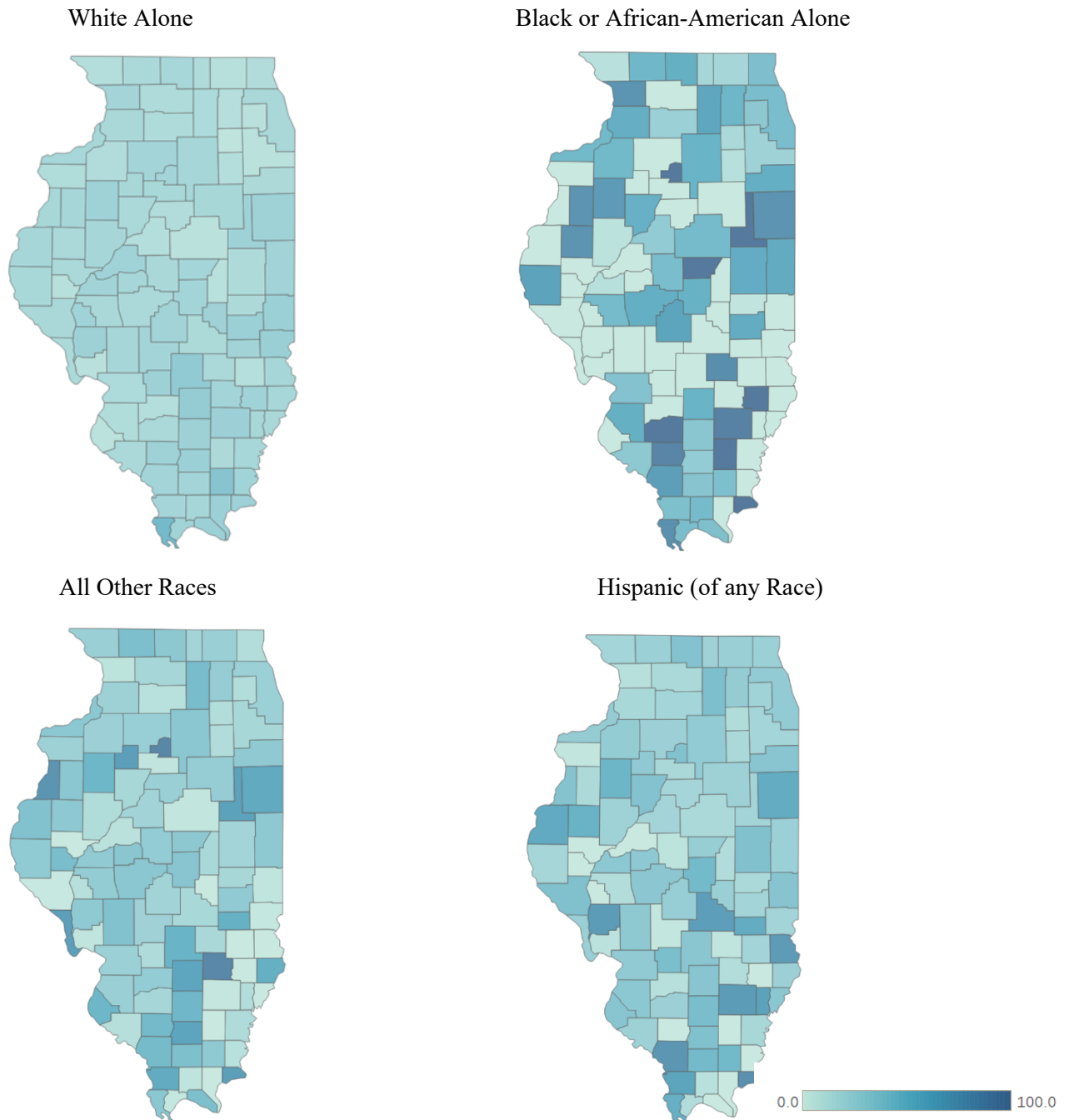
⁶ Federal Safety Net <http://federalsafetynet.com/poverty-definition.html>

Social Determinants of Health

Children <18 years Living Below Poverty Cont.

- Thirty-five counties had 20% or more White children under 18 years who were below 100% poverty level.
- Eleven counties had 80% or more Black children under 18 who were below 100% poverty level
- Twenty counties had 40% or more Hispanics children under 18 who were below 100% poverty level.

Figure 12. Percent of Children Less Than 18 years of Age Who Are Below 100% of Federal Poverty Level in Illinois Counties by Race and Ethnicity, 2011-2015



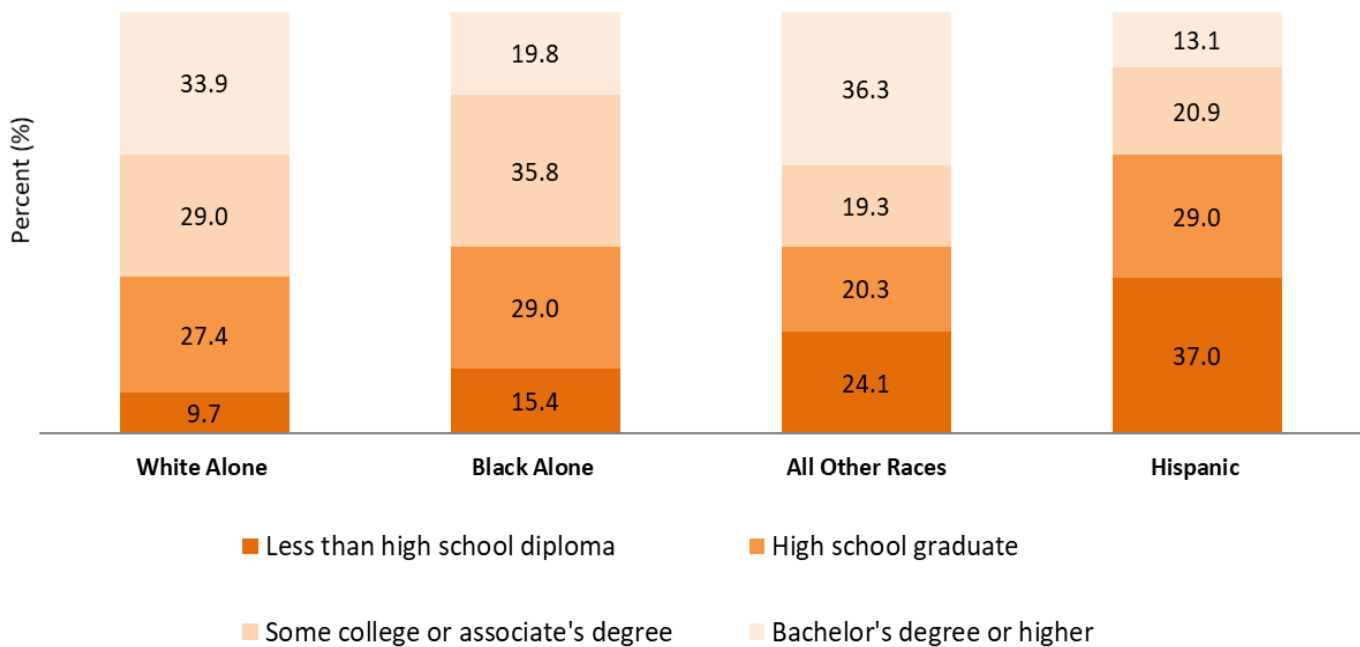
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

Social Determinants of Health

Educational Attainment:

- Hispanics have the highest percent of population (37.0%) with less than high school diploma as well as the lowest rate of bachelor's degree or higher educational attainment.
- About 19.8% Blacks have completed a bachelor's degree or higher.
- 33.9% White and 36.3% All Other races have completed a bachelor's degree or higher.

Figure 13. Educational Attainment for the Population 25 Years and Older in Illinois by Race/Ethnicity, 2011-2015



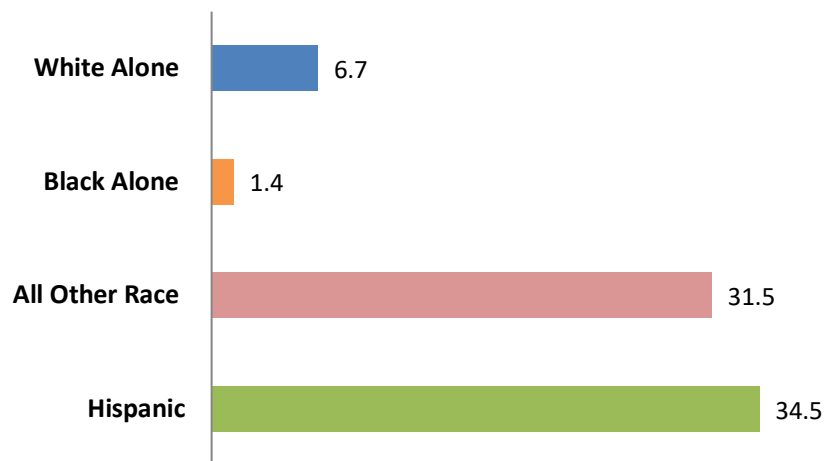
Source: U.S. Census Bureau, 2011-2015 American Community Survey, 5-year estimates

Social Determinants of Health

English Speaking Ability:

- A high percentage of Hispanic and other races in Illinois speak English less than very well.
- The rate among Hispanics who speak English less than very well is 34.5% and 31.5% is in the All Other Race category.
- Limited English Proficiency (LEP) can be a barrier to an individual's ability to access or engage in health care decisions for him or herself or loved ones.

Figure 14. Percent of Population Age 5 Years and Over Who Speaks English Less Than Very Well in Illinois by Race/Ethnicity, 2011-2015

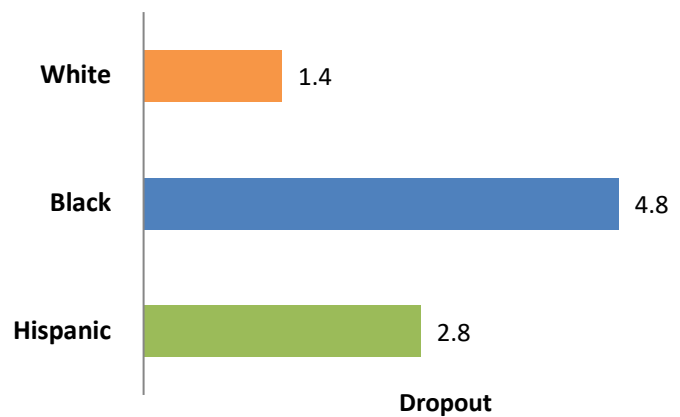


Source: U.S. Census Bureau, 2011-2015 American Community Survey, 5-year estimates

High School Dropout Rate:

- Black children had the highest dropout rate (4.8%) among the three race/ethnic groups.
- The high school dropout rate for Blacks is more than 3 times higher than their white counterparts, and nearly 2 times higher than the rate for Hispanics.


Figure 15. High School Dropout Rates by Race and Ethnicity for Illinois, 2015



Source: Illinois State Board of Education, Division of Student Assessment, 2015

Maternal and Child Health

- In general, more women are getting access to adequate prenatal care, and increased initiation of breastfeeding.
- More children are born and growing in a healthy way.
- Even though Healthy People 2020 targets for each of the indicators below have been met, the disparity gap in birth outcomes has widened for Blacks compared to Whites, regardless of their socioeconomic status.

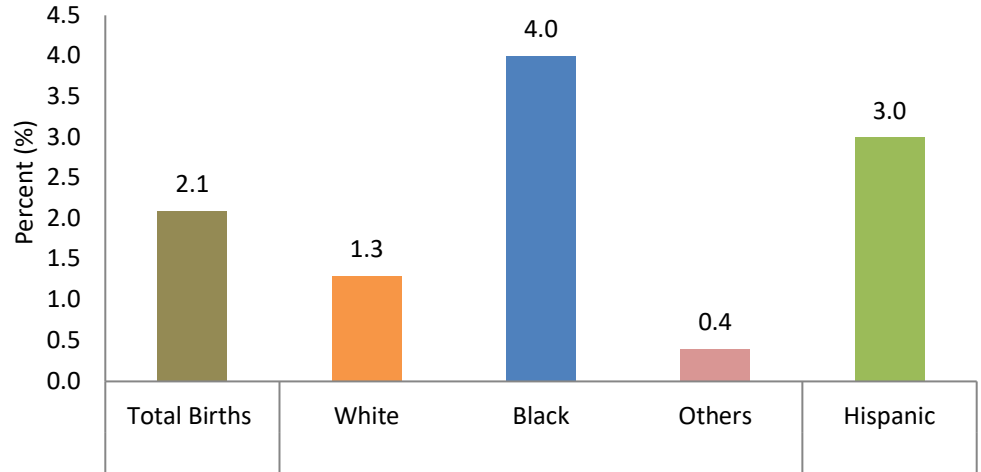
	Baseline	Most Recent	Target	Trend	On Track To Target?
Percent of Pregnant women who received prenatal care beginning in the first trimester	70.8% in 2007	87.7% in 2015	77.9% in 2020	 BETTER	
Infant deaths per 1,000 live births occurred within the first year of life	6.7 in 2006	6.0 in 2015	6.0 in 2020	 BETTER	
Percent Low Birth Weight	8.2% in 2007	7.0% in 2015	7.8% in 2020	 BETTER	
Rate of Initiation of Breastfeeding	74.0% in 2007	86.0% in 2015	81.9% in 2020	 BETTER	
Proportion of infants who are put to sleep in their backs	68.9% in 2007	77.8% in 2014	75.4% in 2020	 BETTER	

Maternal and Child Health: Teenage Births Status

Teenage births:

- Percentage of total births for all females age 15 to 19 years was 2.1 in 2015.
- Highest rates of births were observed among Non-Hispanic Blacks.
- The second highest rate was for Hispanics.

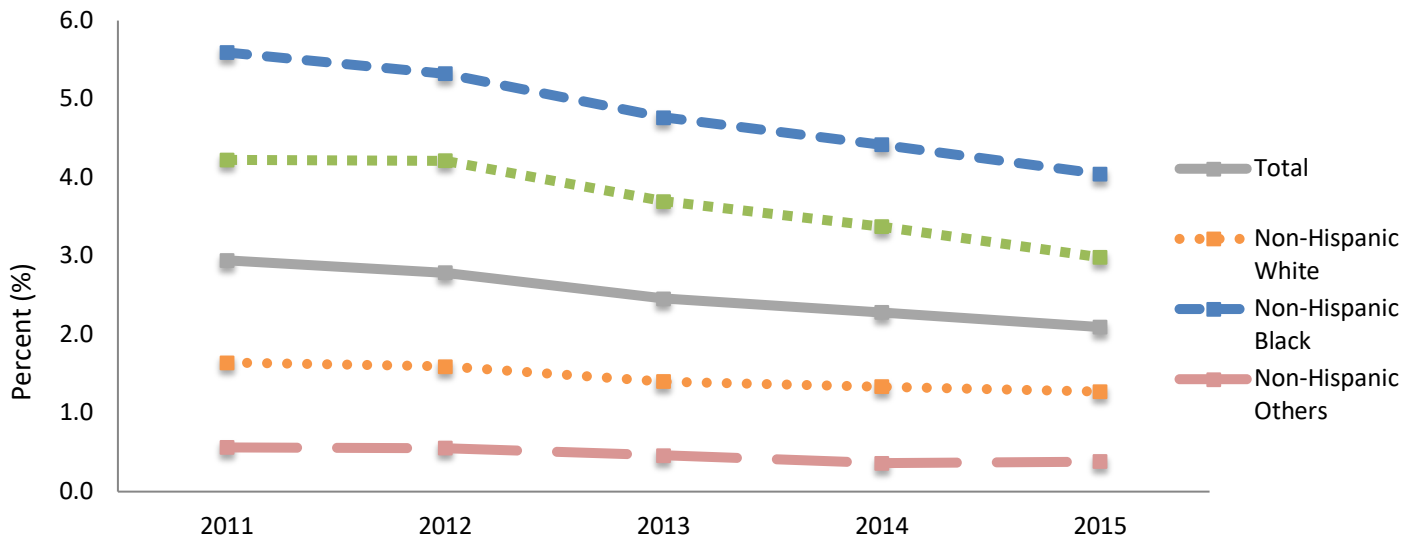
Figure 16. Birth Rates for Females Ages 15-19 years by Race/Ethnicity for Illinois, 2015



Teenage live births:

- The percent of live births among teenage girls have decreased for all race and ethnic groups from 2011 to 2015.
- The highest rate of decrease was observed for Non-Hispanic Blacks 27.7% (from 5.6 to 4.0) and Hispanics 29.4% (4.2 to 3.0) during the five-year period.

Figure 17. Percent of Total Live Births That Were Born to Females Ages 15-19 Years by Race/Ethnicity for Illinois, 2011-2015



Source: IDPH, Vital Records System, 2011-2015

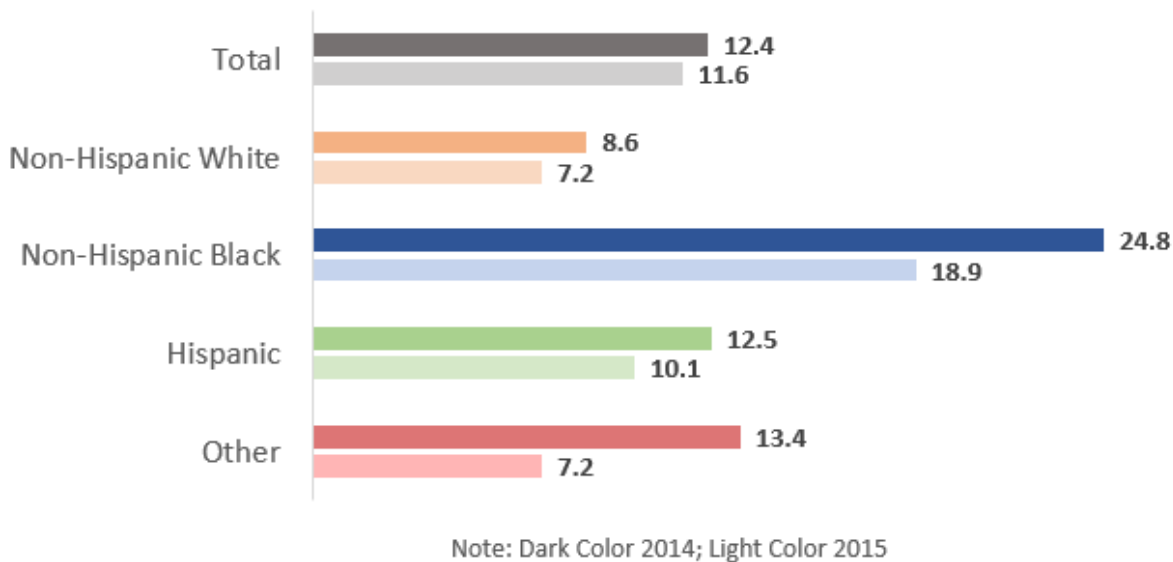
Maternal and Child Health: Prenatal Health Care

Inadequate prenatal care:

“Inadequate prenatal care” implies that prenatal care started later than first trimester.

- In general, prenatal care improved from 2014 to 2015 for all race categories.
- For both years, the highest percent of inadequate prenatal care was observed for Non-Hispanic Blacks.
- Improvement in prenatal care for “other” race category almost doubled, and significant improvement was also observed in the non-Hispanic blacks compared to non-Hispanic whites and Hispanics.

Figure 18. Inadequate Prenatal Care Percentage by Race and Ethnicity for Illinois, 2014-2015



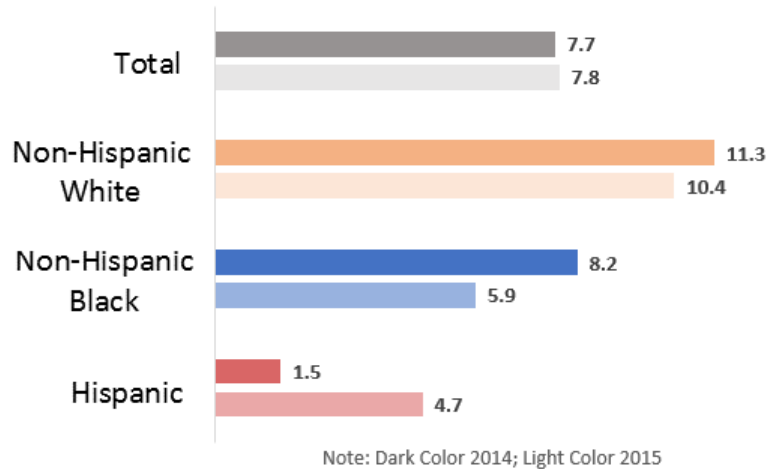
Source: IDPH, Pregnancy Risk Assessment Monitoring System (PRAMS), 2014-2015

Maternal and Child Health: Maternal Behavior

Tobacco use during pregnancy:

- Overall, the percentage of tobacco used during pregnancy has increased but the percentage has decreased for Non-Hispanic Blacks and Hispanic race groups.
- Non-Hispanic Whites have the highest percent (11.3) of tobacco use during pregnancy in 2014.
- Among Non-Hispanic Black women, the percentage of tobacco use during pregnancy decreased from 8.2 to 5.9. This is the sharpest decrease among all groups.
- Hispanic women had the lowest tobacco use rate during pregnancy for both years. However, tobacco use rate increased three-fold in 2015 to 4.7, compared to 1.5 in 2014.

Figure 19. Percent of Pregnant Women Who Used Tobacco During Pregnancy by Race and Ethnicity in Illinois, 2014-2015

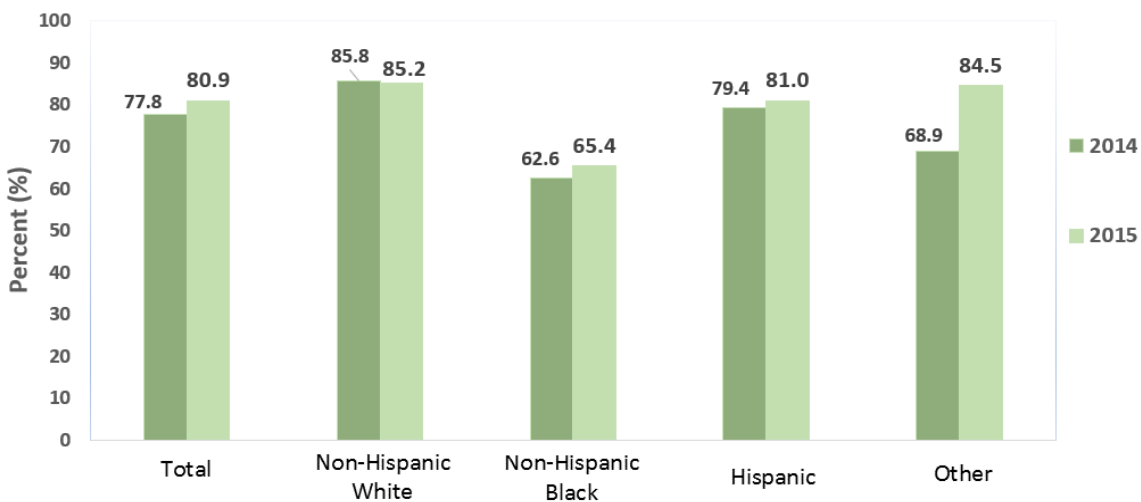


Source: IDPH, Pregnancy Risk Assessment Monitoring System (PRAMS), 2014 - 2015

Placing infants on their back to sleep:

- Non-Hispanic Blacks were least likely to place infants on their backs to sleep although that number improved between 2014 and 2015.
- The percent of individuals practicing safe sleeping pattern for children has increased for all race groups except for Others.

Figure 20. Percent of Mothers in Illinois who Reported Placing Infants on Their Back to Sleep by Race and Ethnicity, 2014-2015



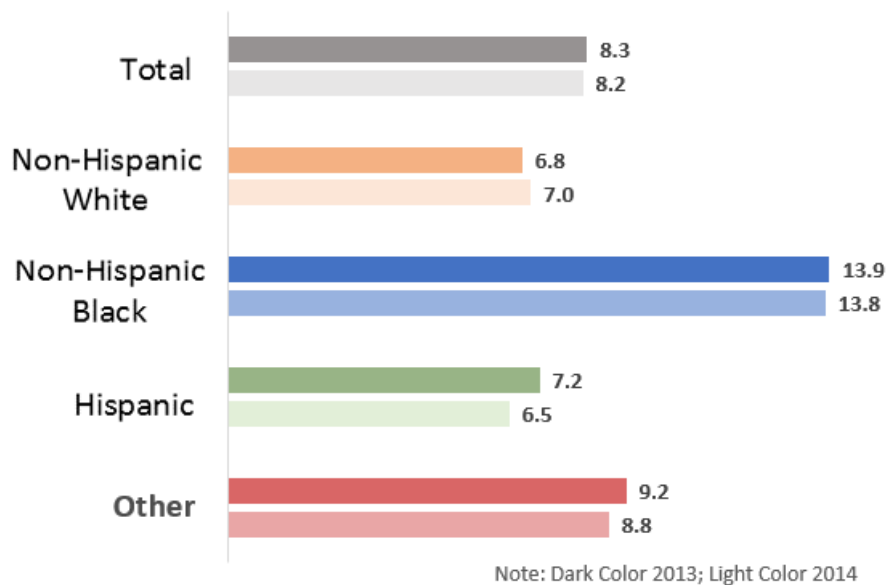
Source: IDPH, Pregnancy Risk Assessment Monitoring System (PRAMS), 2014 and 2015

Maternal and Child Health: Birth Weight of the Child

Low birth weight babies:

- Overall, the percent of babies born with a low birth weight slightly decreased from 2013 to 2014 with the exception on non-Hispanic whites who had a slight increase rate in 2014.
- Non-Hispanic Blacks had the highest percent of babies with low birthweight for both years, which is twice that of non-Hispanic whites for both years.
- The second highest rate for low birthweight babies was for Other race group with a slight decrease from 2013 to 2014.
- Non-Hispanic Whites had the lowest percent of low birthweight babies in 2013, but in 2014 Hispanics had the highest improvement rate and the lowest percent of low birthweight babies over all other race and ethnic categories.

Figure 21. Percent of Low Birth Weight (Birth Weight <2500 grams) Babies by Race and Ethnicity for Illinois, 2013-2014



Source: IDPH, Illinois Vital records System, 2013 - 2014

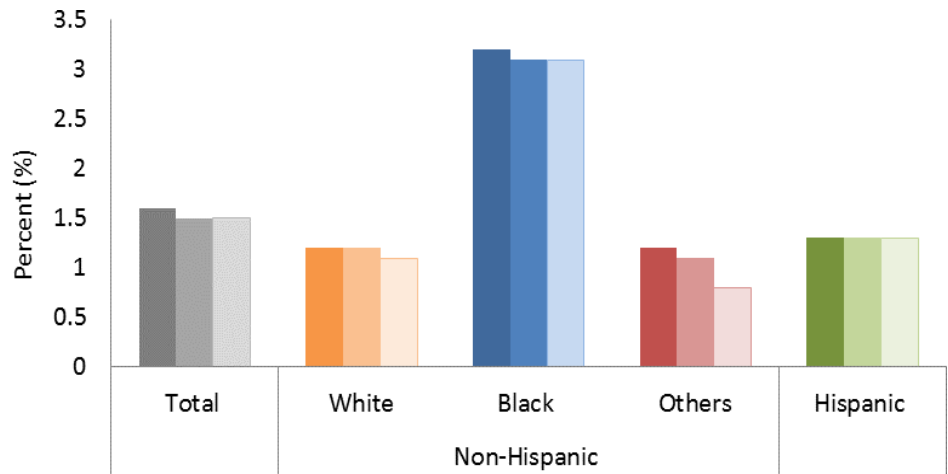
Maternal and Child Health: Birth Weight of the Child Cont.

Very low birth weight:

Very low birth weight babies weigh less than 3.3 pounds or 1500 grams at birth.

- Between 2010 and 2015, Black babies were more than twice as likely to have a very low birth weight compared to their babies from the other groups identified.
- Babies in the Other race category had the least babies with very low birth weight.

Figure 22. Percent of Very Low Birth Weight (Birth Weight <1500 grams) Babies by Race and Ethnicity in Illinois, 2010, 2012 and 2015



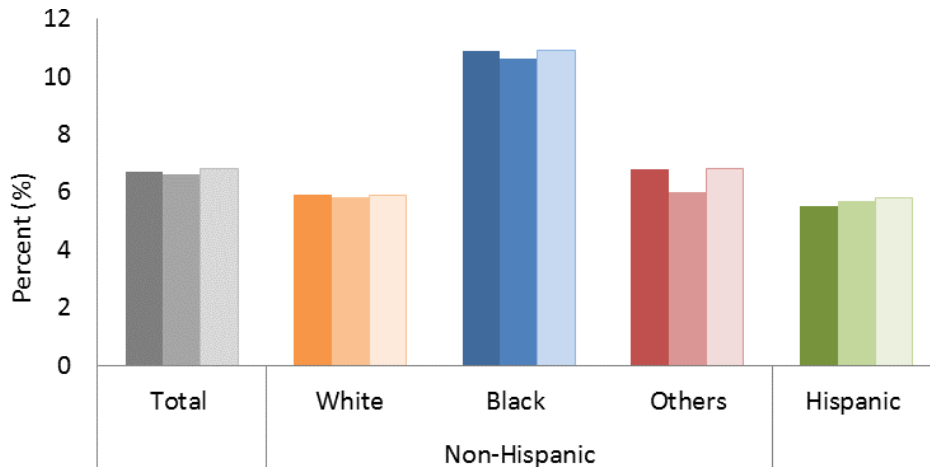
Dark color= 2010, Medium dark color= 2012, Light color= 2015
Source: IDPH, I-Query, 2010, 2012 & 2015

Low birth weight babies:

Low birth weight babies weigh between 1500 and 2499 at birth or approximately 3.3 – 5.5 pounds.

- In this category, Non-Hispanic Blacks had the highest percent of babies with a low birth weight between 2010 to 2015, a rate that is nearly 2 times that of all categories combined.
- Hispanic low birth weight is similar to that of whites but there was a subtle rise in trend over the three years depicted.

Figure 23. Percent of Low Birth Weight (Birth Weight Between 1500-2499 grams) Babies by Race and Ethnicity in Illinois, 2010, 2012 and 2015



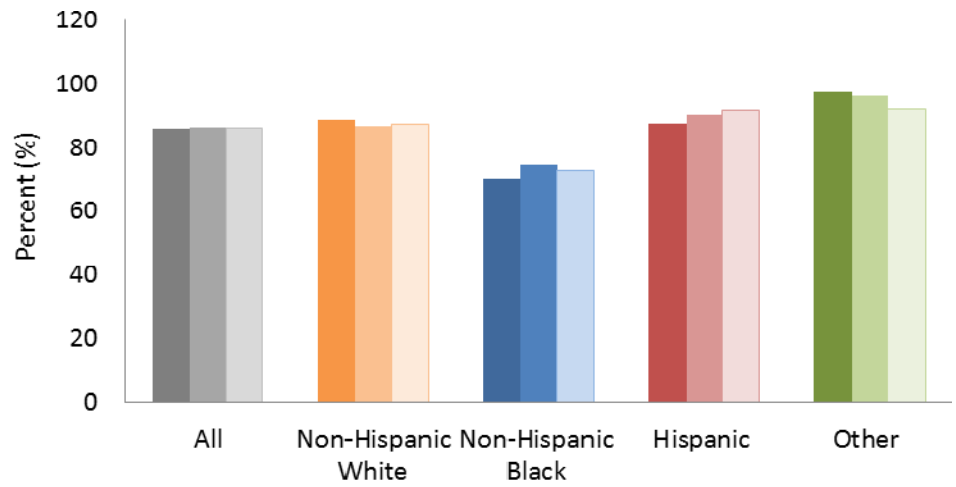
Dark color: 2010, Medium Dark color: 2012, Light color: 2015
Source: IDPH, I-Query, 2010, 2012 & 2015

Maternal and Child Health: Breastfeeding Status

Initiation of breastfeeding:

- Among the race/ethnicity categories, Non-Hispanic Others had the highest percent of new mothers who reported initiation of breastfeeding.
- Non-Hispanic Blacks had the lowest percent of new mothers who reported initiation of breastfeeding.

Figure 24. Percent of New Mothers Who Reported Initiation of Breastfeeding by Race and Ethnicity for Illinois, 2013-2015



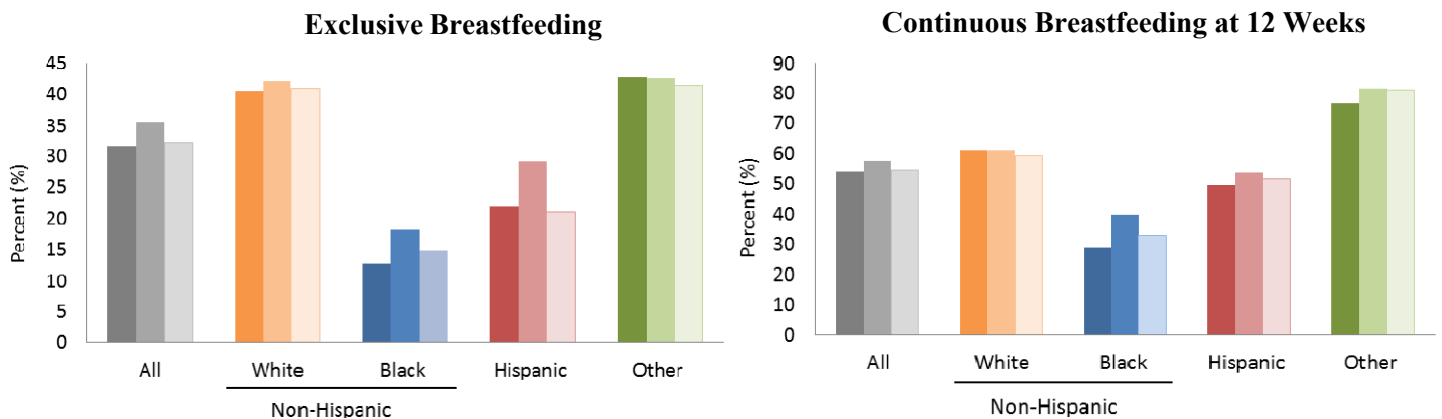
Dark color: 2013, Medium Dark color: 2014, Light color: 2015

Source: IDPH, Pregnancy Risk Assessment Monitoring System (PRAMS), 2013-2015

Continuation of breastfeeding:

- Non-Hispanic other race group and Non-Hispanic Whites had the highest percent of new mothers who reported continuing breastfeeding exclusively at 12 weeks after delivery among mothers who reported initiating breastfeeding.
- Non-Hispanic Blacks had the lowest percent of new mothers who reported continuing breastfeeding exclusively at 12 weeks after delivery among mothers who reported initiating breastfeeding.

Figure 25. Percent of New Mothers Who Reported Continuing Breastfeeding at 12 Weeks After Delivery Among Mothers Who Reported Initiating Breastfeeding by Race and Ethnicity in Illinois, 2013-2015



Dark Color– 2013; Medium Dark Color–2014; Light Color- 2015

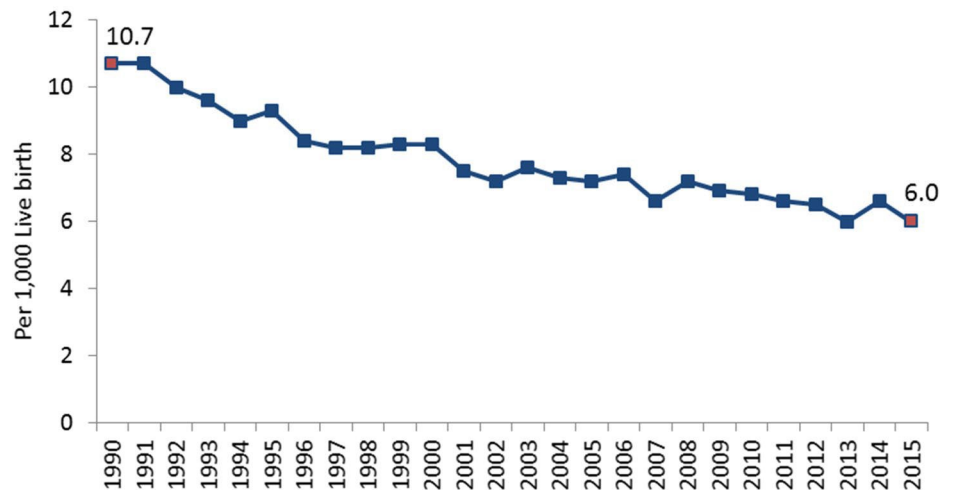
Source: IDPH, Pregnancy Risk Assessment Monitoring System (PRAMS), 2013-2015

Maternal and Child Health: Infant Mortality

Infant mortality:

- Infant mortality rate has declined from 10.7 in 1990 to 6.0 per 1,000 live births in the past twenty-five years.
- The infant mortality rate was highest in 1990 and it declined gradually over time.

Figure 26. Infant Mortality Rates per 1000 Live Births for All Causes of Death in Illinois, 1990-2015

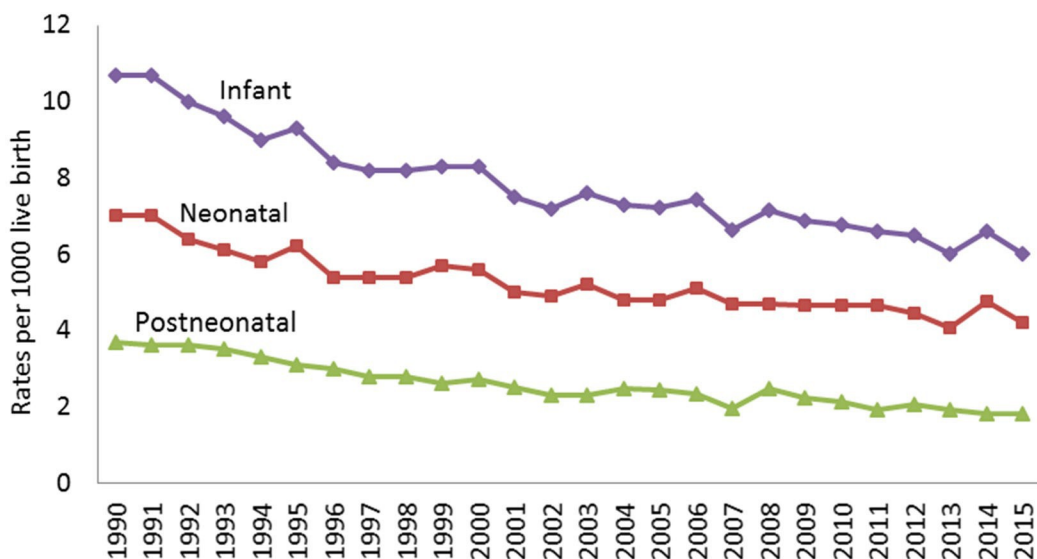


Source: IDPH, Annual Vital Statistics Report, 1990-2015

Neonatal, Post-neonatal and Infant mortality:

- The rates of neonatal, post-neonatal and infant mortality have declined from 1990 to 2015.
- A significant rate of decline is observed for infant mortality.
- Lowest rate of decline is observed for post-neonatal mortality rate (3.7 to 1.8) in the last twenty-five years.

Figure 27. Neonatal, Post-neonatal and Infant Mortality Rates for Illinois, 1990-2015



Note: " Neonatal death" implies the death of a child during first 4 weeks after birth, "Post neonatal death" implies to the death of child within the period of after 27 days but less than one year after birth. And "Infant death" implies the death of children under one year of age.

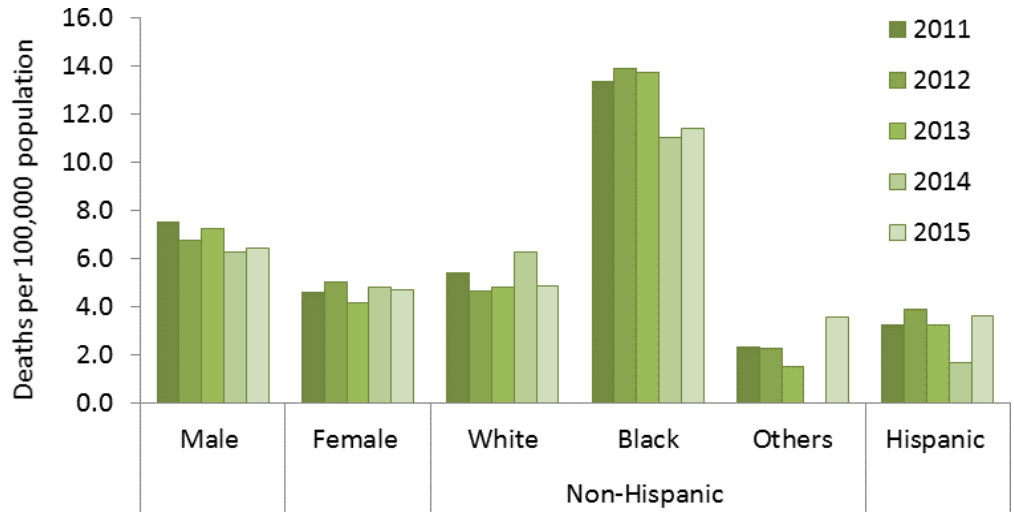
Source: : IDPH, Annual vital record book, 1990-2003; Vital record system, 2004-2015

Maternal and Child Health: Unintentional Injuries

Accident death rates in children age <14 years:

- Overall accidental death rate has decreased from 2011 to 2015.
- Male children have the higher accident death rates than females.
- Highest accidental death rate is observed for non-Hispanic Black children.
- Though the rate has decreased from 2011, a small rise of accidental death was observed in 2015 in non-Hispanic other race group and Hispanic children.

Figure 28. Accidental Death Rates for Children Age <14 Years by Sex and Race/Ethnicity for Illinois, 2011-2015

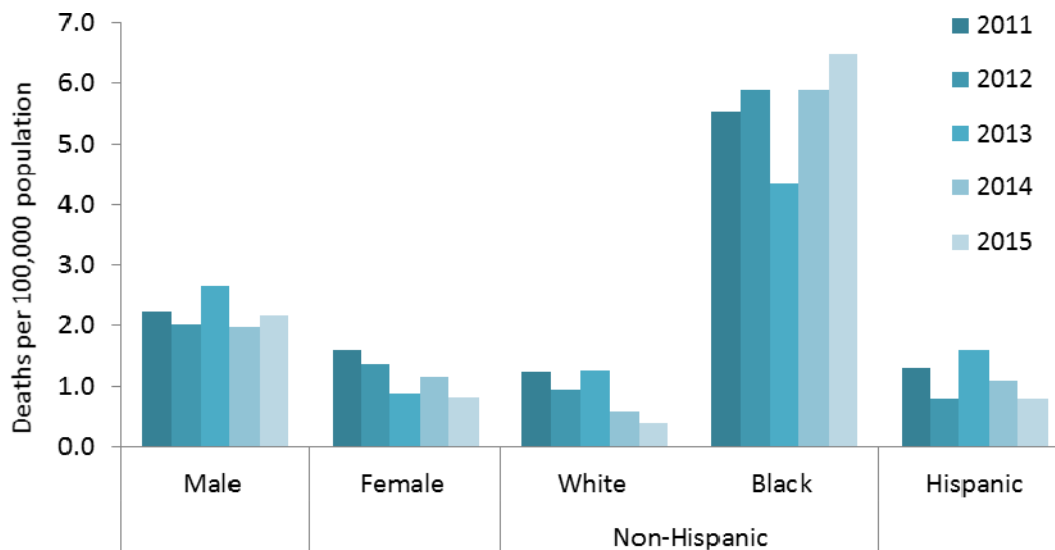


Source: IDPH, Vital Records System, 2011-2015

Homicide rate in children age <14 years:

- Homicide rates show a different pattern among sex and different race/ethnic groups.
- For males the rate is higher than females. Also, it is observed that for the males the rate remained same in 2011 and in 2015.
- Highest rates of homicide were seen among non-Hispanic Black children from 2011 to 2015.
- For non-Hispanic Whites and Hispanic groups, the homicide rate has decreased in last five years.
- Homicide rates decreased for all other race groups except Blacks, which increased 5.5% from 2014.

Figure 29. Homicide Rates in Children Age <14 Years by Sex and Race/Ethnicity for Illinois, 2011-2015



Note: Non-Hispanic others has been excluded because data for this category is only available for 2015.

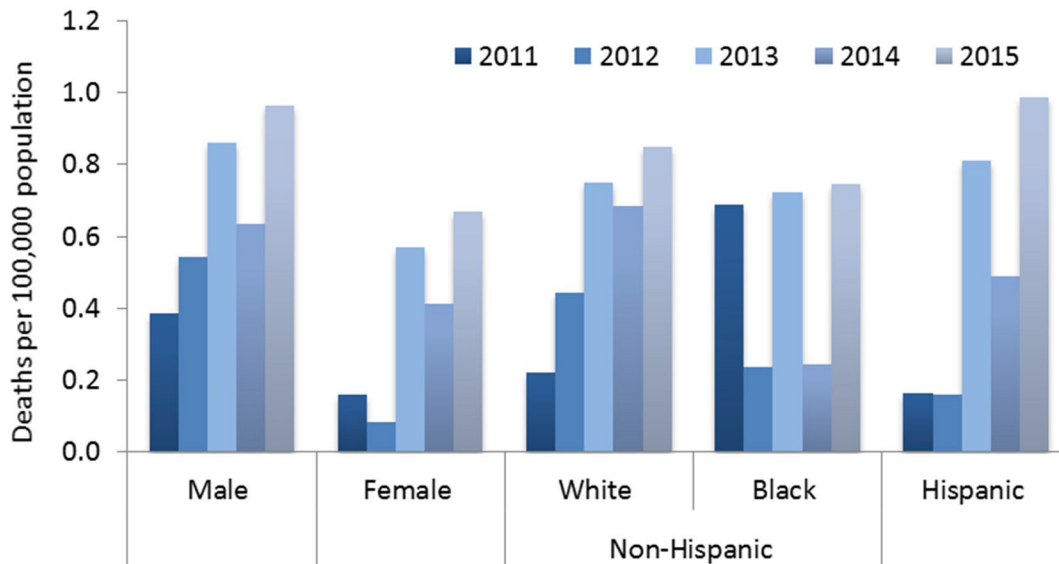
Source: IDPH, Vital Records System, 2011-2015

Maternal and Child Health:

Suicide rate in children age <14 years:

- Overall suicide rate increased for all sex and race categories among children less than 14 years old.
- Though the suicide rate was higher among males, a significant rise was observed for females after 2012.
- The rate continued to increase for non-Hispanic Whites and showed a significant rise for Hispanic group from 2013 to 2015.
- For Non-Hispanic Blacks the rate showed a rise and fall pattern from 2011 to 2015.

Figure 30. Suicide Rates for Children Ages <14 Years by Sex and Race/Ethnicity for Illinois, 2011-2015



Source: IDPH, Vital Records System, 2011-2015

Note: Due to variation in small number of cases the height of the bars changed significantly from one year to another.

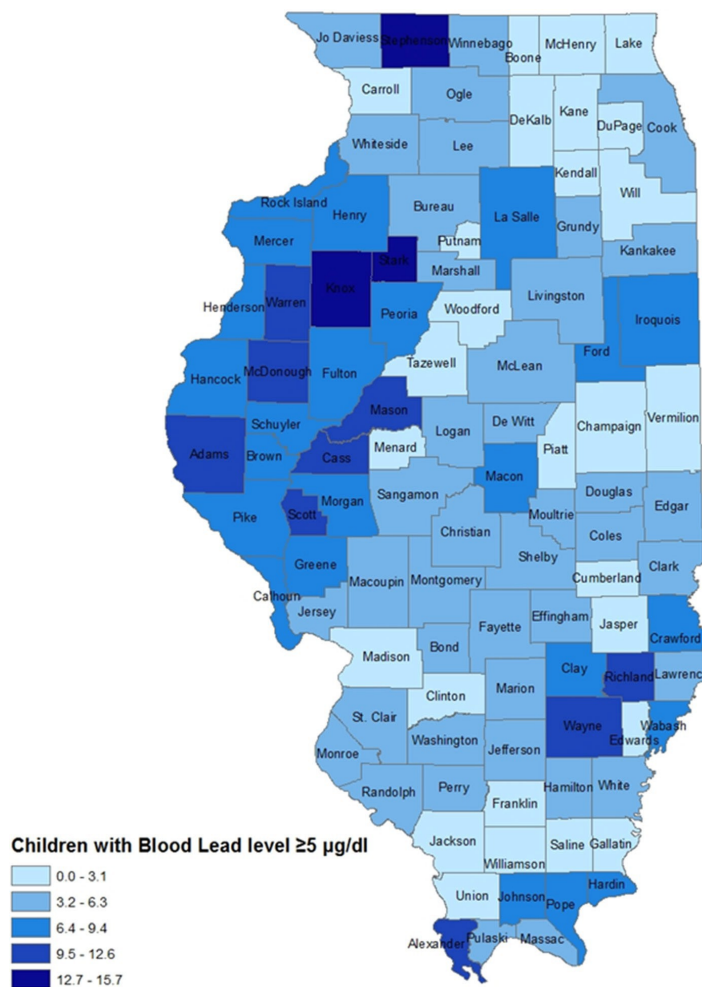
Maternal and Child Health:

Out of 102 counties in Illinois, 61 counties had children ages 6 years or younger who had elevated blood lead level ≥ 5 microgram/dL.

Blood Lead Level in children age <6:

- 12 counties had about 10%+ of screened children ages 6 years or younger who had elevated blood level ≥ 5 microgram/dL in Illinois in 2015.
- 22 counties had about 6.4%-9.4% of screened children ages 6 years or younger who had elevated blood lead level ≥ 5 microgram/dL in Illinois in 2015.
- 27 counties had about .0%-3.1% of screened children ages 6 years or younger who had elevated blood lead level ≥ 5 microgram/dL in Illinois in 2015.

Figure 31. Percent of Children Ages 6 Years or Younger Tested for and with Elevated Blood Lead Levels ≥ 5 $\mu\text{g}/\text{dL}$ in Illinois Counties, 2015



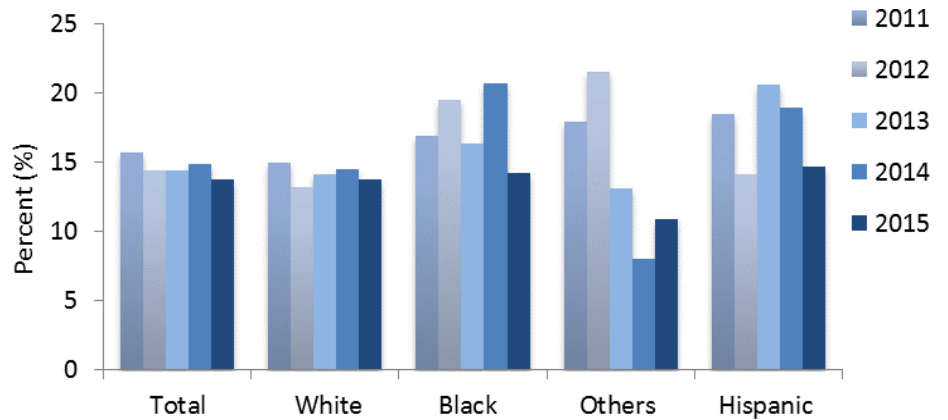
Note: St. Clair county includes East Side Health District and Cook county = Cook county – Chicago.

Behavioral Health and Health Care Access:

Physical health status:

- Overall the rate of poor physical health status for more than 7 days in a month decreased from 2011 to 2015.
- Highest rate was observed for Hispanics and the rate has declined from 2013 to 2015.
- Among Blacks the rate of unhealthy physical days raised in 2013 but fell again from 2011 to 2015.
- For the Others the rate was high at the beginning then it declined significantly during the last three years.

Figure 32. Percent of Population Who Reported Their Physical Health Was “Not Good” for More Than 7 Days in Past 30 Days by Race and Ethnicity in Illinois, 2011-2015

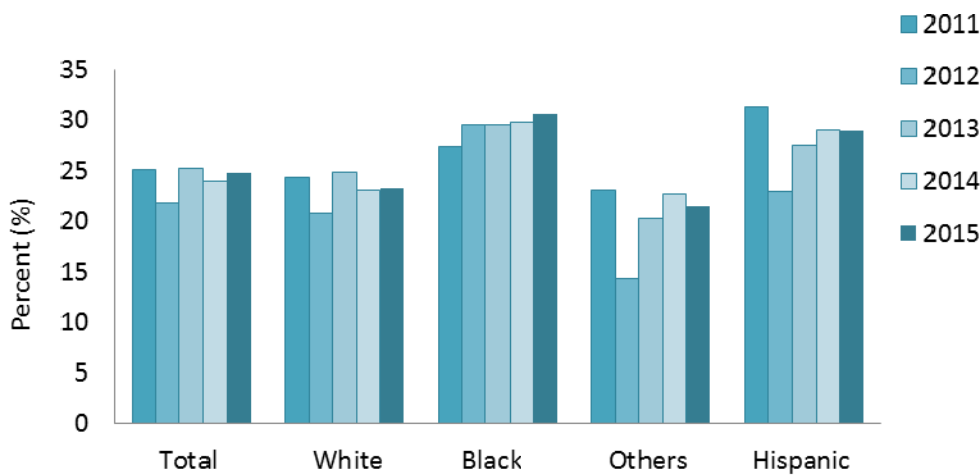


Source: Illinois Risk Factor Surveillance System (BRFSS), 2011-2015

Participation in exercise:

- Percent of population who do not do any exercise was high among Blacks and Hispanics.
- for the Blacks, the rate is increasing slowly among those who do not participate in physical activities.

Figure 33. Percent of Adult Population Who Did Not Participated in Any Exercise During Past 30 Days by Race/Ethnicity for Illinois, 2011-2015



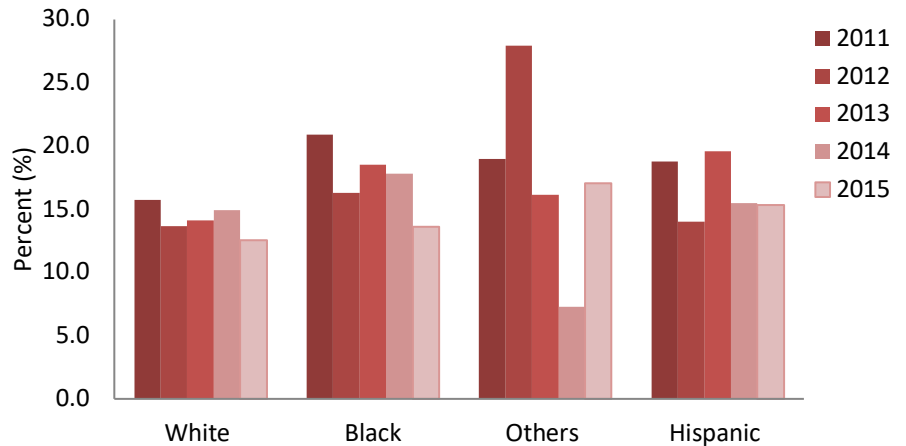
Source: Illinois Behavioral Risk Factor Surveillance

Behavioral Health and Health Care Access: Mental Health Status

Mental health status by race/ethnicity:

- Percent of unhealthy mental health days has decreased for Blacks in last five years.
- For Whites, the percent of unhealthy mental day's status did not change significantly.
- For Others category, the status was highest in 2012 and lowest in 2014. There was a significant spike in 2015 for those reporting more than 7 days of not good health among this group
- For Hispanics, the rate was high in 2011 and 2013, and showed no change from 2014 to 2015.

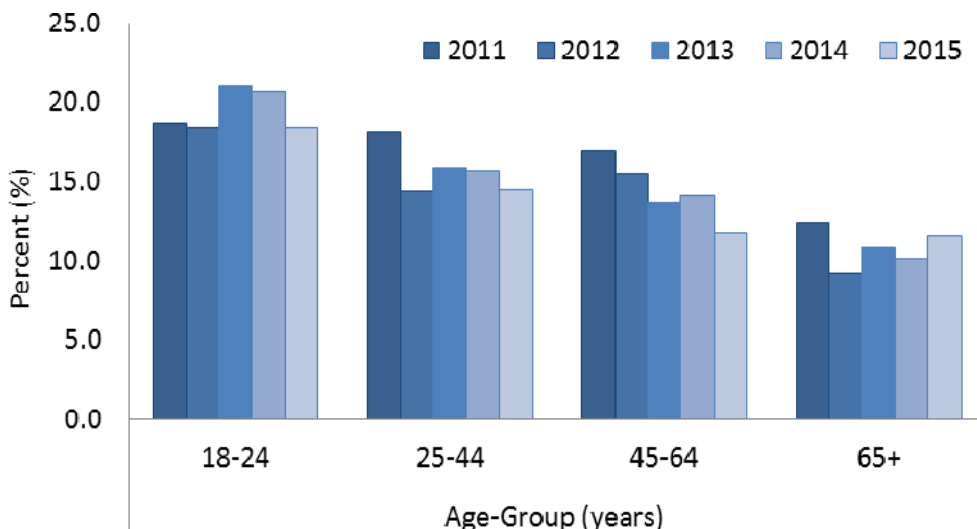
Figure 34. Percent of Adult Population Who Reported Their Mental Health Status Was “Not Good” for More Than 7 Days in Last 30 Days by Race/Ethnicity for Illinois, 2011-2015



Mental health status by age:

- For age-groups 25-44 and 45-64, the percent of unhealthy mental days decreased in the last five years.
- For age-group 18-24, the percent of unhealthy mental health days have been consistent with slight increases observed from 2013 to 2014.
- For age-group 65+, the rate showed a rise and decline pattern from 2011 to 2015.

Figure 35. Percent of Population Who Reported Their Mental Health Status Was “Not Good” for More Than 7 Days in Past 30 Days by Age- group in Illinois, 2011-2015



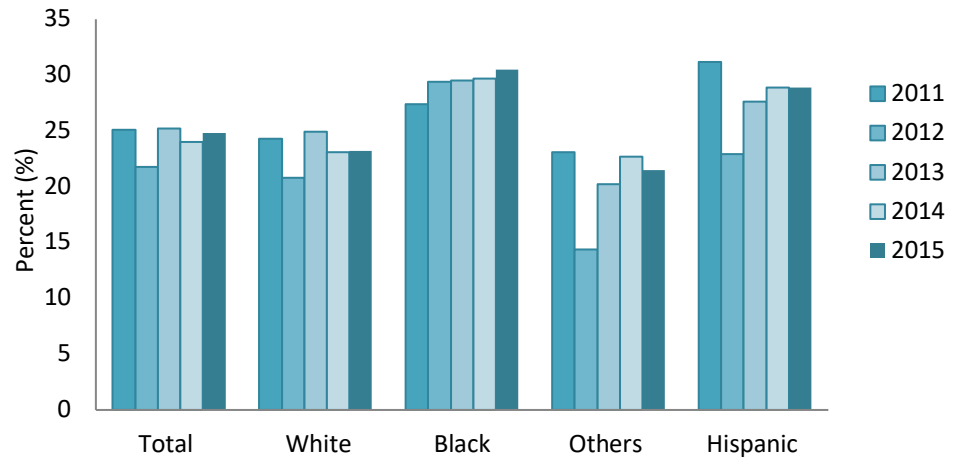
Source: Illinois Behavioral Risk Factor Surveillance System (BRFSS), 2011-2015

Behavioral Health and Health Care Access: Health Risk Factors

Adult smokers:

- Rate of smoking has gone down from 2011 to 2015.
- For Blacks, smoking rate was highest in 2011 with a steady pattern for 2012-2013 and after 2014 the rate has fluctuated downward.
- Highest rates of smoking in 2015 were amongst other races and Hispanics.

Figure 36. Percent of Adult Population Who Were Current Smokers by Race/Ethnicity for Illinois, 2011-2015

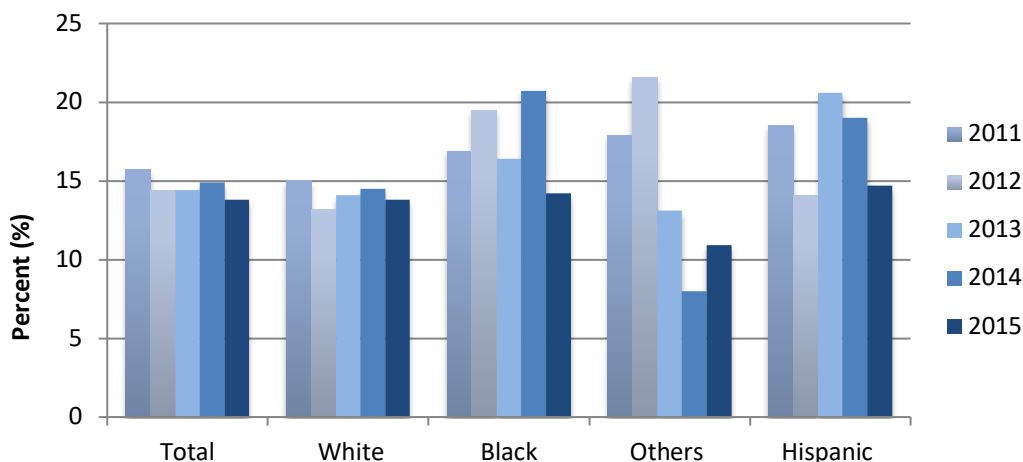


Source: Illinois Behavioral Risk Factor Surveillance System (BRFSS), 2011-2015

Obesity status:

- Obesity rates increased for all race groups except for other races.
- Obesity rate was highest among Blacks in 2011 and continues to remain so but showing a slight decrease in 2015.
- Highest rate of increase since 2011 was observed for Hispanics.

Figure 37. Percent of Adult Population Who Were Diagnosed as Obese in Illinois, 2011-2015



Source: Illinois Behavioral Risk Factor Surveillance System (BRFSS), 2011-2015

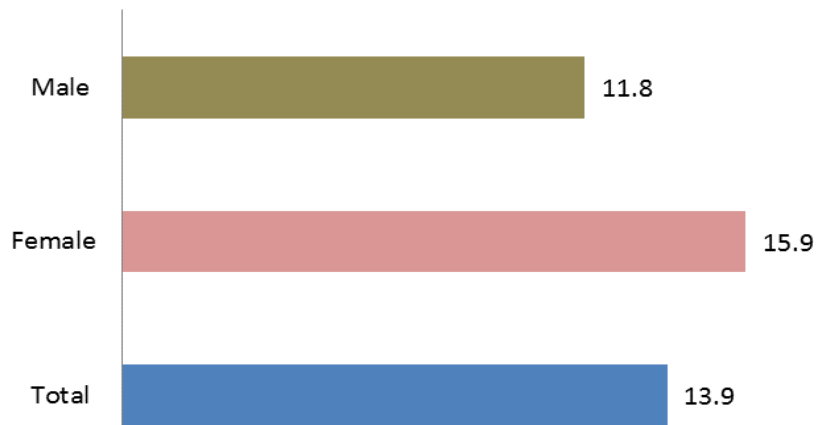
Behavioral Health and Health Care Access: Health Risk Factors

Adverse childhood experiences (ACEs) are traumatic events occurring before age 18. ACEs include all types of abuse and neglect as well as parental mental illness, substance use, divorce, incarceration, and domestic violence⁷

Adverse Childhood Experiences (ACE) by sex:

- Rate of four or more adverse childhood experience is higher among females than males.

Figure 38. Reported Four or More Adverse Childhood Experiences by Sex for Illinois, 2013

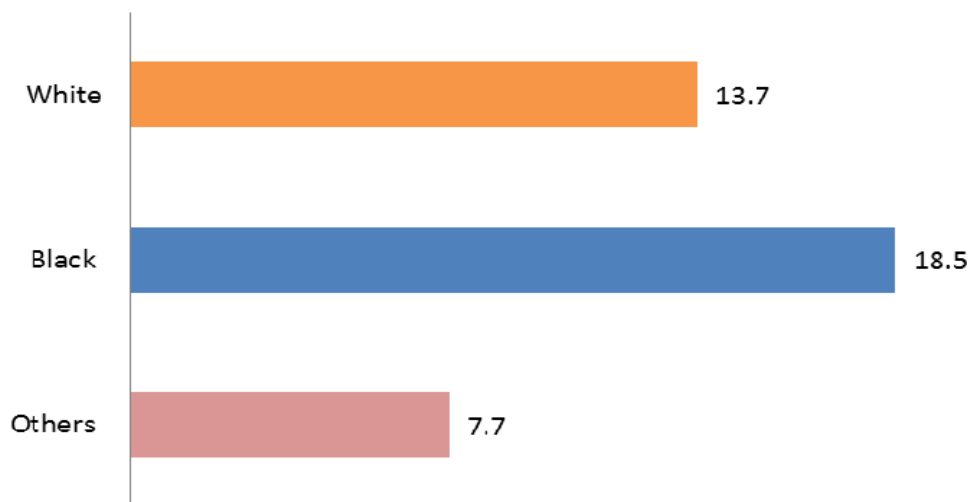


Source: Illinois Behavioral Risk Factor Surveillance System (BRFSS), 2013

ACE by race:

- The rate of four or more adverse childhood experience (ACE) was higher among Blacks.
- Second highest rate of ACE was observed for Whites.

Figure 39. Reported 4 or More Adverse Childhood Experiences by Race in Illinois, 2013



Source: Illinois Behavioral Risk Factor Surveillance System (BRFSS), 2013

⁷ <https://www.childwelfare.gov/topics/preventing/preventionmonth/resources/ace/>

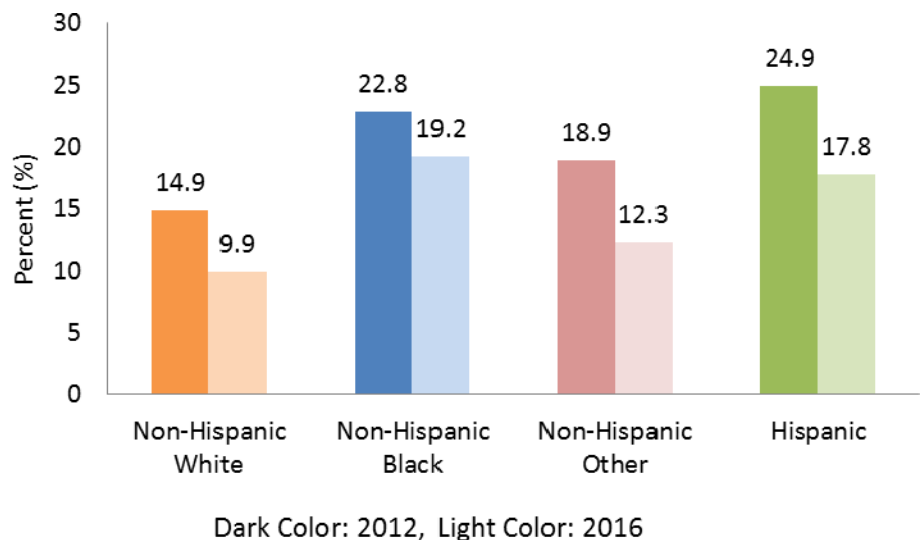
Behavioral Health and Health Care Access: Oral Health Status

Children with oral health problems:

- Overall the oral health problem has decreased in children.
- Non-Hispanic Black children had the highest rate of oral health problems in past 12 months.
- Hispanic children had the second highest rate of oral health problems.

Note: Oral health problems includes "Toothaches, bleeding gums, decayed teeth or cavities."

Figure 40. Percent of Children (Age 1-17 Years) who had Oral Health Problems in Past 12 Months by Race and Ethnicity in Illinois, 2012 and 2016

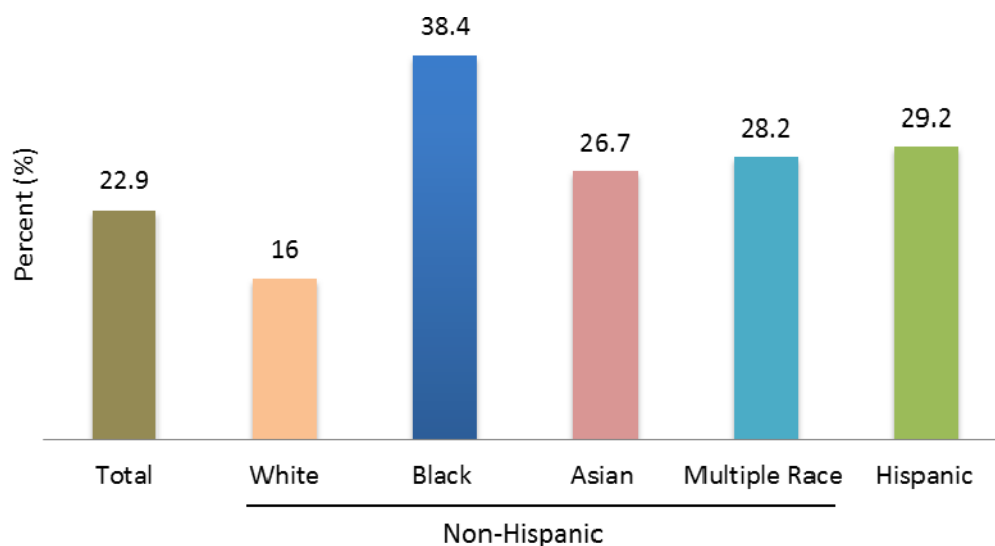


Source: National Survey of Children's Health, 2012-2016

Dental visit status in high school children:

- Non-Hispanic Black high school children are least likely to visit a dentist in past 12 months. This is at a rate 24 times higher than Non-Hispanic Whites and 1.4 and 1.3 times higher from that of Asians and Hispanic respectively.

Figure 41. Percent of High School Children Who Did Not Visited a Dentist in Past 12 Months by Race and Ethnicity in Illinois, 2015



Note: Data are not available for Non-Hispanic American Indian or Alaska Native and Non-Hispanic Native Hawaiian or Other Pacific Islander.

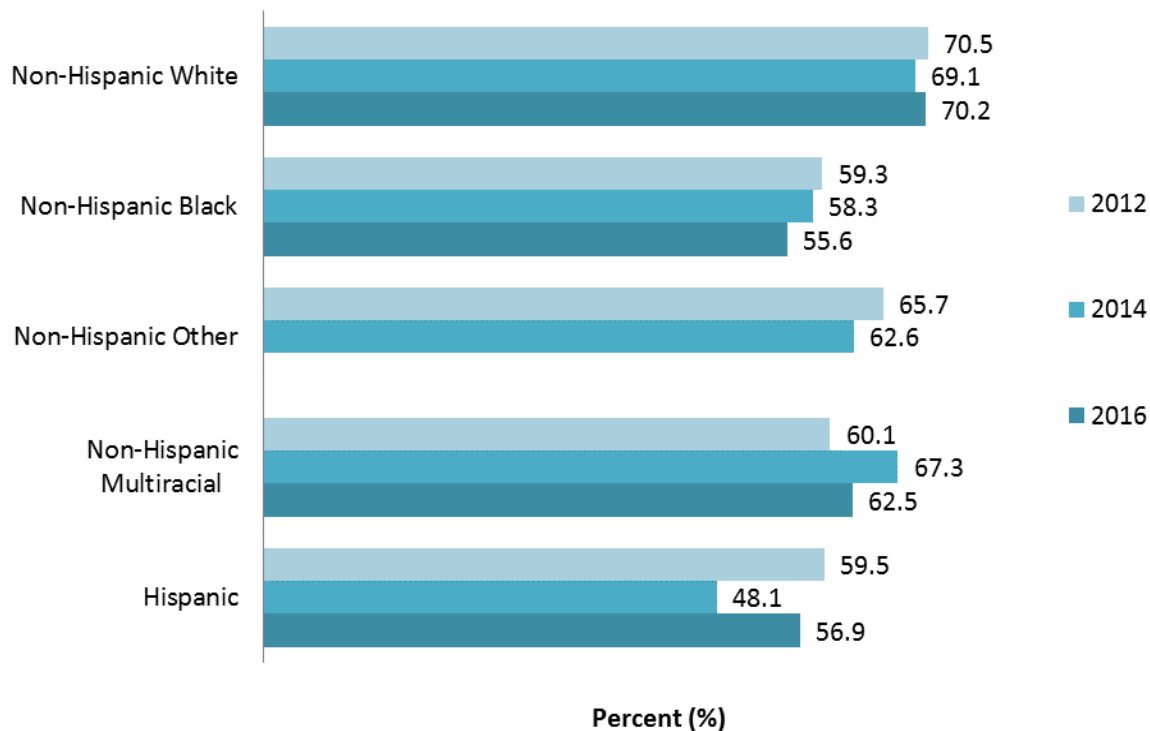
Source: CDC, Illinois High School Youth Risk Behavior Survey, 2015

Behavioral Health and Health Care Access: Dental Health Status Cont.

Adult population who visited a dentist:

- Non-Hispanic White population had more reported visits to the dentist or dental clinic within the past year.
- Black and Hispanic populations had the lowest rate of visit to the dentist or dental clinic in the past year. For Blacks, this number has shown a steady decline over the three years mentioned, unlike all other race and ethnic categories that showed improvement in 2016 compared to 2014.
- Compared to all race and ethnic categories in Figure 42, Hispanic adults showed the biggest improvement in dentist or dental clinic visits in 2016 compared to 2014 data for all groups.

Figure 42. Percent of Adult Population Visited the Dentist or Dental Clinic Within the Past Year for Any Reason by Race and Ethnicity in Illinois, 2012, 2014 and 2016



Note: No data was available for Non-Hispanic Other race for 2016

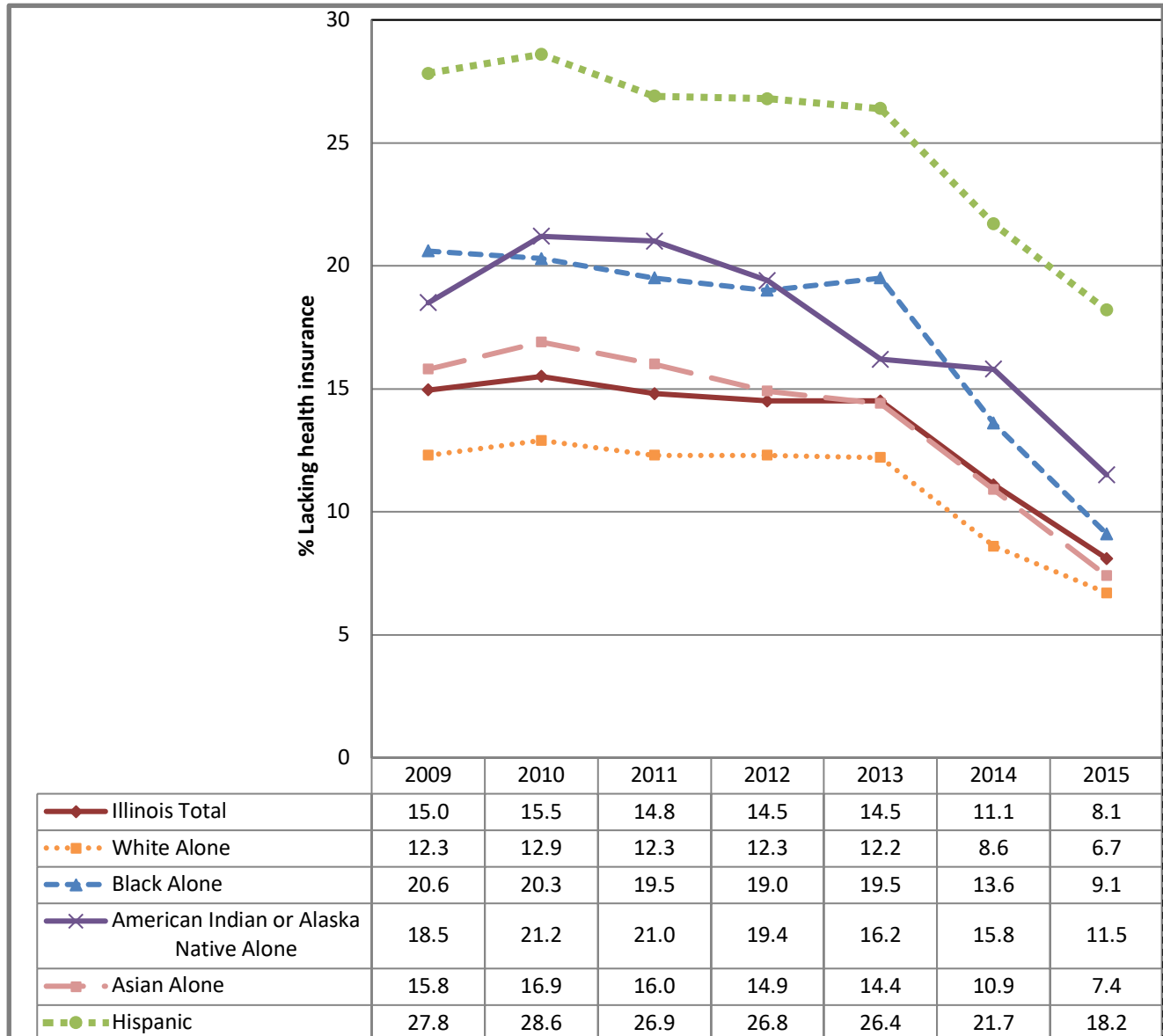
Source: Behavioral Risk Factor Surveillance System (BRFSS), CDC, 2012, 2014 & 2016

Behavioral Health and Health Care Access: Health Insurance Status

Health insurance status:

- Uninsured percent had decreased significantly for all race categories from 2009 to 2015.
- The highest rate of decline was for Blacks.
- And the second highest rate of decline is for Hispanic population.

Figure 43. Annual Percent of Illinois Population (Age <65 Years) Uninsured by Race/Ethnicity, 2009-2015



Source: U.S. Census Bureau, American Community Survey 1-year estimates, 2009-2015

Since 2009, the proportion of the population of Illinois without health insurance coverage has declined for all races and ethnicities. However, the rate of uninsured Hispanic/Latinos is still high at 18.2%. This high disparity can be attributed to mistrust of the system, concerns about immigration status, uncertainty about navigating the health care system, language barrier, and lack of culturally competent service providers. Ensuring equity in accessing and utilizing health care services makes for a healthier workforce and a thriving economy.

Chronic Diseases and Disability Status: Mortality Baseline & Targets

- Death rates for overall cancer mortality and drug induced are below the target level.
- We have exceeded 2020 goals for deaths by stroke and motor vehicle accidents.
- Suicide rate remain unchanged.

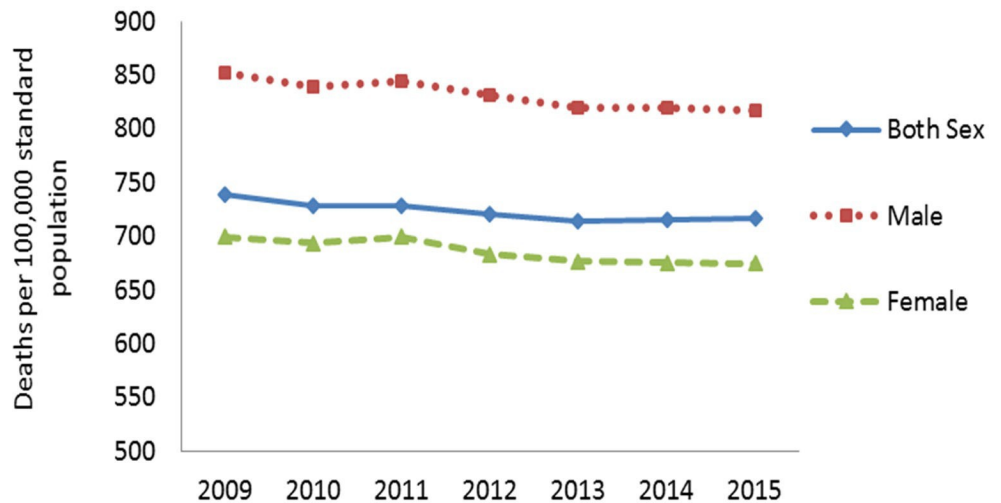
	5 Years Baseline	Most Recent	Target	5 Years Trend	On Tract To Target?
Suicide rate per 100,000 population	11.3 in 2007	10.2 in 2015	10.2 in 2020	 BETTER	YES
Overall cancer death rate per 100,000 population	175.3 in 2007	167.9 in 2015	161.4 in 2020	 BETTER	YES
Stroke/Cerebrovascular disease deaths per 100,000 population	43.5 in 2007	37.3 in 2015	38.4 in 2020	 BETTER	MET
Motor vehicle accident death rate per 100,000 population	13.8 in 2007	8.3 in 2015	12.4 in 2020	 BETTER	MET
Drug induced deaths per 100,000 population	12.6 in 2007	18.1 in 2016	11.3 in 2020	 WORSE	NO

Chronic Diseases and Disability: Mortality Status

Death rates for all causes of death by sex:

- In Illinois, age-adjusted death rates for all causes of death have decreased for both male and females from 2009 to 2015.
- These rates have remained almost unchanged for both sexes since 2013.

Figure 44. Age Adjusted Death Rates for All Causes of Death by Sex in Illinois, 2009-2015

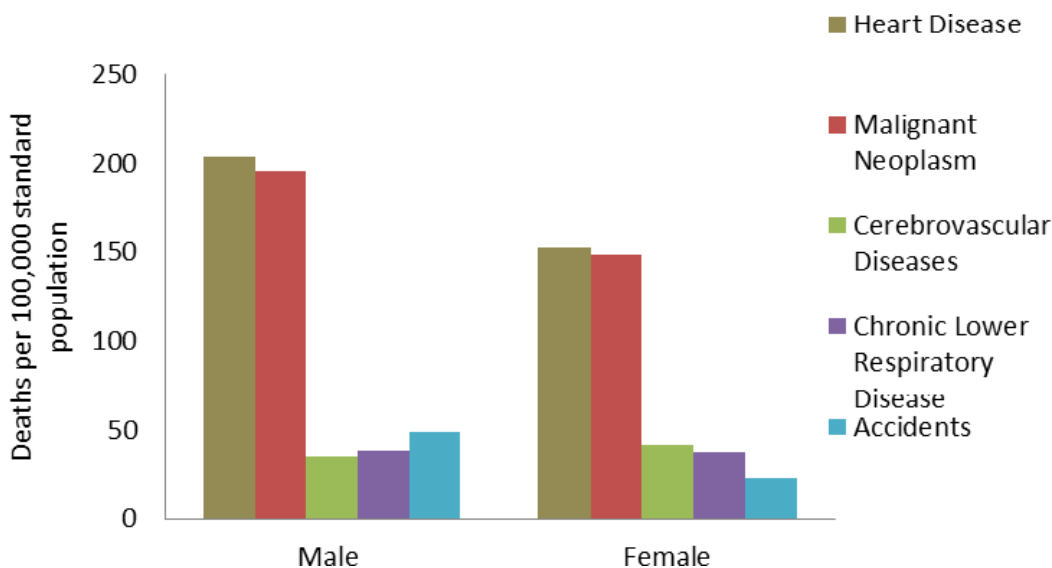


Source: IDPH, Vital Records System, 2009-2015

Five leading causes of death by sex:

- According to the Illinois Vital Records System five leading causes of deaths are heart diseases, malignant neoplasm, cerebrovascular diseases, chronic lower respiratory disease and accident.
- Out of these five categories, age-adjusted death rate for males is higher for heart disease, malignant neoplasm and accidents. On the other hand, age-adjusted death rate is higher for females in cerebrovascular disease category.
- Males and females have similar age-adjusted death rates for chronic lower respiratory diseases.

Figure 45. Age-Adjusted Death Rates for Five Leading Causes of Death by Sex for Illinois, 2015



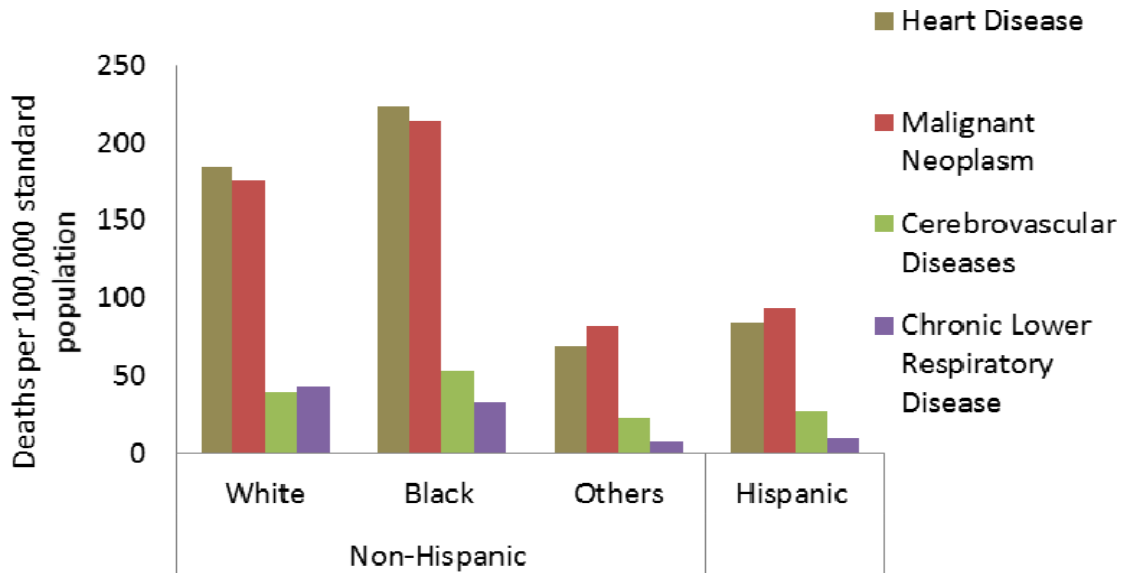
Source: IDPH, Vital Records System, 2015

Chronic Diseases & Disability: Mortality Status

Four Leading causes of death by race and ethnicity:

- Non-Hispanic Blacks had the highest age adjusted death rate in three disease categories, heart disease⁸, malignant neoplasm⁹ and cerebrovascular diseases¹⁰.
- Second highest death rate was observed for Non-Hispanic Whites. They have the highest death rate for chronic lower respiratory disease¹¹.

Figure 46. Age-Adjusted Death Rates for 4 Leading Causes of Death by Race and Ethnicity in Illinois, 2015



Source: IDPH, Vital Records System, 2015

⁸ Heart disease refers to conditions that involve the heart, its vessels, muscles, valves, or internal electric pathways responsible for muscular contraction. The most common type of heart disease in the United States is coronary artery disease, which affects the blood flow to the heart. (<https://www.cdc.gov/heartdisease/about.htm>)

⁹ Malignant neoplasms are collectively known as cancers. Malignant neoplasms display aggressive characteristics, can invade and destroy adjacent tissues, and spread to distant sites (metastasize). (<https://www.sciencedirect.com/topics/medicine-and-dentistry/malignant-neoplasm>)

¹⁰ Cerebrovascular disease includes stroke, carotid stenosis, vertebral stenosis and intracranial stenosis, aneurysms, and vascular malformations. (<https://www.aans.org/Patients/Neurosurgical-Conditions-and-Treatments/Cerebrovascular-Disease>)

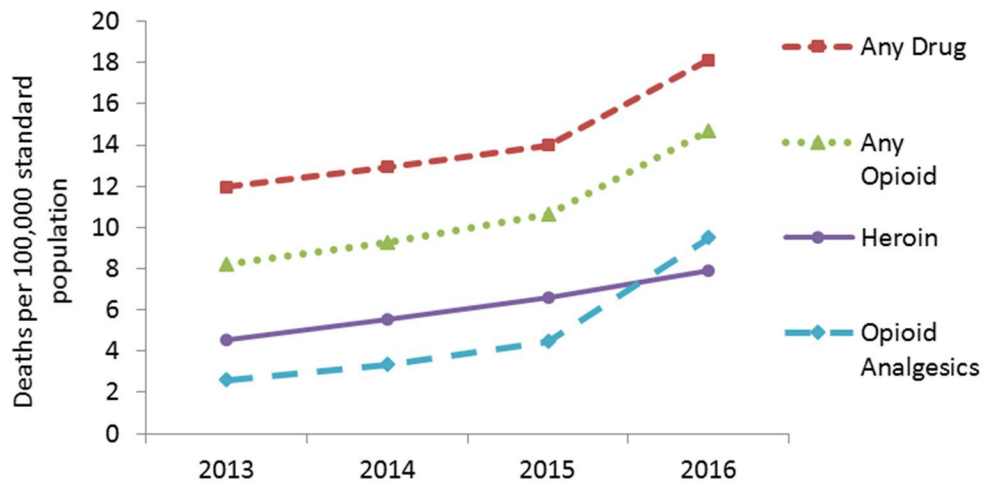
¹¹ Group of conditions that affect the lungs, such as Chronic Obstructive Pulmonary disease (COPD) (<https://www.cdc.gov/copd/index.html>)

Chronic Diseases & Disability: Drug Overdose Mortalities

Drug overdose deaths:

- Deaths per 100,000 populations have increased for all four-drug overdose categories.
- The rate of increase for all drug categories was significant between 2015 and 2016.
- A sharp rise in drug overdose rate for Opioid analgesics was observed during 2015 to 2016.

Figure 47. Age-Adjusted Drug Overdose Death Rates per 100,000 Populations for Illinois, 2013-2016

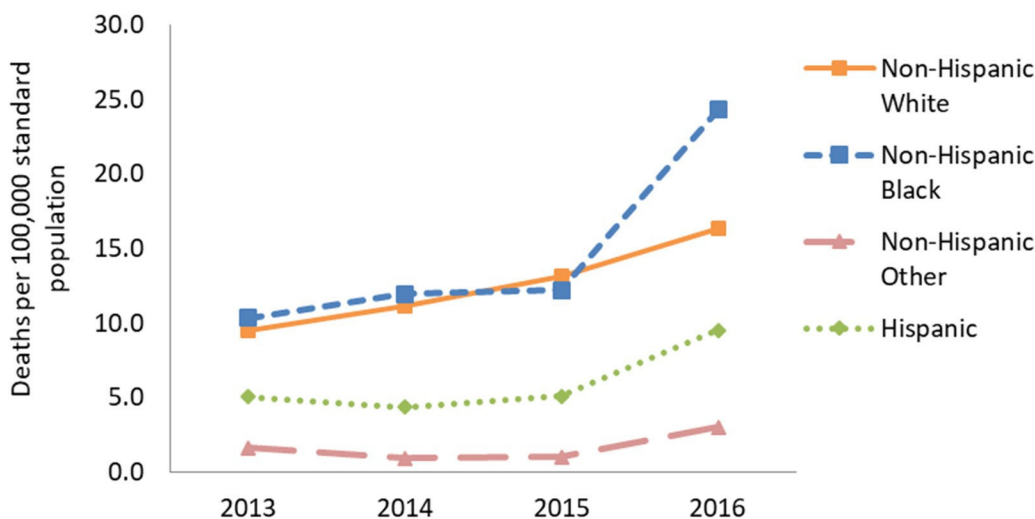


Source: IDPH, Vital Records System, 2013-2016

Any opioid overdose deaths:

- Age-adjusted any opioid drug overdose death rates increased significantly for all race and ethnicity between 2015 and 2016.
- Number of age-adjusted death rates increased more than two-fold between 2015 and 2016 for Non-Hispanic Blacks. This group saw the highest surge in deaths since 2015, among all race and ethnicity.
- These age-adjusted death rates were much lower for Non-Hispanic other and for Hispanics.

Figure 48. Age-Adjusted Any Opioid Overdose Death Rates per 100,000 Populations by Race and Ethnicity in Illinois, 2013-2016



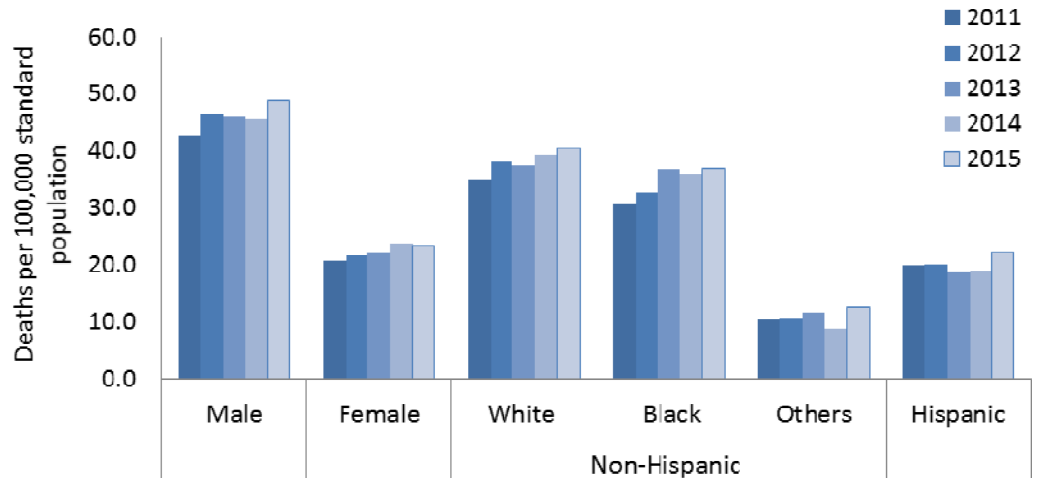
Source: IDPH, Vital Records System, 2013-2016

Chronic Diseases & Disability: Unintentional Mortalities

Accident death rate:

- Accidental death rate was higher among males and the rate increased from 2011 to 2015.
- The highest victims of accidental deaths were Non-Hispanic Whites.
- Non-Hispanic Blacks had the second highest rate of accidental deaths.

Figure 49. Age-Adjusted Accidental Death Rates per 100,000 Populations by Sex, Race and Ethnicity for Illinois, 2011-2015

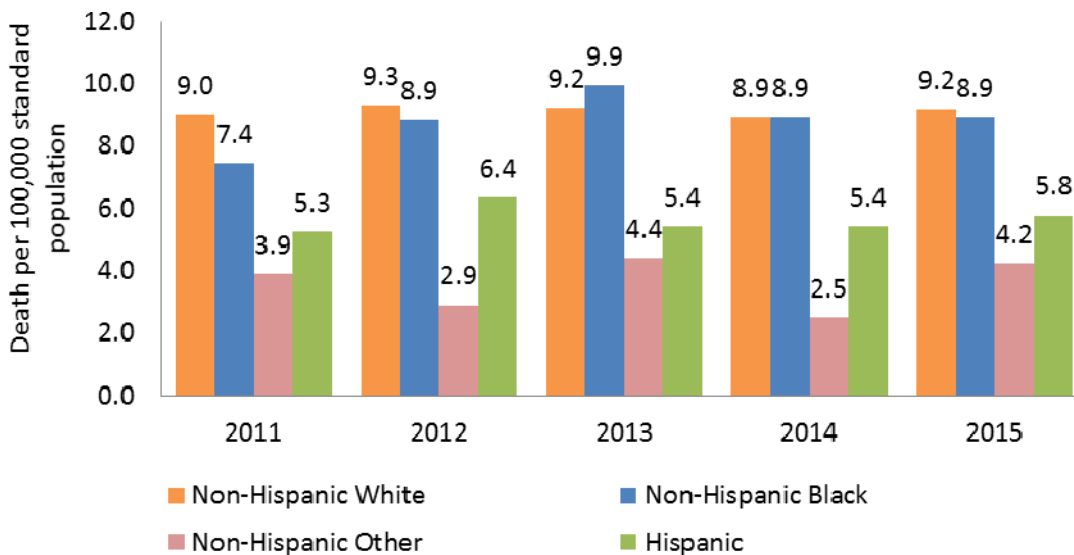


Source: IDPH, Vital Records System, 2011-2015

Motor vehicle accident death rates:

- Overall motor vehicle accidental death rates increased for all four race and ethnic categories between 2011 and 2015.
- For Non-Hispanic Blacks, the motor vehicle accident death rate was highest (9.9) in 2013 but after has reduced by 1 point and has remained the same between 2014 and 2015.
- Since 2011, the aged-adjusted death rate has remained consistent for Non-Hispanic whites, with the number of deaths slightly higher in 2015 than in 2014.

Figure 50. Age-Adjusted Motor Vehicle Accident Death Rates by Race and Ethnicity in Illinois, 2011-2015



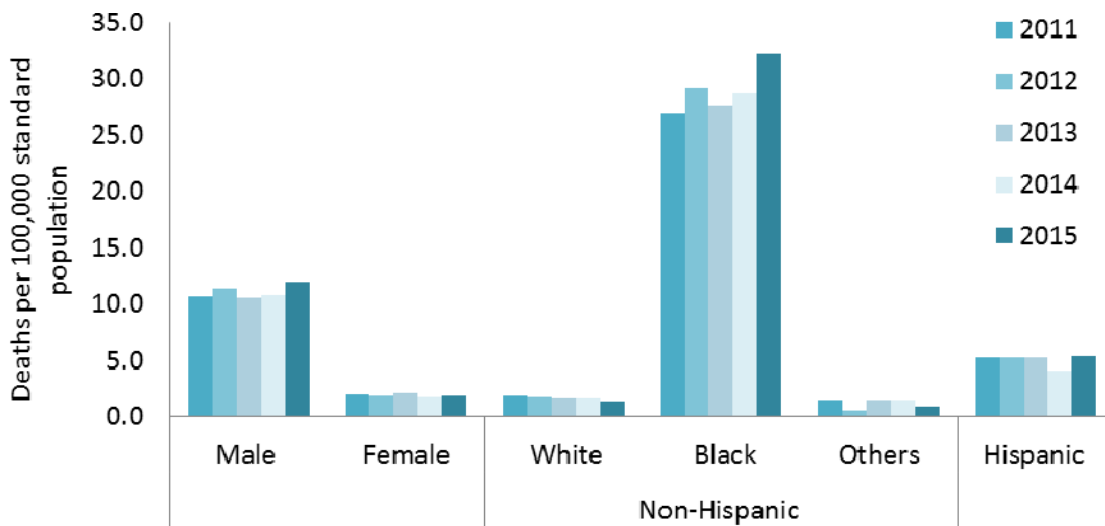
Source: IDPH, Vital Records System, 2011-2015

Chronic Diseases & Disability: Unintentional Mortalities

Homicide rates:

- Age-adjusted homicide rate was more than double for males than females, and the trend remained constant from 2011 to 2014, with a slight uptick in 2015. For females the trend held constant for all five years.
- Blacks were the highest victims of homicidal deaths with a rate more than 13 times higher than that of Whites, and approximately 24 per 100,000 population higher than all other race groups combined.
- The second highest homicide rate was for Hispanics, at a rate double that of Whites and Others categories, but approximately 5 times lower than that of blacks.
- In 2015 there was a spike in homicide rates for Blacks compared to the other race categories who saw slight reductions or no change.

Figure 51. Age-Adjusted Homicide Rates per 100,000 Populations by Sex, Race and Ethnicity for Illinois, 2011-2015



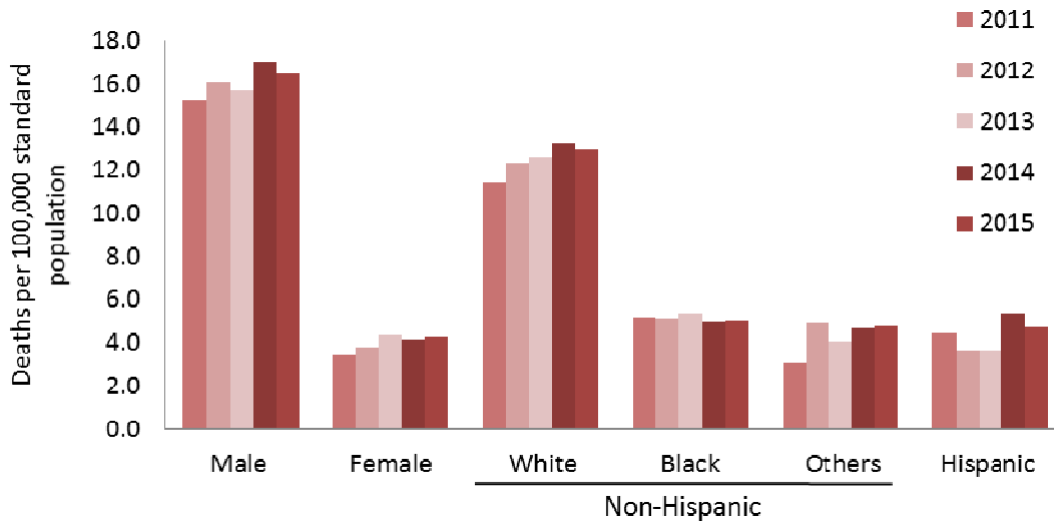
Source: IDPH, Vital Records System, 2011-2015

Chronic Diseases & Disability: Suicide Mortalities

Suicide rates:

- Suicide rates increased from 2011 to 2015 for both sexes with 2014 having the highest rate among male, whites, and Hispanics.
- Age-adjusted suicide rate was five times higher in males than it was for females.
- Non-Hispanic Whites had the highest suicide rate at double the rate of all other race categories between 2011 and 2015.

Figure 52. Age-Adjusted Suicide Rates per 100,000 Populations by Sex, Race and Ethnicity for Illinois, 2011-2015



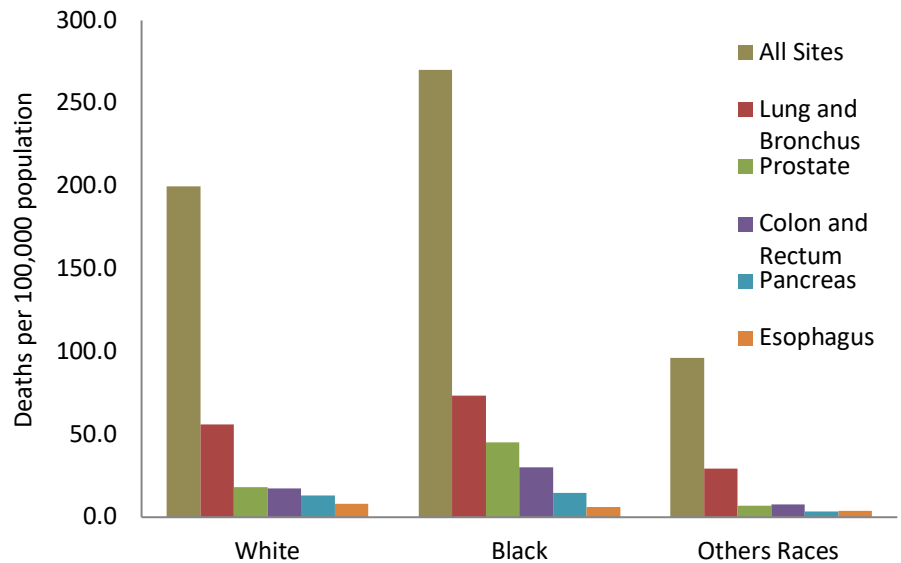
Source: IDPH, Vital Records System, 2011-2015

Chronic Diseases & Disability: Cancer Mortalities

Cancer related deaths in males:

- Black males had the highest age-adjusted death rates for cancer. The rates were also higher for lung and bronchus, prostate, colon and rectum, pancreas and esophagus than their counter parts.

Figure 53. Age-Adjusted Cancer Death Rates for Males by Race and the Site of Cancer in Illinois, 2014

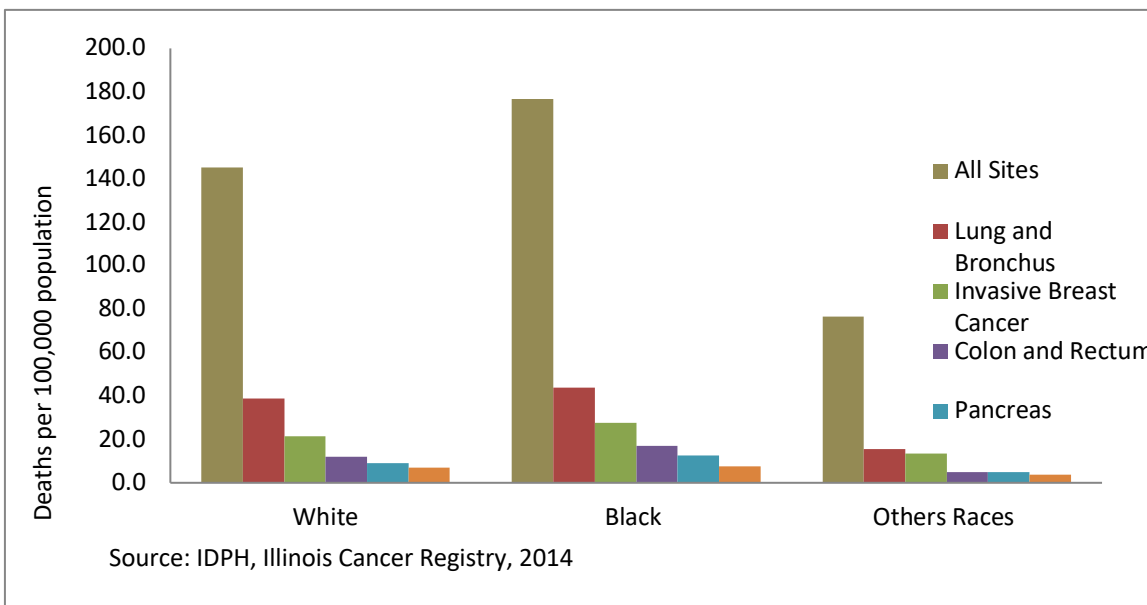


Source: IDPH, Illinois Cancer Registry, 2014

Cancer related deaths in females:

- Age adjusted cancer death rate was also highest among Black women in all five categories as well as for all sites of cancer.



Figure 54. Age-Adjusted Cancer Death Rates for Females by Race and the Sites of Cancer in Illinois, 2014



Source: IDPH, Illinois Cancer Registry, 2014

Chronic Diseases and Disability: Morbidity Baseline & Targets

- The gonorrhea rate for both male and females shows a decline between 2008 and 2015.
- Newly diagnosis rate of HIV disease did not change much between 2008 and 2015 and is not expected to meet AHRQ benchmark. One explanation could be that more people in Illinois are getting tested, resulting in more newly diagnosed and reported HIV+ cases.

	Baseline	Most Recent	Target	Trend	On Tract To Target?
Newly diagnosed with HIV per 100,000 population	14.2 in 2007	13.7 from 2008-2015	4.3 (Benchmark by AHRQ)	 UNCHANGED	NO
New cases of Gonorrhea per 100,000 population					
For Male	216.5 in 2008	147.8 in 2015	194.8 in 2020	 BETTER	MET
For Female	279.9 in 2008	117.6 in 2015	251.9 in 2020		

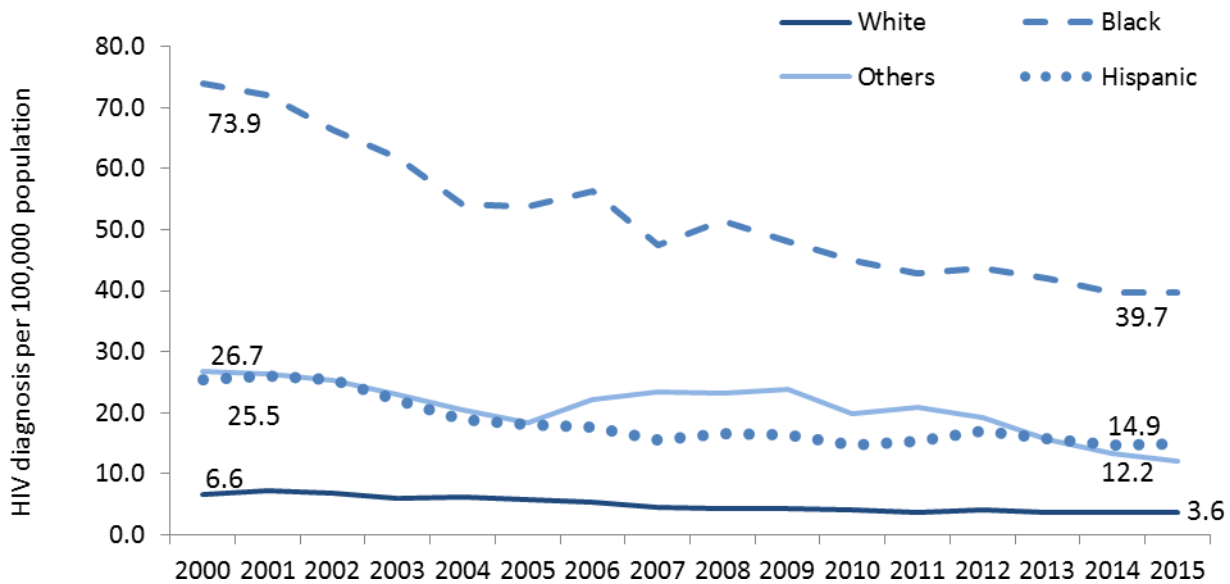
Note: The target for the newly diagnosed with HIV disease was used from Agency for Health Care Research and Quality (AHRQ), National Health Care Quality and Disparity reports.

Chronic Diseases & Disability: Morbidity Status for HIV

HIV diagnosis status:

- In general HIV rates have decreased among all race and ethnic groups.
- HIV rates among Blacks had decreased by nearly half since 2000 but remains significantly higher than that of other race and ethnic categories.
- Among Whites, the HIV rate had also decreased by half since 2000, but has remained steady since 2013.
- HIV rate among Others showed variations in the last fifteen years. It peaked in 2009 and has steadily declined from 2012 and 2015.
- The HIV rate among Hispanics had decreased from 2000 to 2004 and has remained mostly steady through 2015.

Figure 55. HIV Disease Diagnosis Rates per 100,000 Populations in Illinois by Race/Ethnicity, 2000-2015



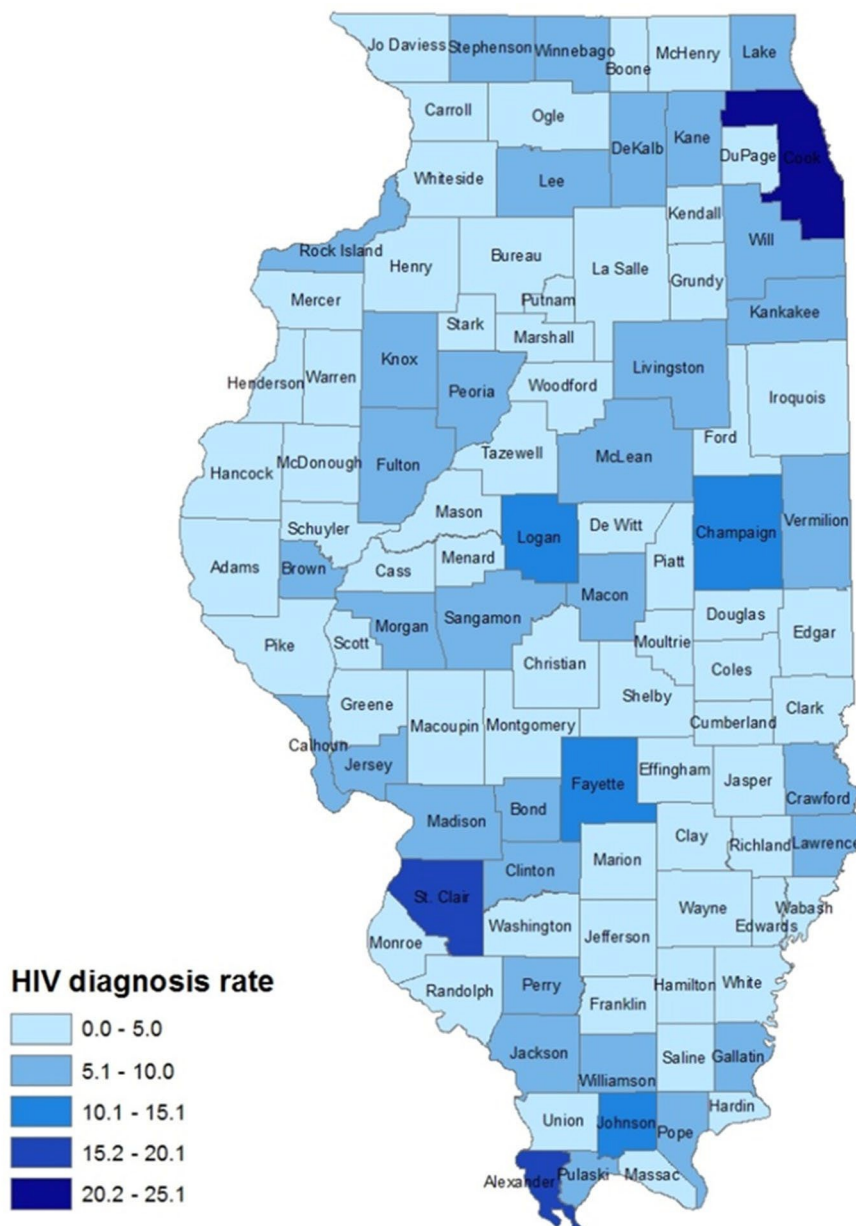
Source: IDPH, HIV Section, Surveillance Unit, Data as of May 1, 2017

Chronic Diseases & Disability: Morbidity Status for HIVCont.

HIV prevalence rate per county:

- 63 counties had HIV prevalence rates five persons or fewer per 100,000 population during 2008-2015
- 32 counties had a prevalence rate 5.1 to 10.0 per 100,000 population
- 7 counties had a prevalence rate of greater than 10 per 100,000 population during 2008-2015

Figure 56. Percent of Persons Living with HIV Disease by Illinois Counties, 2008-2015



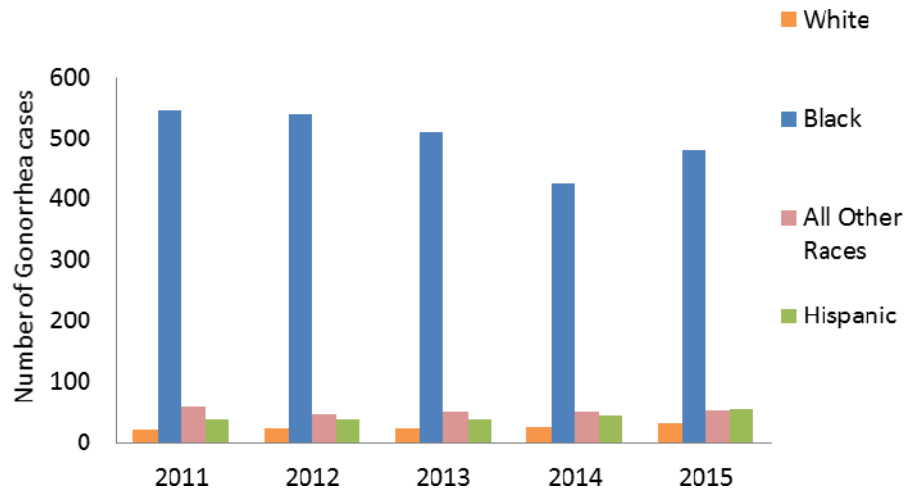
Source: IDPH, HIV Section, Surveillance Unit, Data as of May 1, 2017

Chronic Diseases & Disability: Morbidity Status

Reported cases of Gonorrhea:

- In 2015 the incidence of the disease was approximately 25 times higher among Blacks than among Whites and approximately 16 times higher than all other race groups and Hispanics.
- Gonorrhea was more prevalent in Blacks. While the number of reported cases among Blacks had decreased in 2014, the numbers increased in 2015.

Figure 57. Reported Cases of Gonorrhea per 100,000 Population by Race and Ethnicity in Illinois, 2011-2015

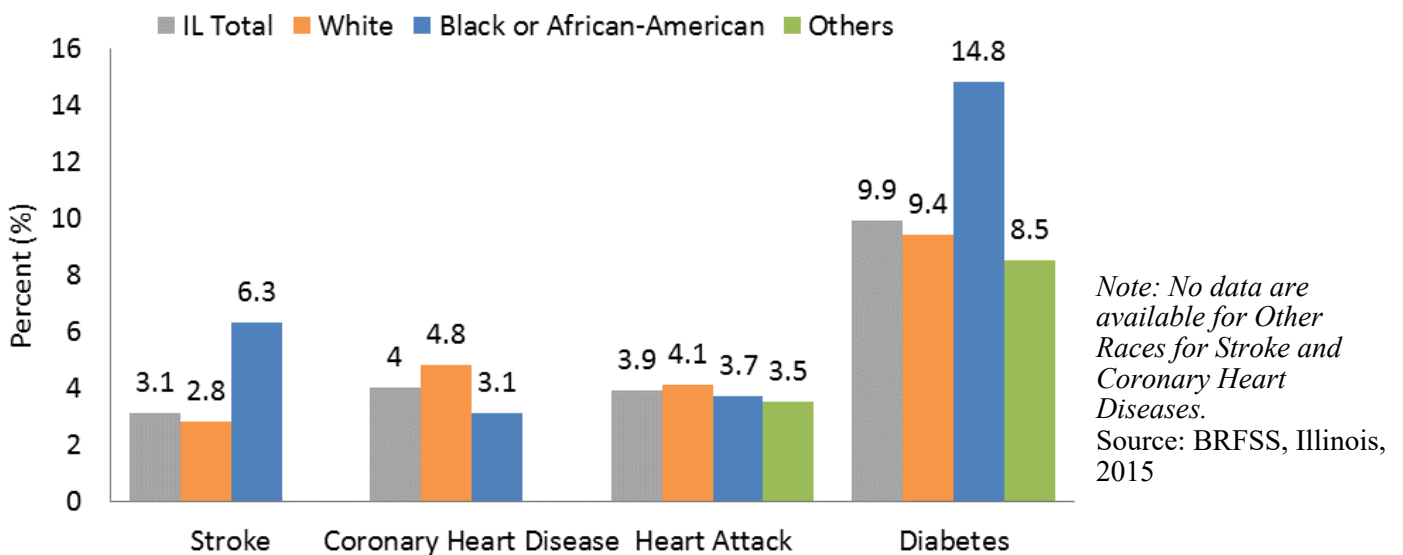


Source: IDPH, Illinois National Electronic Disease Surveillance System (I-NEDSS), 2011-2015

Ever diagnosed with stroke, coronary heart disease, heart attack or diabetes:

- In comparison to Others and White categories, the incidence rate of diabetes among Blacks was more than 1.5 times higher.
- The rate of stroke amongst blacks is nearly 2.5 times that of Whites, and double that of the general Illinois population.
- Blacks also had the second highest rate for coronary heart disease and heart attack compared to Whites and the general Illinois population.

Figure 58. Percent of Population Ever Told Had a Stroke, Coronary Heart Disease, Heart Attack or Diabetes in Illinois by Race/Ethnicity, 2015

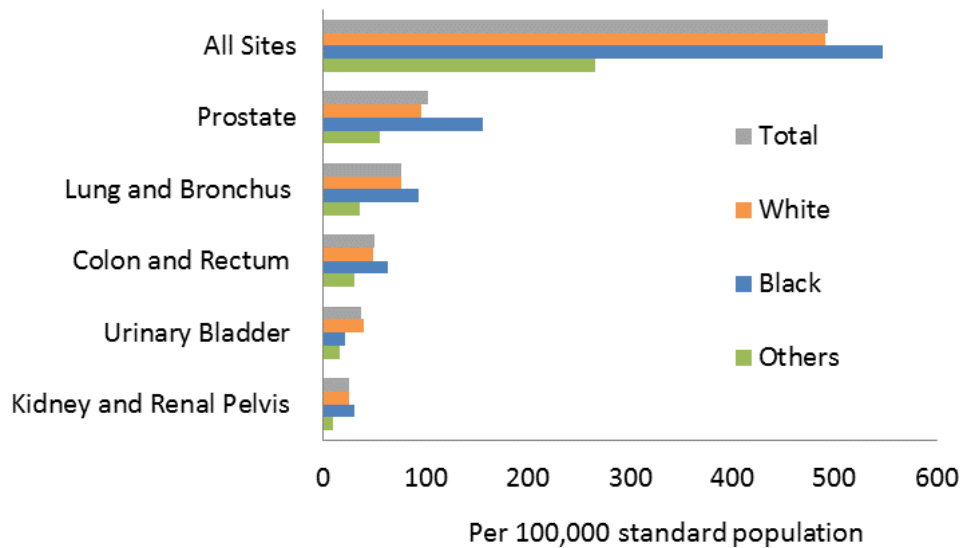


Chronic Diseases & Disability: Cancer Morbidity Status

Cancer incidence in males:

- Age-adjusted cancer incidence rates were higher for Blacks males in all categories except urinary bladder.
- Second highest cancer incidence rate was observed in White males.
- Prostate cancer rates are significantly higher in Black males, nearly twice that of White men, and 2.5 times that of Other males.

Figure 59. Age-Adjusted Cancer Incidence Rates for Males by Race for Illinois, 2014

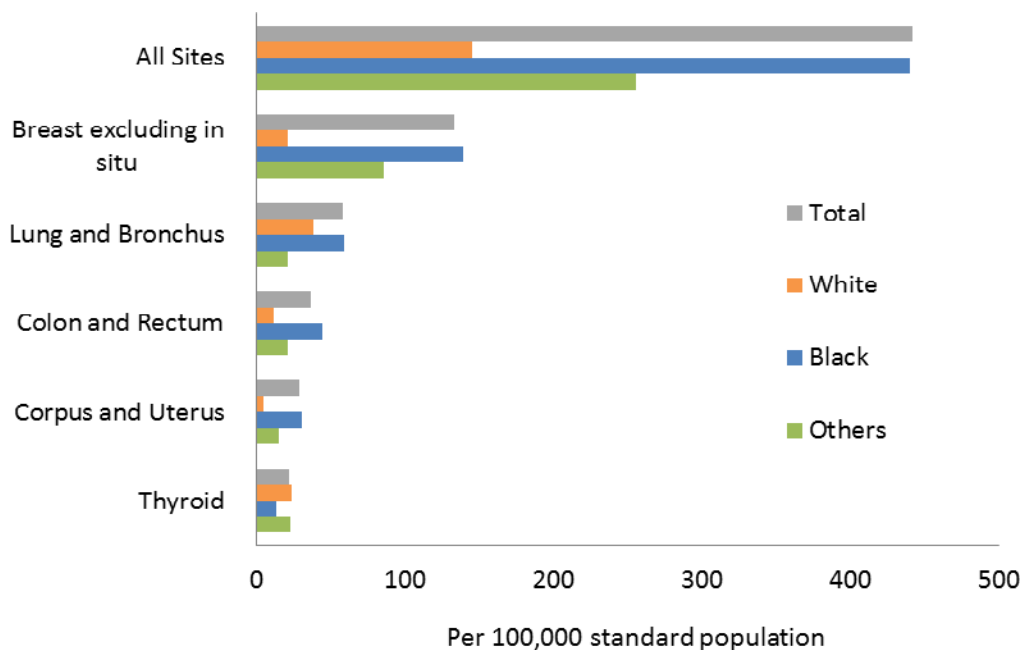


Source: IDPH, Illinois Cancer Registry, 2014

Cancer incidence in females:

- As like males, cancer incidence rates were higher for Black women in all categories of cancer except for thyroid cancer.
- Second highest cancer incidence rates were observed in other race group in almost all cancer categories.

Figure 60. Age-Adjusted Cancer Incidence Rates for Females by Race for Illinois, 2014



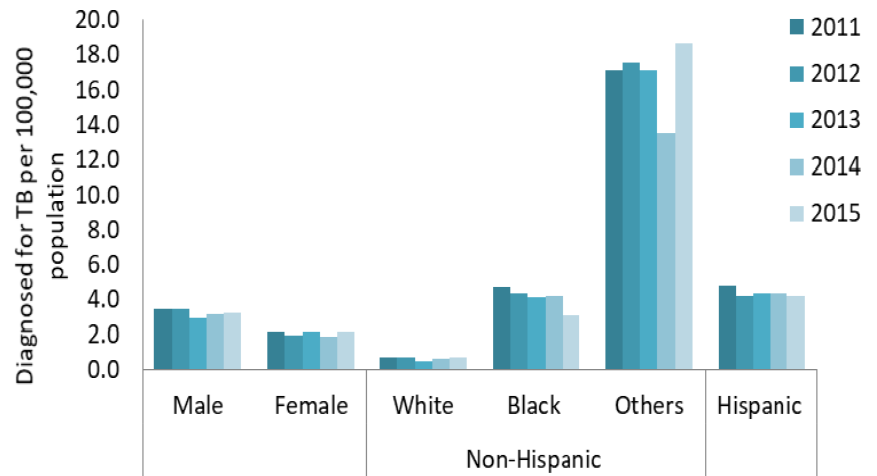
Source: IDPH, Illinois Cancer Registry, 2014

Chronic Diseases & Disability: Morbidity Status

Tuberculosis prevalence rate:

- Tuberculosis prevalence was 3 times higher among non-Hispanic Others compared to blacks and Hispanics and the rate has increased from 2014 in 2015.
- Both non-Hispanic Blacks and Hispanic groups had the second highest prevalence rate of tuberculosis. For Hispanics the tuberculosis prevalence remained almost the same in the past three years and declined for blacks in 2015.
- Whites have TB infection rate 4 times lower than that of Blacks and Hispanics, and nearly 18 times lower than “Others”.

Figure 61. Prevalence Rates of Tuberculosis per 100,000 Populations by Sex, Race and Ethnicity for Illinois, 2011-2015

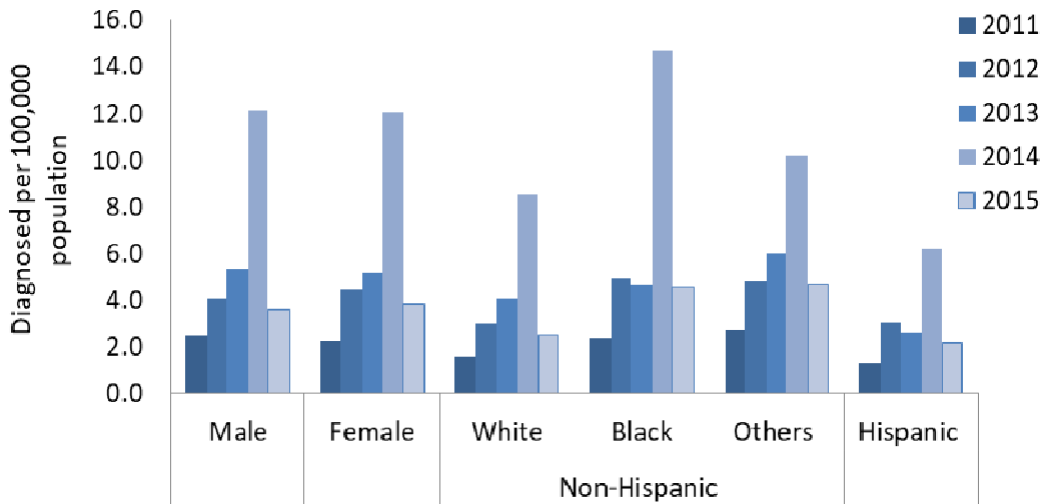


Source: IDPH, Illinois Electronic Disease Surveillance System, 2011-2015

Influenza incidence rate:

- Influenza incidence rate was high in 2014 for both sexes and all races.
- In general influenza prevalence rate was high for non-Hispanic Blacks and non-Hispanic others.

Figure 62. Influenza Prevalence Rates by Sex, Race and Ethnicity for Illinois, 2011-2015



Source: IDPH, Illinois electronic disease surveillance system, 2011-2015

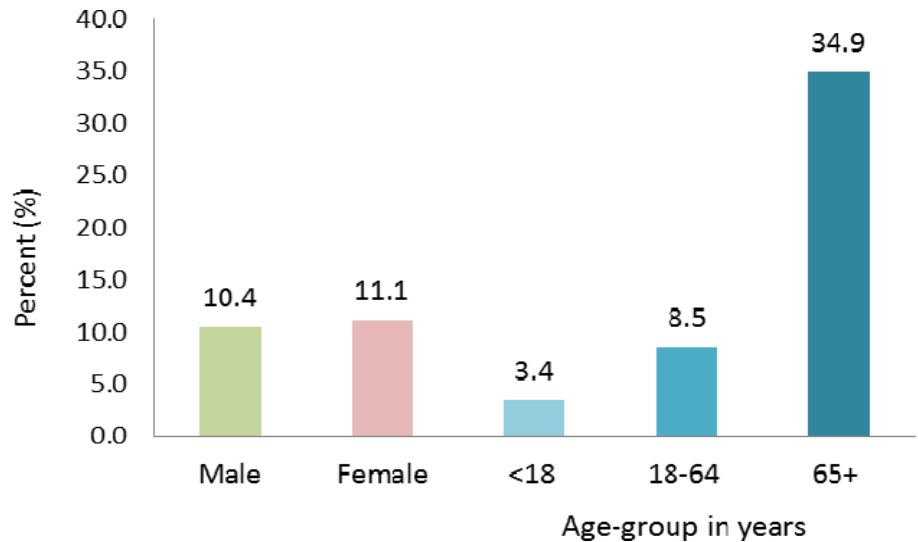
Chronic Diseases & Disability: Disability Status

Disability Status by sex and age:

According to the U.S. Census Bureau's five years estimates,

- Disability status was higher among females than that of males.
- The rate was highest for age-group 65 and over.

Figure 63. Disability Status (%) by Sex and Age-group for Illinois, 2011-2015

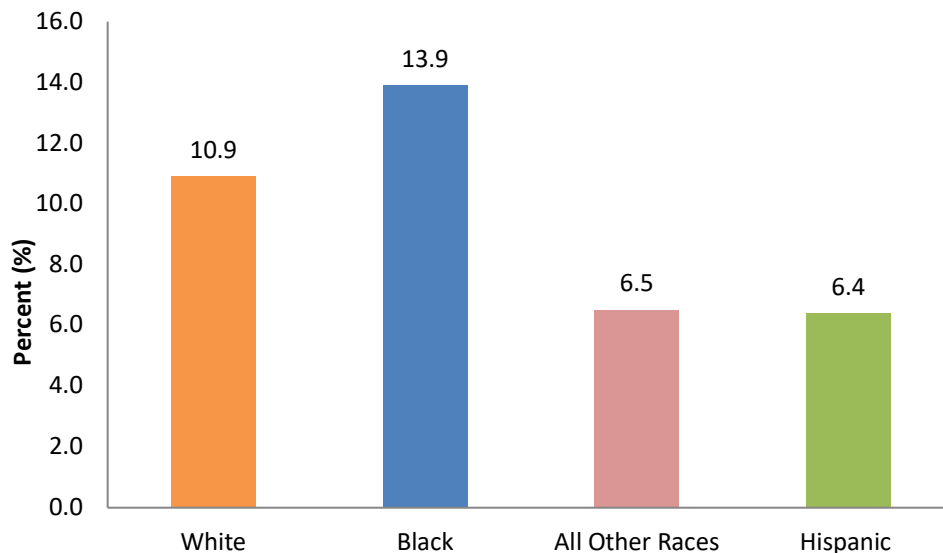


Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-years estimates

Disability by race:

- Disability status was highest among Blacks than any other race group.
- Second highest disability was seen for Non-Hispanic Whites.

Figure 64. Disability Status (%) by Race/Ethnicity in Illinois, 2011-2015



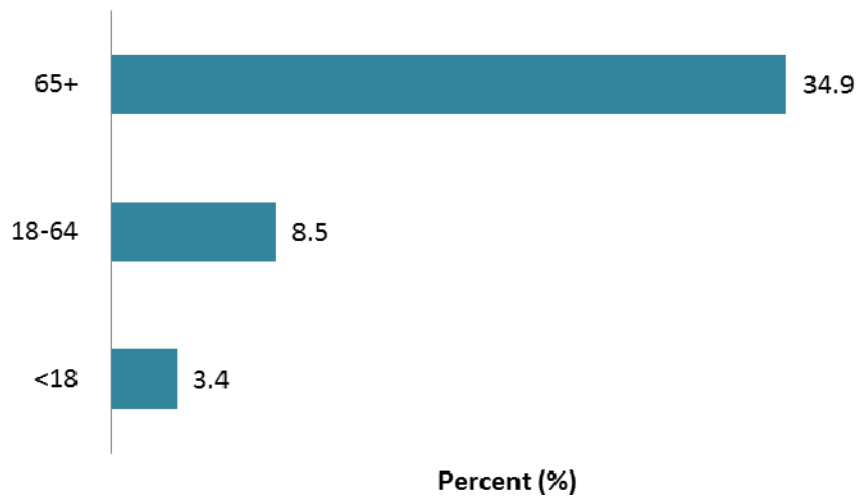
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year estimates

Chronic Diseases & Disability: Disability Cont.

Disability by age:

- The percent of disability increased with age and highest rate of disability was for age-group 65 and over.

Figure 65. Disability Status in Illinois by Age, 2011-2015

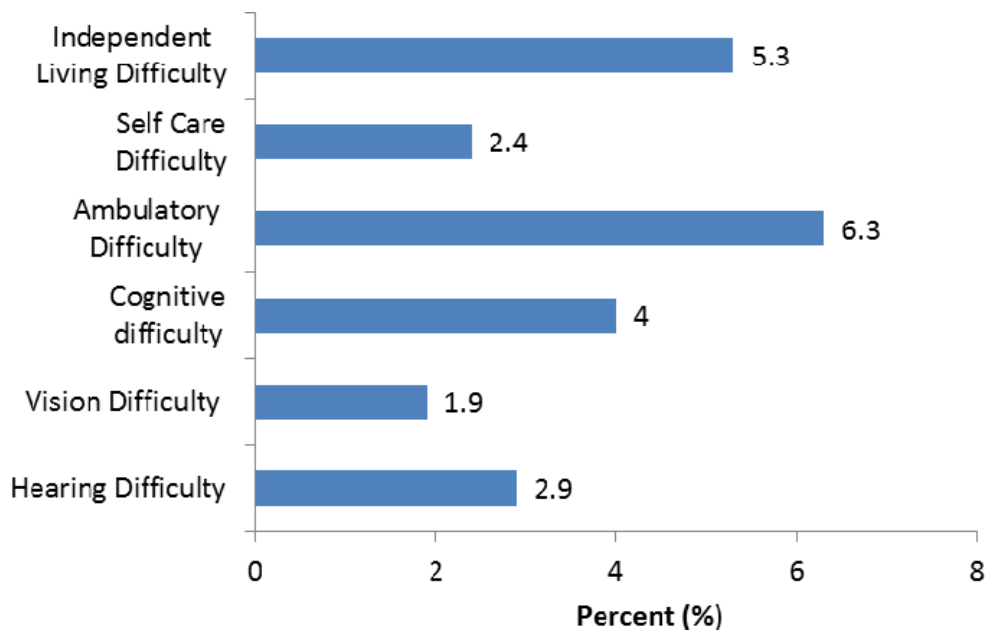


Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year estimates

Types of disability:

- Ambulatory difficulty percent was highest among all types of disability in Illinois.
- The lowest percentage of disability was for vision difficulty.

Figure 66. Percent of Population with Different Types of Disability for Illinois, 2011-2015



Source: U.S. Census Bureau, 2011-2015 American Community Survey, 5-year estimates

Discussion and Conclusion

Good health comprises much more than being disease free. Applying resources and enacting policies through an equity lens can have a profound impact on improving health outcomes and life expectancy for Illinois' most vulnerable citizens. State public health officials should be intentional in designing internal systems, processes, policies, and programs that promote a shift towards addressing disparities that prevent the attainment of optimal health for all. The Illinois Department of Public Health works ensure a **population health approach**¹² is applied to the public health setting. This approach requires a collective understanding of how we define health; that it is more than just the absence of disease, but a state of complete physical, mental, and social well-being. This approach also requires understanding where the greatest gaps are in opportunities for people to be healthy, as well as expanding our role in creating opportunities for healthier conditions beyond where these gaps exist.

Based on 2015 data, Illinois' minority population comprised more than one third (37.3%) of the state's estimated 12.8 million residents. Minority populations are growing across the state. A substantial growth rate has occurred in all downstate regions with the Champaign and Rockford regions experiencing nearly 52% in growth, followed by the Peoria region with nearly 48% growth. Historically, minority groups have and continue to experience higher incidence of morbidity and mortality. There is need to promote a diverse work culture and invest in culturally and linguistically appropriate services and provider trainings, especially in smaller and rural communities.

Asian, Latino, and refugee populations have steadily increased over the years. The continued diversification of the state presents a need for better data collection and more specialized health care and outreach efforts in minority communities. Forging alliances with community gate keepers and other public and private entities and seeking their advice and involvement in health equity planning for their communities is a way to gain a community's trust. It also paves the way for culturally appropriate prevention and care strategies, and place-based initiatives to be implemented. These can help shape sound policies and quality programs in areas where gaps exist.

This report compiles data on health disparities in Illinois based on limited information. Most of the available county level health data did not include the needed indicators by race, ethnicity, and other differentials because of small numbers or data on a desired variable was not collected or released. Data on children's health characteristics in most cases were not available. It is an area that needs attention to complement data for a life course approach of disease prevention and improvement in quality of life.

¹² CDC views **population health** as an interdisciplinary, customizable **approach** that allows **health** departments to connect practice to policy for change to happen locally. This **approach** utilizes non-traditional partnerships among different sectors of the community – public **health**, industry, academia, **health** care, local government entities, etc. – to achieve positive **health** outcomes. <https://www.cdc.gov/pophealthtraining/whatis.html>

IDPH is working to improve the quality and consistency of data it collects. For example, standardizing uniformity in data collection by race and ethnicity, sex, gender, sexual orientation, age, disability, and relevant socioeconomic indicators across all IDPH funded programs. Additionally, IDPH must explore tools to easily disseminate timely, relevant, and meaningful-use data that is readily accessible, visually appealing, and easily interpreted by partners, constituents, and policy makers.

IDPH is working to support community-led, place-based initiatives that build community resilience, especially in neglected communities in the state, and promote upstream thinking that will yield positive results for improving the quality of life in Illinois. IDPH is proactively working to develop creative funding opportunities that allow “braided funding” to support community health improvements in concert with improvements in targeted disease outcomes.

In keeping with IDPH’s priority of making health equity central to all work functions, the Center for Minority Health Services will continue to support health equity causes in Illinois, champion internal initiatives, and produce an annual health equity report that highlights strides made by IDPH towards eliminating health inequities in Illinois.

Glossary

- **Disability:** For the sake of this report, we adopt the American Community Survey’s (ACS) definition of “disability,” which is functional limitations that include one or a combination of the following six health issues: hearing, vision, cognitive, ambulatory, self-care, and independent living difficulties.
- **Disparity** is defined as a lack of similarity; it also means inequality or difference. Many types of disparities exist among people such as age, race, sexual identity or orientation, disability, socioeconomic status, and geographic location. These disparities can significantly affect health outcomes, especially among minority populations.
- **Equity** implies giving as much advantage, consideration, or latitude to one party as it is given to another. Along with economy, effectiveness, and efficiency, Equity is essential for ensuring that extent and costs of funds, goods and services are fairly divided among their recipients.
- **Gender** identity refers to the internal/psychological sense of self, regardless of what sex a person was assigned at birth. When asking about gender as a category, words like woman, man, and trans* should be used.
- **Health** is defined by the World Health Organization (WHO) as “a state of complete physical, mental, and social wellbeing and not merely the absence of disease or infirmity.”

- **Race and Ethnicity:**

The concept of race as used by the U.S. Census Bureau reflects self-identification, it does not denote any clear-cut scientific definition of biological stock. The Office of Management and Budget (OMB) issued a directive (Federal Register, July 9, 1997), replacing Statistical Policy Directive No. 15, 1977, providing a minimum standard for maintaining, collecting, and presenting data on race and ethnicity for all federal reporting purposes. Following the OMB standards, the 2000 and 2010 decennial censuses asked respondents to “mark one or more” races for each individual resulting in six single races and additional 57 multiple-race categories. Separately, respondents were asked their ethnicity (Hispanic or Latino and Non-Hispanic or Latino). The single race categories were:

1. White
2. Black or African American
3. Asian
4. American Indian or Alaska Native
5. Native Hawaiian or Other Pacific Islander and,
6. Other

According to the OMB Statistical Policy Directive No. 15, 1977, the five race categories were:

1. White
2. Black
3. American Indian, Eskimo or Aleut

- 4. Asian or Pacific Islander and,
- 5. Other

For our report the following Race categories are used:

- Non-Hispanic White: Non-Hispanic and White
 - Non-Hispanic Blacks: Non-Hispanic and Black
 - Non-Hispanic Other: Non-Hispanic and Asian + American Indian or Alaska Native + Native Hawaiian or Other Pacific Islander
 - Hispanic or Latino
- **Inequality** is the difference in social status, wealth, or opportunity between people or groups
 - **Inequity Calculations:**
 Rate Difference = Minority Estimate – White Estimate (reference group)
 Rate Ratio = Minority Estimate/White Estimate
 %Change in Rate Ratio = (Time 2 rate ratio – Time 1 rate ratio)/(time 1 rate ratio) *100
 ↓ Disparity increases (%change in rate ratio is negative)
 ↑ Disparity decreases (%change in rate ratio is positive)
 ↔ No Change, ◆ No Available Data

If Rate Ratio or Relative Differences are <1 then:		If Rate Ratio or Relative Differences are >1 then:	
% Changes >0	Decrease in disparity (better)	% Changes >0	Increase in disparity (worse)
% Changes <0	Increase in disparity (worse)	% Changes <0	Decrease in disparity (better)

- **Multi Race:** Science 2000 Census according to the Office of Management and Budget (OMB) a person can claim one/more races. Among those who claims two/more races is considered as “Multi Race”.
- **Opioid Analgesics drug overdose deaths:** Is one in which any opioid analgesic was reported as a contributing cause of death (ICD-10 codes T40.2, T40.3, T40.4). This category is a subset of the “Any Opioid” category. Opioid analgesics include natural (e.g., morphine, codeine) and semi-synthetic (e.g., oxycodone, hydrocodone, hydromorphone, oxymorphone) opioid analgesics, methadone, and synthetic opioid analgesics other than methadone (e.g., fentanyl, tramadol).
- **Sex** refers to the biological make up in terms of chromosomes, hormones, and primary and secondary sex characteristics. When asking about sex as a category, words like male, female and intersex¹³ should be used.

¹³ Intersex is defined as a general term covering a variety of conditions in which a person's sex characteristics - including chromosomes, gonads or genitals - are not distinct to either a male or female. <https://www.yourdictionary.com/intersex>

- **Sexual orientation** refers to a person's emotional, physical, and sexual attraction to other people. When asking about sexual orientation as a category, words like gay/lesbian, bisexual/pansexual, and heterosexual should be used.
- **Social Determinants of Health** are factors outside the boundaries of traditional health that contribute to poor health. These factors include housing, transportation, education, food, economic, behavioral, genetics, and environmental factors (Healthypeople.gov).

Data Sources:

- Demographics and social determinants data came from the U.S. Census Bureau's American Community Survey (ACS) 2011 to 2015.
- High school dropout data from Illinois School Board of Education.
- Maternal health and behavior, birth weight data and breastfeeding status data from Pregnancy Risk Assessment Monitoring System (PRAMS).
- Blood lead level data from Illinois Lead Program Surveillance Database.
- Health status and health risk factor data from Illinois Behavioral Risk Factor Surveillance System (BRFSS).
- Oral Health data from National Survey of Children's Health, Illinois High School Youth Risk Behavior Survey, CDC, and Behavioral Risk Factor Surveillance System (BRFSS), CDC.
- Mortality and Morbidity data from Illinois Vital Record System.
- Cancer mortality and morbidity data from Illinois Cancer Registry.
- HIV data from IDPH, HIV section, surveillance unit.

Methods:

- Rate per 100,000 population: $[\# \text{ of cases} / \text{population}] * 100,000$
- Age-Adjusted death rates: $[\# \text{ of deaths adjusted by age} / \text{population of the same age}] * 100,000$, standardized by US population 2000
- Infant mortality rate: $[\# \text{ of infant deaths} / 1000 \text{ live birth}]$
- Inequity calculation: For the inequity calculation the data on different indicators were collected for two points of time. Then the rate difference was calculated using the rates for white population as a reference. Percent change in rate ratio was calculated using the data for two points in time. Negative result for the percent change in rate ratio indicates the decrease in health disparity and the positive result indicates the opposite.

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