



MEASURING CHICAGO'S HEALTH

Findings from the 2014 Healthy Chicago Survey

OCTOBER 2015



LETTER FROM COMMISSIONER MORITA

Dear Partners,

At the Chicago Department of Public Health (CDPH), our goal is to ensure health equity across our city - providing every resident the opportunity to live a healthy life. Over the past several years, we have made significant progress toward this goal. Life expectancies in every neighborhood and human papilloma virus vaccination rates among every demographic have gone up, while youth smoking rates and new HIV infections have dropped. To take this success to the next level, we must have access to timely, accurate data so we can better identify, understand and respond to remaining health disparities.

We launched the Healthy Chicago Survey in 2014, surveying 2,500 randomly selected Chicago adults on their health status, behavior, access to health services and more. Now, for the first time, our department has comprehensive, relevant and current information available on the health and well-being of Chicago residents. This report shares the highlights from these new data, and will be the first in a series of reports that will use and disseminate key findings from the survey.

We intend for the Healthy Chicago Survey to be the leading source of health and health behavior data for our city. Healthy Chicago Survey data have already played an integral role during the development of Chicago's community health improvement plan. Using survey data, we were able to identify priority health concerns and populations where the greatest disparities exist. Specific, evidence-based strategies were then selected for CDPH and our partners to implement. We recognize that Healthy Chicago Survey data have value to our partners throughout the city. As a result, we are committed to providing data to those interested in conducting additional analyses to further our understanding of health in Chicago.

CDPH has also made a commitment to conduct the Healthy Chicago Survey on an annual basis. As this report serves as a baseline, subsequent surveys will help us monitor changes in health behavior and status over time. They will also allow us to present data at the neighborhood level starting in 2016, providing community area estimates for the first time that will help us and our partners better direct our resources. Moreover, each year we will have the opportunity to adapt the questionnaire to reflect current public health priorities.

By working together, we can use Healthy Chicago Survey data to make meaningful, lasting changes in the lives of all Chicago residents - ensuring everyone has access to the resources and opportunities necessary to live a healthy life.



A handwritten signature in black ink that reads 'Julie Morita'.

Julie Morita, M.D.

Commissioner, Chicago Department of Public Health

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EXECUTIVE SUMMARY

Chronic diseases, such as heart disease, stroke, cancer, diabetes and mental health conditions are leading causes of morbidity and mortality in Chicago. Positive health behaviors (e.g., healthy eating, active living, and quitting smoking), preventive health care services (e.g., checking blood pressure and cholesterol, getting mammograms and pap tests) and managing chronic disease and mental health conditions (e.g., taking medication for blood pressure, seeking treatment for mental health) can reduce morbidity and mortality. Monitoring these factors provides critical data to the Chicago Department of Public Health (CDPH) and other public health stakeholders so that interventions, strategies and policies better address the needs of Chicago communities.

In 2014, CDPH launched the first Healthy Chicago Survey (HCS), a city-wide, random-digit-dialed telephone survey of noninstitutionalized adults aged 18 and older residing in Chicago. HCS collects data on health behaviors, disease prevalence and access to and utilization of health care services. This report presents the initial findings from this survey and is organized into seven sections: health status, health care and access, diet and physical activity, tobacco use, chronic disease, mental health and emergency preparedness. Results are stratified by age, sex, race-ethnicity and percent of federal poverty level in order to assess where disparities exist.

Overall, Chicago adults have rates of tobacco use, fruit and vegetable consumption and physical activity that are similar to national rates. Rates of health coverage, screening for breast, cervical and colorectal cancer, and treatment for hypertension are also similar to what is observed nationally. However, both nationally and in Chicago, demographic disparities exist. For example, adults in Chicago living below the federal poverty level have lower rates of health coverage, eat fewer fruits and vegetables, exercise less and have higher smoking rates. Women are less likely to have exercised in the past month but are more likely to be non-smokers and more likely to have health coverage than men. Hispanics and non-Hispanic blacks have lower rates of health coverage, eat fewer servings of fruits and vegetables, are less likely to be meeting physical activity recommendations and are more likely to be current smokers than non-Hispanic whites.

Disparities that are observed in these risk factors are also observed in the rates of downstream chronic conditions, such as hypertension, high cholesterol, obesity, diabetes, heart disease and stroke. For example, in Chicago, non-Hispanic blacks are 1.5 times as likely to be obese, twice as likely to have diabetes and three times as likely to report having had a stroke than non-Hispanic whites. Older adults report higher rates of high blood pressure, diabetes and coronary heart disease than younger adults. Women are more likely to be obese and are more likely to have asthma than men. Those living below the federal poverty level are more likely to report high blood pressure, obesity, diabetes and coronary heart disease.

The findings in this report indicate that significant differences exist in the general health, health care utilization and access, health behaviors and chronic disease prevalence among Chicago adults. CDPH and our partners can use these findings and those in years to come to identify populations at higher risk for unhealthy behaviors, chronic disease and mental health conditions, and with limited access to health care services and preventive screenings. These data can inform the programmatic activities, policies and environmental changes implemented so that Chicago can be a city of strong communities where all residents enjoy equitable access to resources, opportunities and environments that maximize their health and well-being.

2014 Healthy Chicago Survey

INTRODUCTION

OVERVIEW

The Healthy Chicago Survey (HCS) is a telephone survey led by the Chicago Department of Public Health (CDPH) for residents of the City of Chicago. It is conducted to collect information on the population's health status, health access patterns, disease and risk factor prevalence, and health behaviors. Interviews were conducted by Abt SRBI, a survey research organization, in English and Spanish from May 6 - September 23, 2014. Samples were drawn from both landline and cell phone random digit dialing frames. The final sample included 2,517 adults living in the City of Chicago.

MOVING FORWARD

DATA SHARING AND DISSEMINATION

In the coming months, CDPH will publish a series of 'spotlight reports' - providing a more comprehensive review of specific topics. These reports will focus on a particular health issue or demographic group, and will include further subgroup analyses, correlations and applications to public health practice. Reports already in development include those focused on diet and physical activity, diabetes, mental health and the health of LGBT residents. CDPH will also continue to engage with public health partners, academia and the community to share results. We are committed to providing data to partners interested in conducting additional analyses to inform the development of programs, policies and grant applications to improve public health.

DATA TO ACTION

CDPH and its partners used HCS data and data from other sources to serve as the foundation for our new citywide health improvement plan. This plan provides concrete strategies that focus on issues and populations where need is greatest in order to address the health disparities identified in this report. Furthermore, the data in this report will serve as a baseline for measuring the success of several strategies included in this plan. By conducting the survey on an annual basis, we will be able to track our progress

in improving health and behaviors, and adjust and strengthen our strategies, ensuring our work remains relevant and appropriate.

FUTURE SURVEYS

CDPH is currently in the process of conducting the second HCS. The frequency of the survey allows us to add questions as public health issues arise. As such, the 2015 Healthy Chicago Survey includes new questions addressing social cohesion, discrimination and neighborhood conditions—all identified during the community health assessment process. By gathering additional data, we will be able to develop not only city-wide estimates, but also estimates for each of Chicago's 77 community areas. This will give us a clearer picture of where disparities exist so we can more accurately direct our attention and resources to the neighborhoods in greatest need.

Information is the key to success - both in planning and implementation. By launching the Healthy Chicago Survey and ensuring its continuance for years to come, we will have the information necessary to evaluate and continue to promote health equity for all residents.

If you would like additional information on the new citywide health improvement plan, please visit www.cityofchicago.org/Health.

HOW TO READ THIS REPORT

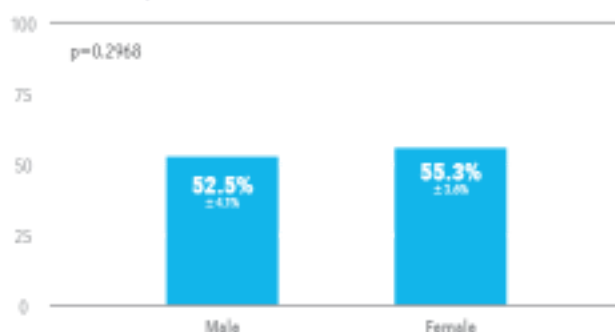
Summary statements for each indicator describe the results shown in the four graphs. Each indicator is stratified by age, gender, race-ethnicity and percent of federal poverty level.

- Race-ethnicity:** Results are shown for Chicago's three largest race-ethnicity groups: Hispanic, non-Hispanic black and non-Hispanic white. Data for other race-ethnicity groups are not displayed due to small numbers (**Sample Demographics**, page 58)
- Percent of Federal Poverty Level (Percent FPL):** The Federal Poverty Level (also called Federal Poverty Guideline, Federal Poverty Line, or FPL) is a measure of household income issued every year by the Department of Health and Human Services. It is based both on household income and household size (see table below). As a general rule of thumb, for the same household size, a higher percent FPL means a higher household income.
- Data Suppression:** Numbers are suppressed (not shown) if the cell count is less than 5 or if the confidence interval is greater than or equal to 25%.

2014 Federal Poverty Guidelines (1):

Household Size	100% FPL	200%	300%	400%
1	\$11,670	\$23,340	\$35,010	\$46,680
2	15,730	31,460	47,190	62,920
3	19,790	39,580	59,370	79,160
4	23,850	47,700	71,550	95,400
5	27,910	55,820	83,730	111,640

Chart: Example



The **p-value** indicates whether there is a statistically significant difference between groups. A p-value less than 0.05 means that the difference observed between groups is not due to chance, and is therefore a true difference. In this example, the p-value is 0.2968, which indicates that there is no difference in the rate between males and females. For this report, the p-value is calculated at the 95% confidence level using the Rao-Scott Chi Square test.

The **number after the "±"** represents the margin of error, or half of the 95% confidence interval. In this case, the confidence interval for males would be 48.4%-56.6% and for females would be 51.7%-58.9%

1. Department of Health and Human Services. Office of the Secretary. Annual Update of the HHS Poverty Guidelines. Federal Register. Vol. 79, No. 14 (22 January 2014) p. 3595

2014 Healthy Chicago Survey

HEALTH STATUS



HEALTH STATUS

The Healthy Chicago Survey provides information on the general health status of the population by measuring self-rated health status, physically unhealthy days, mentally unhealthy days, activity limitations and having a health condition that requires special equipment. Healthy People 2020, a science-based, 10-year national plan to improve the health of all Americans, includes general health status as one of four measures that serve to monitor progress towards the overarching goals:

- Attain high-quality, longer lives free of preventable disease, disability, injury and premature death;
- Achieve health equity, eliminate disparities, and improve the health of all groups;
- Create social and physical environments that promote good health for all; and
- Promote quality of life, healthy development and healthy behaviors across all life stages. (1)

Self-rated health is widely cited as a valid measure of health and wellness that uniquely predicts morbidity and premature mortality (2). The percentage of adults in Chicago who rate their health as fair or poor is 18.4%, compared to 10.3% of adults nationally (3).

Significant disparities are observed across all health status indicators in Chicago. Older adults report poorer self-rated health, more physically unhealthy days and are more likely to have activity limitations or need special equipment due to a health condition.

The percentage of Hispanics reporting fair or poor health in Chicago is significantly higher than non-Hispanic blacks or non-Hispanic whites. This trend has been observed elsewhere, even after controlling for socio-economic status, age, depressive symptoms and comorbidities (4). Various hypotheses have been suggested to explain this observation. Self-rated health among Hispanics tends to be higher among those foreign-born and decreases with increased time in the US (5,6). Additionally, it has been found in other health surveys that those who complete the survey in Spanish are more likely to report fair or poor health, suggesting that the interpretation of the question may differ based on language (7).

Substantial disparities in health status in Chicago also exist based on percentage of the federal poverty level (FPL). Those living below the FPL are five times as likely to report fair or poor health, experience 2.5 times more mentally unhealthy days per month and experience 2 times more physically unhealthy days per month as those who live at 400% FPL. It is well documented that income is strongly and positively associated with health, although the reverse pathway, that poor health can lead to reduced income, has also been shown (8,9). Several mechanisms have been proposed for how higher poverty may affect health including increased exposure to poor physical and social environments, increased risk of chronic stress and decreased access to health-protecting resources (9).

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7. Francini L, Fernandez-Esquer M. Socioeconomic, cultural, and personal influences on health outcomes in low income Mexican-origin individuals in Texas. *Social Sci and Med*. 2004; 59: 1629-1646.
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9. Adler NE, Rehkopf DH. U.S. disparities in health: descriptions, causes, and mechanisms. *Annu Rev Public Health*. 2008; 29(1): 235-252



18.4% or 353,000 Chicago adults

reported that their health is fair or poor

HEALTH STATUS

FAIR/POOR HEALTH STATUS

- Self-rated health status is commonly used as an indicator of health-related quality of life (1-3). In Chicago, 18.4% of adults describe their health as fair or poor (14.8% fair; 3.6% poor). Overall, 34.2% describe their health as good, 26.9% as very good and 20.4% as excellent.
- Self-rated health varied by age. Rates of fair or poor health were twice as high for those over the age of 45, compared to those 44 and younger (**Chart 1**).
- Men and women reported similar rates of fair or poor health (**Chart 2**).
- There were significant disparities between racial-ethnic groups. Twice as many Hispanics and non-Hispanic blacks reported poor or fair health as non-Hispanic whites (**Chart 3**).
- There is a very strong trend between poverty and self-rated health (**Chart 4**).

Chart 1: Percentage Reporting Fair or Poor Health by Age Category

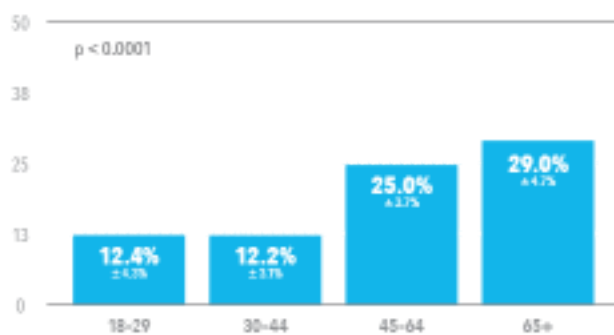


Chart 2: Percentage Reporting Fair or Poor Health by Gender

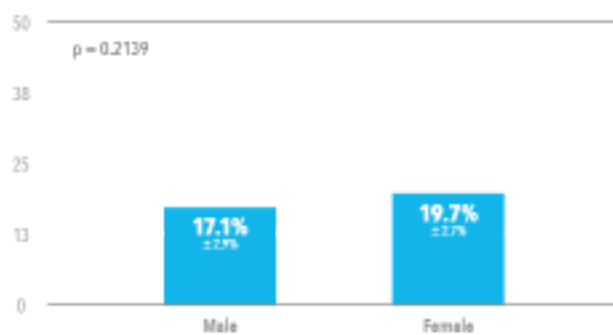


Chart 3: Percentage Reporting Fair or Poor Health by Race-Ethnicity

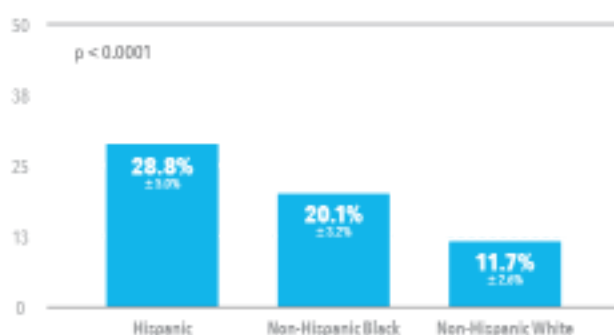


Chart 4: Percentage Reporting Fair or Poor Health by Percent of Federal Poverty Level



Indicator Definition: Respondents who described their health as fair or poor when asked "Would you say that in general your health is excellent, very good, good, fair or poor?"

1. Benjamin IY. Why does self-rated health predict mortality? An update on current knowledge and a research agenda for psychologists. *Psych & Health*. 2011;26(1):1407-1415
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3. Idler E, Benjamin IY. Self-rated health and mortality: A review of 28 studies. *J Health Soc Behav*. 1997;38(1):21-37.

3.4 physically unhealthy days

in the past 30 days



HEALTH STATUS

PHYSICALLY UNHEALTHY DAYS

- Overall, adults in Chicago experienced 3.4 physically unhealthy days in the past 30 days.
- Those over the age of 65 had 2.5 times the number of physically unhealthy days per month than 18 to 29 year olds (**Chart 5**).
- There was no difference in reported physically unhealthy days between women and men (**Chart 6**), or among racial-ethnic groups (**Chart 7**).
- Those below the federal poverty level reported a significantly higher number of physically unhealthy days compared to other poverty levels (**Chart 8**).

Chart 5: Mean Number of Physically Unhealthy Days in Past 30 days by Age Category

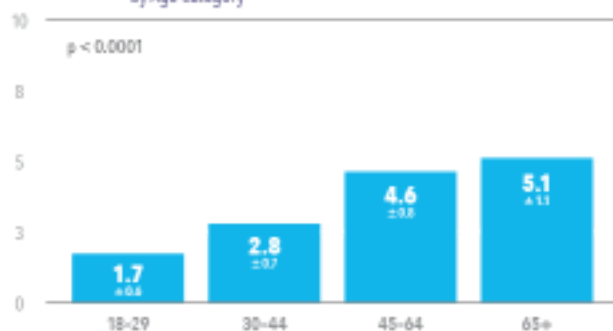


Chart 6: Mean Number of Physically Unhealthy Days in Past 30 Days by Gender

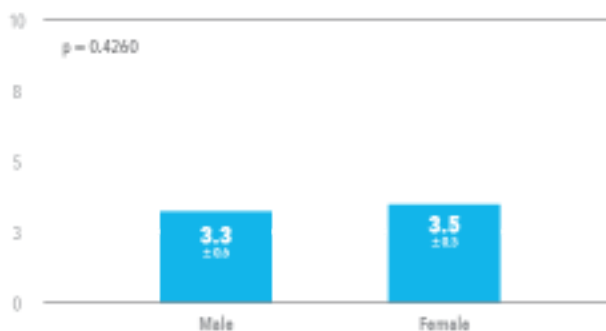


Chart 7: Mean Number of Physically Unhealthy Days in Past 30 Days by Race-Ethnicity

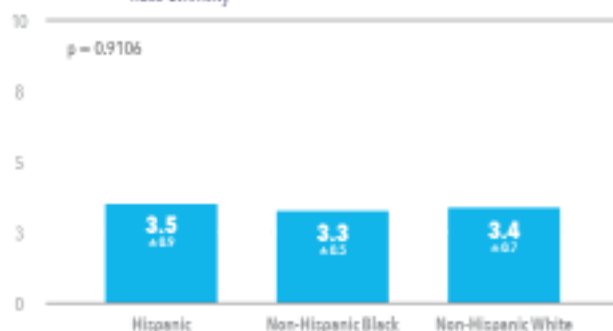
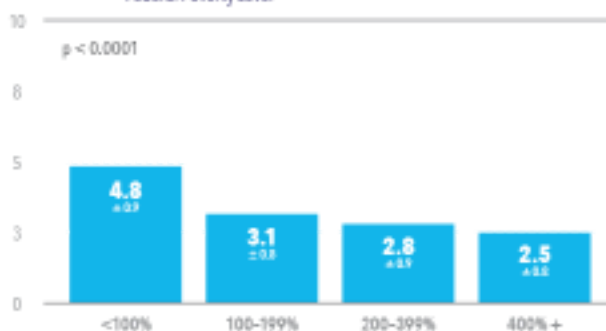


Chart 8: Mean Number of Physically Unhealthy Days in Past 30 Days by Percent of Federal Poverty Level



Indicator Definition: Average number of days in the past 30 days where, when thinking about their physical health, which includes illness and injury, the respondent reported their physical health was not good.



3.1 mentally unhealthy days

in the past 30 days

HEALTH STATUS

MENTALLY UNHEALTHY DAYS

- Overall, adults in Chicago experienced 3.1 mentally unhealthy days in the past 30 days.
- Those aged 65 and older experienced one fewer mentally unhealthy day, on average, than those between the ages of 30 and 64 (**Chart 9**).
- Women reported a higher number of mentally unhealthy days compared to men (**Chart 10**).
- There was no significant difference in the number of mentally unhealthy days reported by racial-ethnic groups (**Chart 11**).
- The number of mentally unhealthy days was related to poverty; those living below the federal poverty level reported 2.5 times more days than those with the highest incomes (**Chart 12**).

Chart 9: Mean Number of Mentally Unhealthy Days in Past 30 Days by Age Category

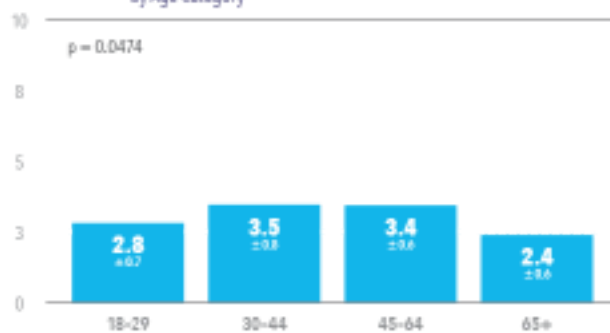


Chart 10: Mean Number of Mentally Unhealthy Days in Past 30 Days by Gender

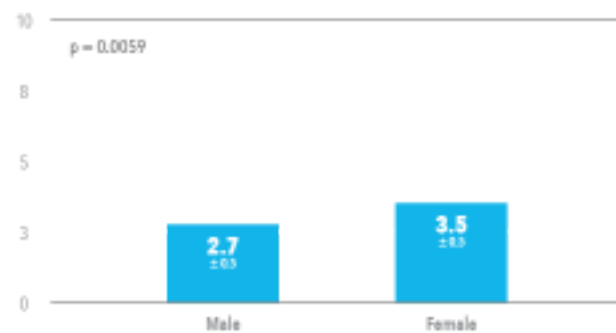


Chart 11: Mean Number of Mentally Unhealthy Days in Past 30 Days by Race-Ethnicity

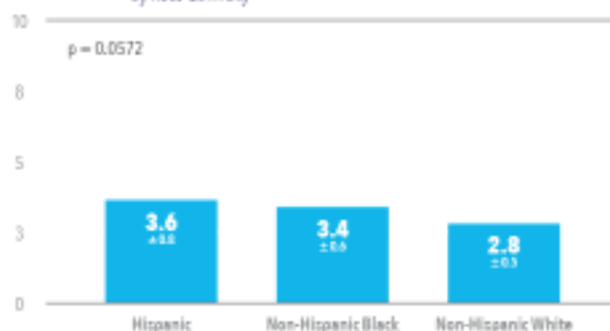
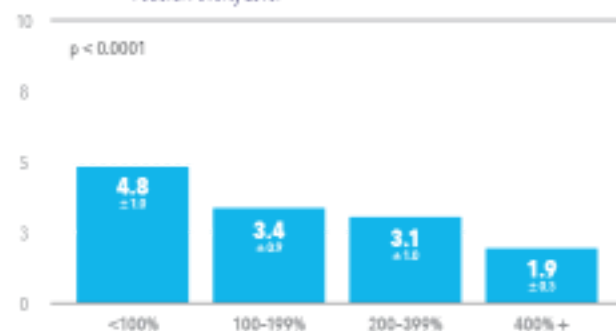


Chart 12: Mean Number of Mentally Unhealthy Days in Past 30 Days by Percent of Federal Poverty Level



Indicator Definition: Average number of days in the past 30 days where, when thinking about their mental health, which includes stress, depression and problems with emotions, the respondent reported their mental health was not good.

17.5% or 332,000 Chicago adults

reported activity limitation because of physical, mental or emotional problems



HEALTH STATUS

ACTIVITY LIMITATION

- Overall, 17.5% of adults reported activity limitation because of physical, mental or emotional problems.
- This varied significantly by age, and was three times more prevalent among those over the age of 45 than those aged 18 to 29 years. (**Chart 13**).
- There were no differences by gender (**Chart 14**) or racial-ethnic group (**Chart 15**).
- Activity limitation was strongly related to poverty (**Chart 16**). Over 25% of those below the federal poverty level reported activity limitation.

Chart 13: Percentage Reporting Activity Limitations by Age Category

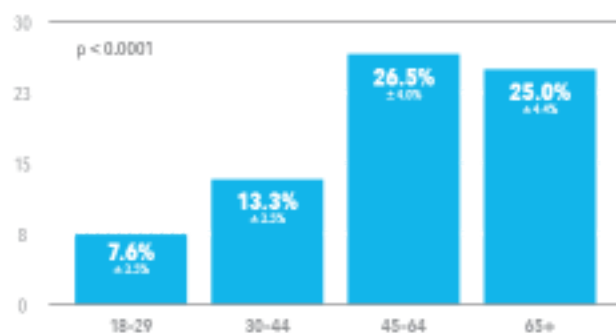


Chart 14: Percentage Reporting Activity Limitations by Gender

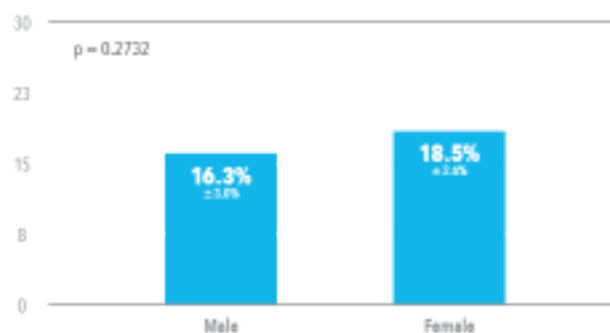


Chart 15: Percentage Reporting Activity Limitations by Race-Ethnicity

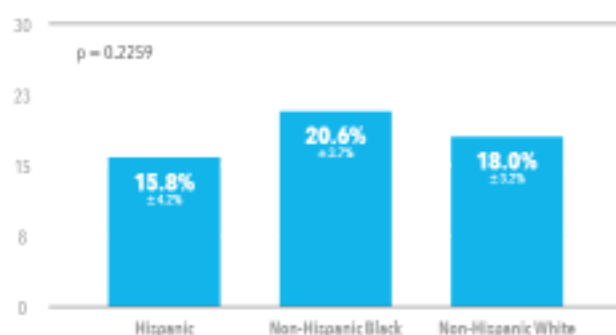
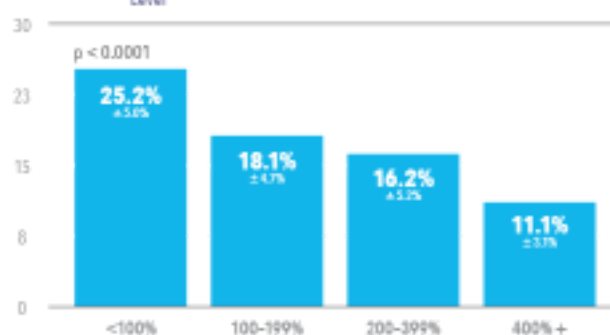


Chart 16: Percentage Reporting Activity Limitations by Percent of Federal Poverty Level



Indicator Definition: Respondents who are limited in any way in any activities because of physical, mental or emotional problems.



8.5% or 162,800 Chicago adults

reported using special equipment

HEALTH STATUS

SPECIAL EQUIPMENT USE

- While 8.5% of adults had a health problem that requires the use of special equipment (such as a cane or wheelchair), this ranged significantly by age (**Chart 17**).
- Special equipment use was higher among women (**Chart 18**), non-Hispanic blacks (**Chart 19**) and those closer to the federal poverty level (**Chart 20**).

Chart 17: Percentage Using Special Equipment by Age Category

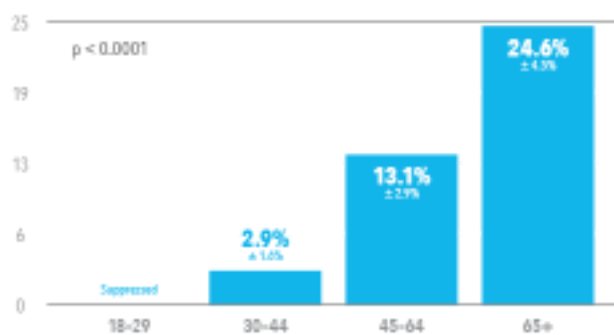


Chart 18: Percentage Using Special Equipment by Gender

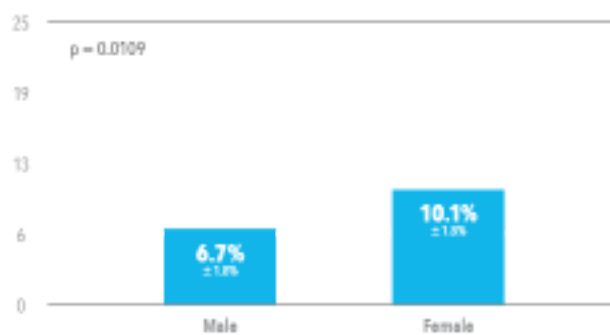


Chart 19: Percentage Using Special Equipment by Race-Ethnicity

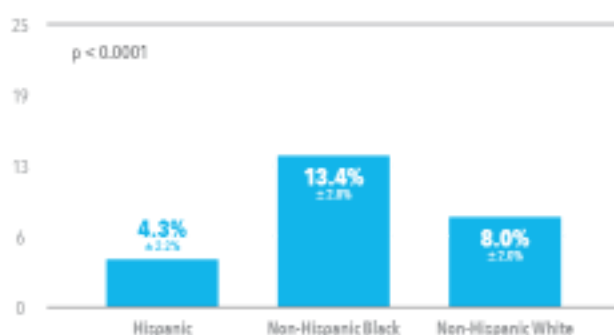
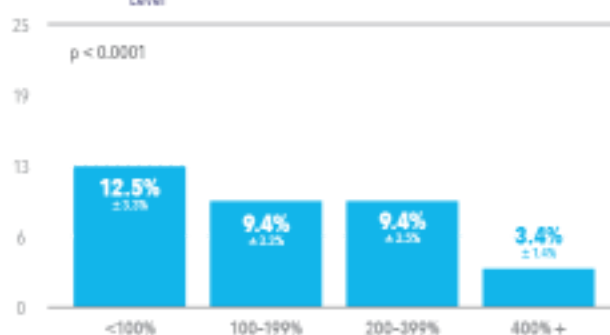


Chart 20: Percentage Using Special Equipment by Percent of Federal Poverty Level



Indicator Definition: Respondents who have any health problem that requires the use of special equipment, such as a cane, a wheelchair, a special bed or a special telephone.



2014 Healthy Chicago Survey

HEALTH CARE & ACCESS



HEALTH CARE & ACCESS

Beginning in 2014, as part of the Affordable Care Act (ACA), most uninsured Illinoisans became eligible for health insurance coverage through the state's expanded Medicaid program or through the Illinois Health Insurance Marketplace. Data collection for the Healthy Chicago Survey occurred from May 6 - September 23, 2014 and may capture preliminary effects of ACA; however, subsequent years' data will have the potential to provide a more thorough description of the impact of ACA.

A goal of Healthy People 2020 is to improve access to comprehensive, quality health care services, including increasing access to health insurance coverage, ensuring people have a usual and ongoing source of care, increasing access to preventive services, and providing timely care (1). Overall, 82% of adults in Chicago are covered by some type of health care coverage. For those aged less than 65 years, the coverage rate is 79.7%, similar to the national rate (83.3%) but still below the Healthy People 2020 target of 100% (1,2).

In Chicago, rates of health coverage are significantly lower among men, young adults, Hispanics, non-Hispanic blacks and those living in greater poverty, similar to what is observed nationally (2). Disparities in coverage can be influenced by factors such as language, citizenship, income and employers' offers of insurance (3). The ACA aims to address these disparities, especially through the "dependent coverage mandate" that allows young adults up to

the age of 25 to be covered by their parents' health insurance, through the expansion of Medicaid eligibility (in Illinois, eligibility was expanded to include all those living below 133% of the federal poverty level) and through the provision of subsidies for individuals living below 400% of the federal poverty level. These changes are predicted to result in significant reductions in health coverage disparities in the U.S. among racial and ethnic groups (4), young adults (5) and income levels (6).

It is widely accepted that having health insurance increases the appropriate use of physician services and preventive services, improves self-reported health status, and decreases morbidity and mortality (7). In Chicago, 81% of adults have a personal doctor, which is similar to the national rate of 77.3%, but this rate ranges from 46% among those who do not have health coverage, to 89% among those with coverage. Overall, 75.6% of women in Chicago are meeting breast cancer screening guidelines compared to the national rate of 72.6%, and 82.9% of women are meeting cervical cancer screening guidelines compared to the national rate of 80.7% (2). Interestingly, rates of breast and cervical cancer screening do not differ significantly by health coverage status. Overall, 60.4% of adults in Chicago are meeting the current colorectal cancer screening guidelines, compared to the national rate of 58.2% (2). However, this rate is 64.1% among Chicago adults with health coverage, compared to only 33.1% among those without coverage.

Reference:

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82.0% or 1,559,400 Chicago adults

reported having health coverage



HEALTH CARE & ACCESS

HEALTH INSURANCE COVERAGE

- Among adults, 82.0% were covered by some type of health care coverage, including health insurance, prepaid plans such as HMOs, government plans such as Medicaid or Medicare, or Indian Health Services. The rate of health coverage among adults aged less than 65 years was 79.7%.
- Of those with coverage, 53% had coverage through their employer or someone else's employer, 20% had coverage through Medicare, 14% had coverage through Medicaid, 8% had coverage that they bought on their own and 5% had some other type of coverage.
- Not everyone was covered equally. Those more likely to be without coverage included young adults (**Chart 21**), men (**Chart 22**), Hispanics (**Chart 23**) and those living below the FPL (**Chart 24**). The percentage with health coverage increased with age (**Chart 21**) and household income (**Chart 24**).

Chart 21: Percentage with Health Coverage by Age Category

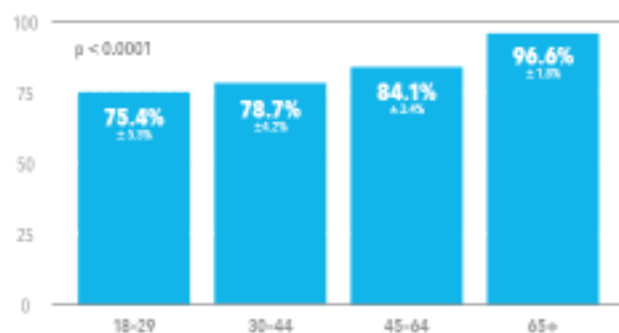


Chart 22: Percentage with Health Coverage by Gender

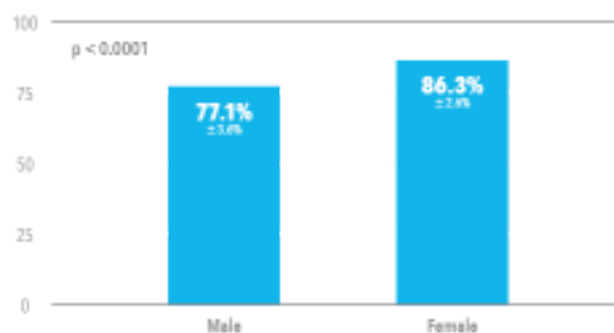


Chart 23: Health Coverage by Race-Ethnicity

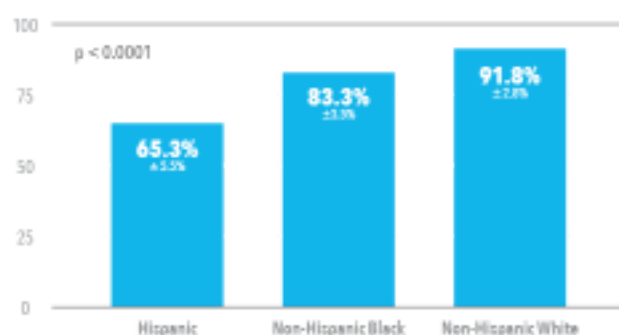
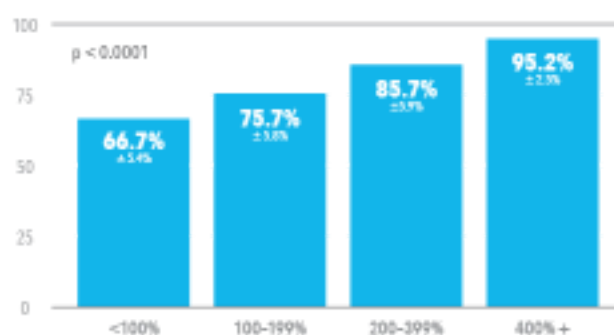


Chart 24: Percentage with Health Coverage by Percent of Federal Poverty Level



Indicator Definition: Those responding yes to: "do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, government plans such as Medicare, or Indian Health Services?"



80.8% or 1,540,200 Chicago adults

reported having one or more person they think of as their personal doctor

HEALTH CARE & ACCESS

PERSONAL DOCTOR

- In Chicago, 80.8% of adults reported having one or more person they think of as their regular personal doctor or health care provider.
- Having a personal doctor was more common among those who are older (**Chart 25**) and women (**Chart 26**).
- More non-Hispanic whites reported having a personal doctor than non-Hispanic blacks and Hispanics; non-Hispanic blacks had a significantly higher percentage than Hispanics (**Chart 27**).
- Those with higher incomes reported higher rates of having a personal doctor; however, this was only observed once household incomes were above 400% of the federal poverty level (**Chart 28**).
- Having a personal doctor was related to health coverage status; 89% of those who had health insurance also had a personal doctor, compared to 46% of those who did not have insurance.

Chart 25: Percentage with One or More Person They Think of as Their Personal Doctor or Health Care Provider by Age Category

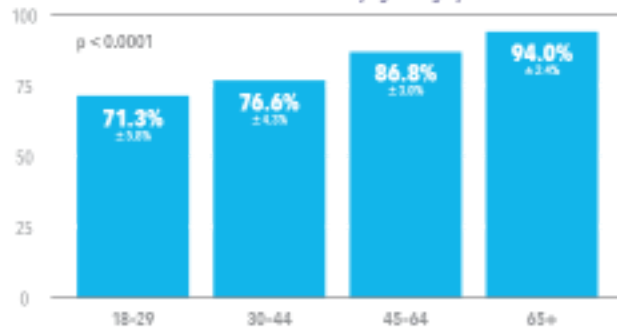


Chart 26: Percentage with One or More Person They Think of as Their Personal Doctor or Health Care Provider by Gender

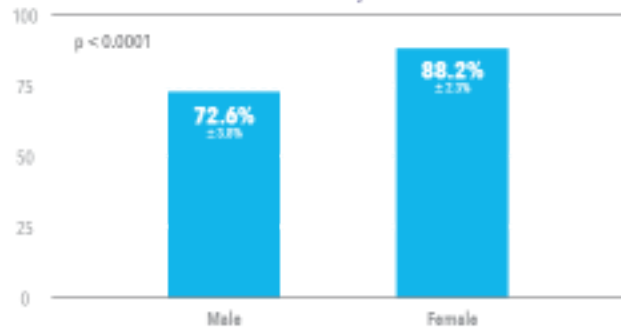


Chart 27: Percentage with One or More Person They Think of as Their Personal Doctor or Health Care Provider by Race-Ethnicity

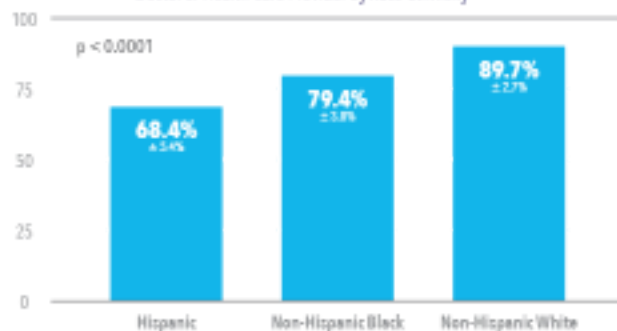
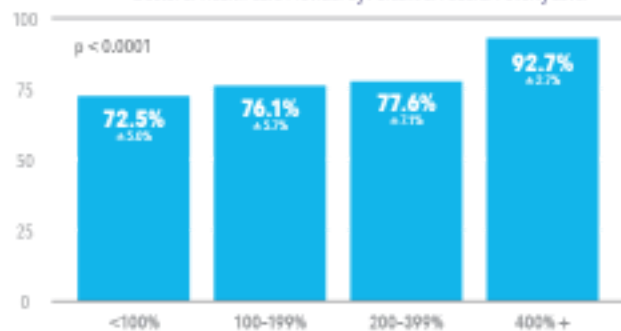


Chart 28: Percentage with One or More Person They Think of as Their Personal Doctor or Health Care Provider by Percent of Federal Poverty Level



Indicator Definition: When asked, "do you have one person or more than one person you think of as your personal doctor or health care provider," those who answered "yes, only one" or "yes, more than one."

76.8% or 1,466,600 Chicago adults

reported having visited a doctor in the past year for a routine checkup



HEALTH CARE & ACCESS

LAST ROUTINE CHECKUP

- Overall, 76.8% of adults reported that they had visited a doctor or health care provider in the past year for a routine checkup, but this was significantly higher among those aged 65+ compared to other age categories (**Chart 29**).
- Women were more likely than men to report visiting a doctor or health care provider in the past year for a checkup (**Chart 30**), as were non-Hispanic blacks (**Chart 31**), but there was no significant difference by poverty level (**Chart 32**).
- Overall, 81% of those who had coverage visited a doctor in the past year, compared to 56% of those who did not have coverage.

Chart 29: Percentage who had a Routine Checkup with a Doctor or Health Care Provider in Past Year by Age Category

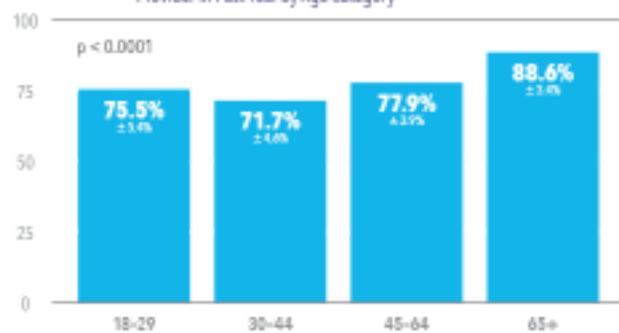


Chart 30: Percentage who had a Routine Checkup with a Doctor or Health Care Provider in Past Year by Gender

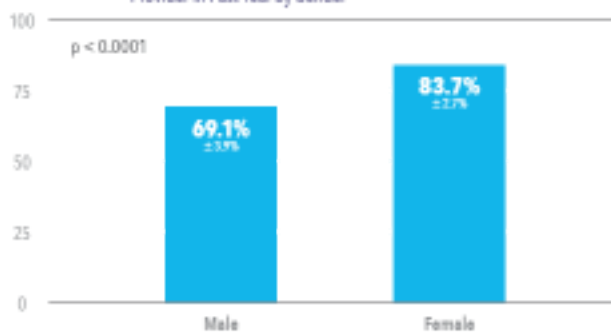


Chart 31: Percentage who had a Routine Checkup with a Doctor or Health Care Provider in Past Year by Race-Ethnicity

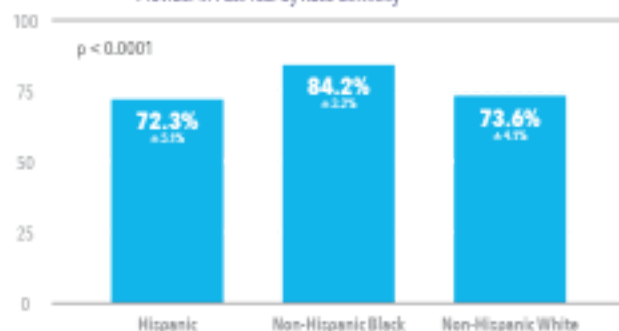
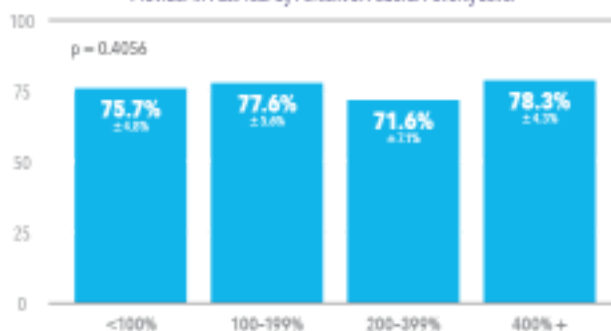


Chart 32: Percentage who had a Routine Checkup with a Doctor or Health Care Provider in Past Year by Percent of Federal Poverty Level



Indicator Definition: Those who responded that it was within the past year (anytime less than 12 months ago) that they last visited a doctor or health care provider for a routine checkup. A routine checkup is a general physical exam, not an exam for a specific injury, illness or condition.



61.5% or 1,169,200 Chicago adults

reported having visited a dentist in the past year

HEALTH CARE & ACCESS

LAST DENTIST VISIT

- Overall, 61.5% of adults visited a dentist in the past year, for any reason.
- Although there was no difference among age categories (**Chart 33**), women were more likely than men (**Chart 34**) and non-Hispanic whites were more likely than non-Hispanic blacks and Hispanics to have visited a dentist in the past year (**Chart 35**).
- Reporting having visited a dentist in the past year was significantly more likely among those with higher incomes. (**Chart 36**).
- Those with health coverage were more likely to report having seen a dentist in the past year (66% compared to 41% among those without health coverage).

Chart 33: Percentage Who Have Seen a Dentist in the Past Year by Age Category

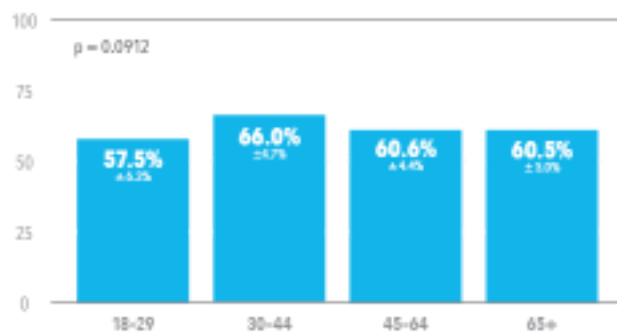


Chart 34: Percentage Who Have Seen a Dentist in the Past Year by Gender

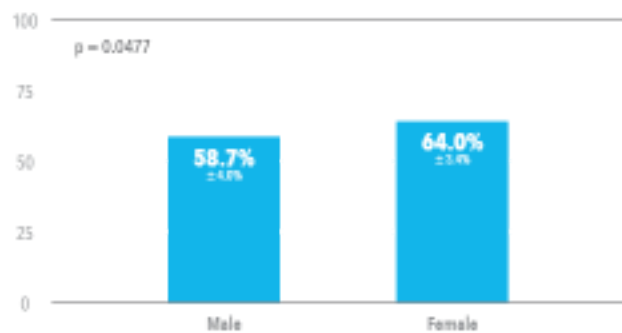


Chart 35: Percentage Who Have Seen a Dentist in the Past Year by Race-Ethnicity

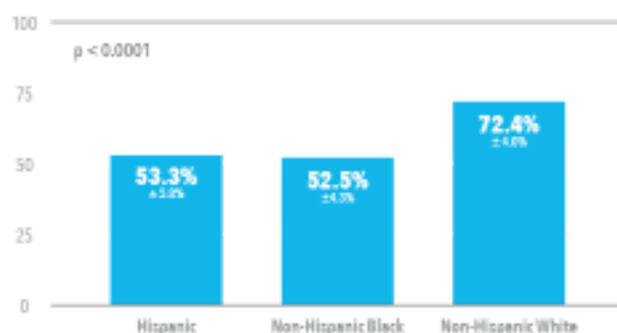
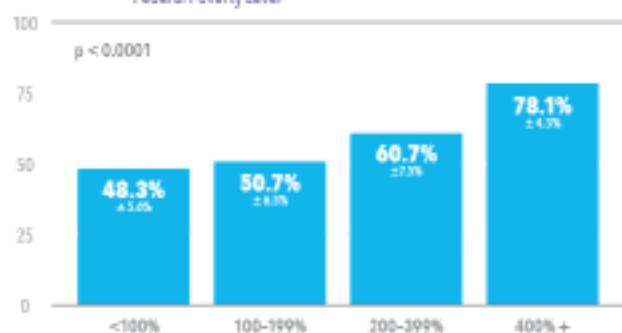


Chart 36: Percentage Who Have Seen a Dentist in the Past Year by Percent of Federal Poverty Level



Indicator Definition: Those who responded that it was within the past year (anytime less than 12 months ago) that they last visited a dentist or dental clinic for any reason. It is unknown whether health coverage includes dental coverage.

75.6% or 235,700 Chicago women aged 50 to 74 years reported having a mammogram within the past two years



HEALTH CARE & ACCESS

BREAST CANCER SCREENING

- The US Preventive Services Task Force recommends screening mammography every two years for women 50-74 years (1). In Chicago, 75.6% of women in this age category are meeting this recommendation.
- There was no difference in the percentage meeting this recommendation by age category (**Chart 37**).
- Non-Hispanic black women had a higher percentage meeting this recommendation than non-Hispanic white women (**Chart 38**).
- Rates of breast cancer screening were not significantly different between women who had health coverage (76.0%) and women who did not have health coverage (71.4%).

Chart 37: Percentage Meeting Breast Cancer Screening Guideline by Age Category

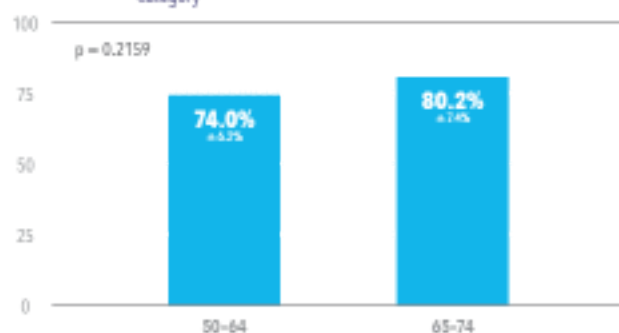


Chart 38: Percentage Meeting Breast Cancer Screening Guideline by Race-Ethnicity

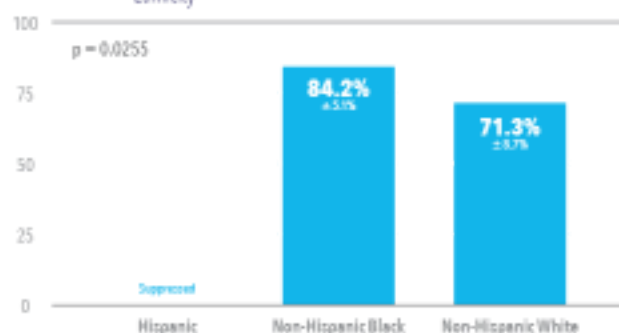
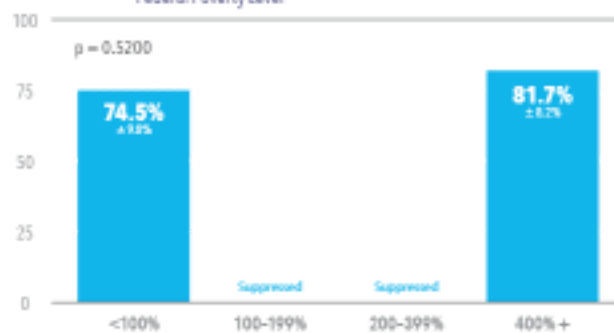


Chart 39: Percentage Meeting Breast Cancer Screening Guideline by Percent of Federal Poverty Level



Indicator Definition: Among women age 50 to 74 years, those who report having a mammogram within the past two years.

1. Recommendation Summary, US Preventive Task Force. Updated, March 2015. Available at: <http://www.uspreventiveservicestaskforce.org/Page/Topic/recommendation-summary/breast-cancer-screening> Accessed: 05 May 2015



82.9% or 574,400 Chicago women

age 21 to 65 reported having a Pap test in the past three years

HEALTH CARE & ACCESS

CERVICAL CANCER SCREENING

- The US Preventive Services Task Force recommends a Pap test with cytology every three years to screen for cervical cancer in women aged 21 to 65 years (1). Among women aged 21 to 65 years, 82.9% had a Pap test within the past three years.
- Women aged 21 to 29 were the least likely to have had a Pap test within the past three years (**Chart 40**).
- There was no significant difference between racial-ethnic groups (**Chart 41**) or poverty level (**Chart 42**).
- Rates of cervical cancer screening were not significantly different between women who had health coverage (83.6%) and women who did not have health coverage (79.1%)

Chart 40: Percentage Meeting Cervical Cancer Guideline by Age Category

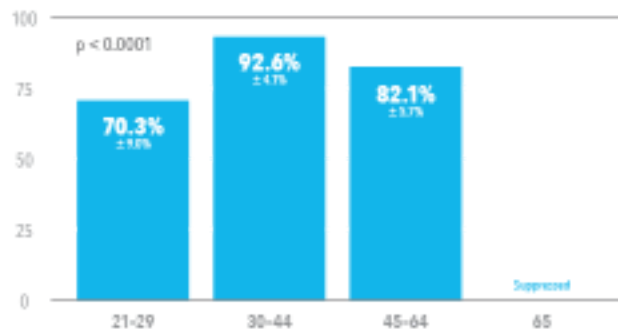


Chart 41: Percentage Meeting Cervical Cancer Screening Guideline by Race-Ethnicity

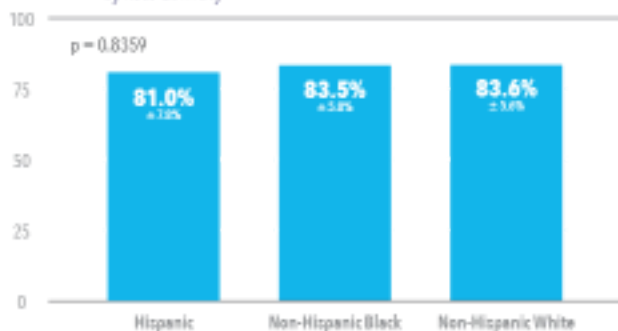
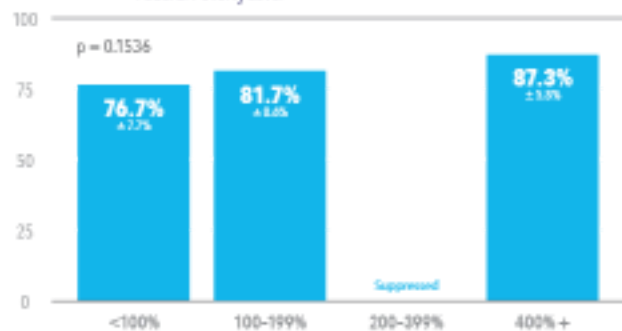


Chart 42: Percentage Meeting Cervical Cancer Screening Guideline by Percent of Federal Poverty Level



Indicator Definition: Women aged 21 to 65 years, who have not had a hysterectomy, who report having a Pap test within the past three years.

1. Recommendation Summary. US Preventive Task Force. Updated, March 2015. Available at: <http://www.uspreventiveservicestaskforce.org/Page/Topic/recommendation-summary/cervical-cancer-screening>. Accessed: 05 May 2015.

60.4% or 362,900 Chicago adults aged 50 to 75 reported meeting the colorectal cancer screening guideline



HEALTH CARE & ACCESS

COLORECTAL CANCER SCREENING

- The US Preventive Services Task Force recommends screening for colorectal cancer for adults between age 50 and 75 (1). Accepted screening protocols include: annual high sensitivity fecal occult blood test (FOBT), or a sigmoidoscopy done every five years with FOBT every three years, or a colonoscopy every 10 years.
- Overall, 60.4% of adults aged 50 to 75 years were meeting this guideline. Adults aged 65 to 75 had higher rates of colorectal screening than adults aged 50 to 64 (Chart 43).
- There was no difference in colorectal screening rates between men and women (Chart 44).
- Hispanics had lower colorectal screening rates than other racial-ethnic groups (Chart 45). Screening rates were significantly higher among those with higher household incomes. (Chart 46).
- Colorectal cancer screening rates were significantly higher among those with health coverage (64.1%) compared to those without (33.1%).

Chart 43: Percentage Meeting Colon Cancer Screening Guidelines by Age Category

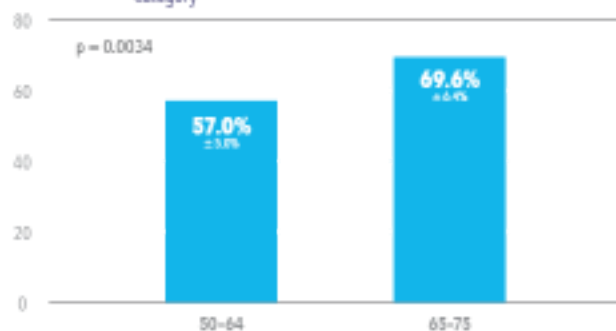


Chart 44: Percentage Meeting Colon Cancer Screening Guidelines by Gender

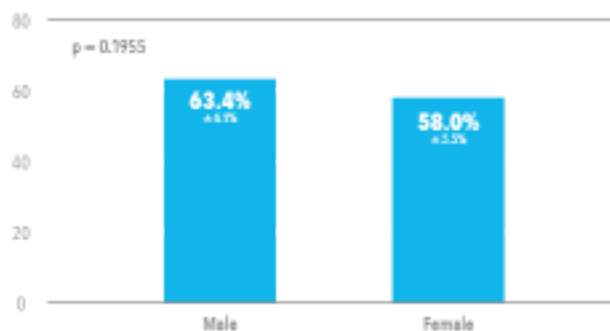


Chart 45: Percentage Meeting Colon Cancer Screening Guidelines by Race-Ethnicity

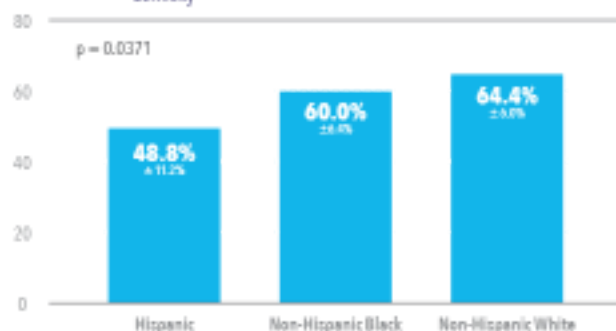
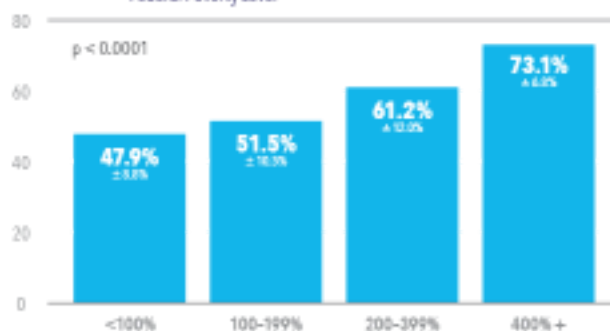


Chart 46: Percentage Meeting Colon Cancer Screening Guidelines by Percent of Federal Poverty Level



Indicator Definition: Meeting colonoscopy screening guideline: Blood stool test < 1 year (age 50-75) OR (Sigmoidoscopy/colonoscopy < 5 yrs AND blood stool < 3 yrs (age 50-75)) OR Sigmoidoscopy/Colonoscopy < 10 yrs (age 50-75)

1. Recommendation Summary, US Preventive Task Force. Updated, March 2015. Available at: <http://www.uspreventiveservicestaskforce.org/Page/Topic/recommendation-summary/colorectal-cancer-screening>. Accessed: 05 May 2015.



51.8% or 956,800 Chicago adults

reported having ever had an HIV test

HEALTH CARE & ACCESS

EVER HAD AN HIV TEST

- Among adults, 51.8% have been tested for HIV at least once in their lives.
- Testing rates were highest among those aged 30 to 44 years (**Chart 47**), and non-Hispanic blacks (**Chart 49**) but there was no difference between men and women (**Chart 48**) or poverty levels (**Chart 50**).
- A majority (85.5%) were last tested in a health care setting, which includes a private doctor's office, HMO office, hospital or other testing clinic, while 8.1% were last tested in a non-health care setting, which included at a counseling site, drug treatment facility, at home or at a correctional facility.
- Among those who have ever been tested for HIV, 26% were last tested within the past year. An additional 32% were last tested between one and two years ago and 21% were last tested between two and five years ago. The remaining 21% were last tested more than five years ago.

Chart 47: Percentage Ever Tested for HIV by Age Category

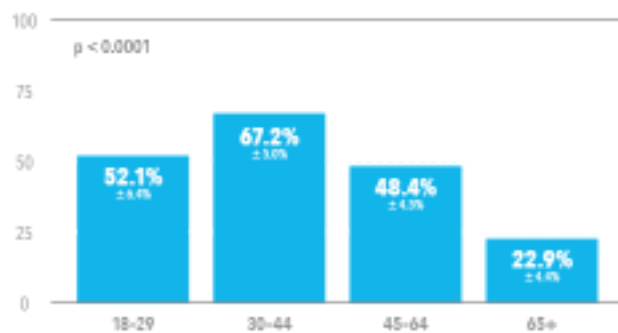


Chart 48: Percentage Ever Tested for HIV by Gender

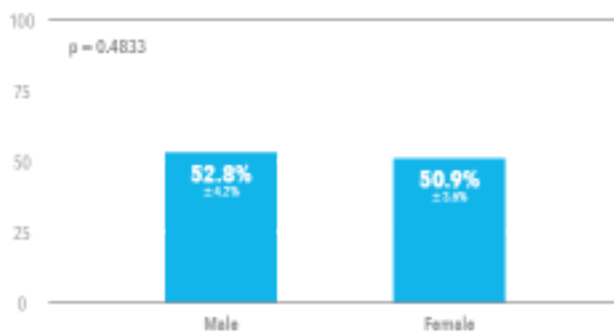


Chart 49: Percentage Ever Tested for HIV by Race-Ethnicity

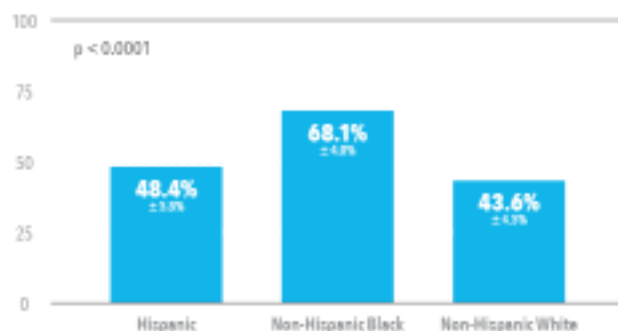
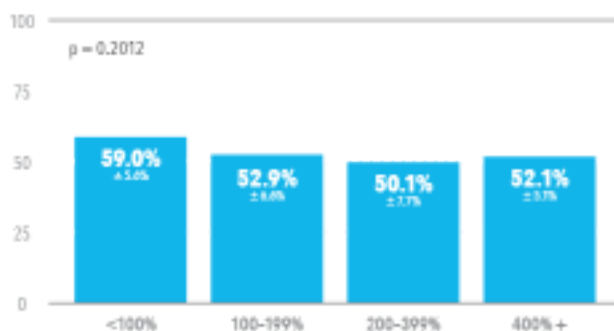


Chart 50: Percentage Ever Tested for HIV by Percent of Federal Poverty Level



Indicator Definition: Those responding that they had ever been tested for HIV, including saliva tests, but not including tests they may have had as part of a blood donation.



2014 Healthy Chicago Survey

DIET & PHYSICAL ACTIVITY



DIET & PHYSICAL ACTIVITY

A diet rich in nutrients and regular physical activity are essential components of a healthy lifestyle and can lower the risk of high blood pressure, obesity, heart disease, stroke and diabetes (1-3). Among adults, physical activity can also lower the risk of depression and early death (4,5). Healthy eating and active living are influenced both by social factors such as education and income (6), and environmental factors such as access to healthy foods (7), neighborhood safety (8) and characteristics of the built environment (9).

The diet-related objectives of Healthy People 2020 focus on increasing consumption of fruits, vegetables, whole grains and calcium, and decreasing consumption of fat, sugar and sodium. The Healthy Chicago Survey reports that 53.9% of adults eat two or more servings of fruit a day and 22.7% eat three or more servings of vegetables a day.

The Physical Activity Guidelines for Americans stress that all adults should avoid inactivity, but for the most substantial health benefits, they should aim for at least 150 minutes of moderate-intensity, or 75 minutes of vigorous-intensity aerobic physical activity a week (1). In addition, adults should do muscle-strengthening activities on two or more days a week (1). Healthy People 2020 objectives aim to increase the proportion of adults who are meeting this physical activity guideline and decrease the proportion who engage in no leisure-time activity. Results from the Healthy

Chicago Survey indicate that 18.3% of Chicago adults engage in no leisure-time physical activity, compared to 30.5% of US adults, and 24.4% are meeting the federal guidelines for physical activity, compared to 20.8% of US adults (5).

In Chicago, differences by race-ethnicity are reported for every diet and physical activity indicator. Non-Hispanic whites reported significantly higher rates of fruit and vegetable consumption as well as meeting physical activity recommendations compared to non-Hispanic blacks and Hispanics. Hispanics reported the highest rate of use of neighborhood outdoor space compared to non-Hispanic whites and non-Hispanic blacks. However, Hispanics reported not feeling as safe in neighborhood outdoor spaces compared to non-Hispanic whites.

Adults with higher incomes reported higher fruit and vegetable consumption, physical activity, and feeling safe in neighborhood outdoor spaces, though there was no difference in reported rates of using neighborhood outdoor spaces by income. Research has shown that income is strongly related to diet and physical activity, and that those with lower incomes are disproportionately affected by the cost, availability and quality of fruits and vegetables, and the availability of safe environments or facilities that enable and promote physical activity (8, 10, 11).

References:

1. US Department of Health and Human Services (HHS), Office of Disease Prevention and Health Promotion. 2008 Physical Activity Guidelines for Americans. Washington: HHS; 2008.
2. US Department of Health and Human Services (HHS), Office of Disease Prevention and Health Promotion. Physical activity guidelines advisory committee report, 2008. Washington: HHS, 2008.
3. Warburton D, Nicol C, Bredin S. Health Benefits of Physical Activity: The Evidence. *CMAJ*. 2006; 174(6): 801-809.
4. Teychenne M, Ball K, Salmon J. Physical Activity and Likelihood of Depression in Adults: A Review. *Preventive Medicine* 2008; 46(5): 397-411.
5. Centers for Disease Control and Prevention, National Center for Health Statistics. National Health Interview Survey (NHIS), 2013.
6. Wadley J, Waller J, Jarvis MJ. Sex differences in the association of socioeconomic status with obesity. *Am J Public Health* 2002; 92: 1299-304.
7. Zerk SN et al. Neighborhood Retail Food Environment and Fruit and Vegetable Intake in a Multiethnic Urban Population. *American Journal of Health Promotion*. 2009; 23(4): 255-264.
8. Foster S, Giles-Corti B. The Built Environment, Neighborhood Crime and Constrained Physical Activity: An Exploration of Inconsistent Findings. *Preventive Medicine*. 2008; 47(3): 241-251.
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10. Walker RE, et al. Disparities and access to healthy food in the United States: A review of food deserts literature. *Health & Place*. 2010; 16: 876-884.
11. Powell LM, et al. Availability of Physical Activity-Related Facilities and Neighborhood Demographic and Socioeconomic Characteristics: A National Study. *Am J Public Health*. 2006; 96(9): 1676-1680.

53.9% or 1,022,000 Chicago adults

reported eating 2+ servings of fruit daily



DIET & PHYSICAL ACTIVITY

FRUIT CONSUMPTION

- The recommended daily number of servings of fruits varies based on a person's age, sex and level of physical activity. For a person who needs 2,000 calories a day to maintain their health, 2 cups of fruit are recommended (1). Overall, 53.9% of adults in Chicago reported eating 2 or more servings of fruit daily.
- There was no difference in fruit consumption by age category (**Chart 51**) or gender (**Chart 52**).
- Non-Hispanic whites reported higher fruit consumption compared to Hispanics and non-Hispanic blacks (**Chart 53**).
- Participants in the lowest income groups reported the lowest consumption of fruit (**Chart 54**).

Chart 51: Percentage eating 2+ servings of fruit daily by age category

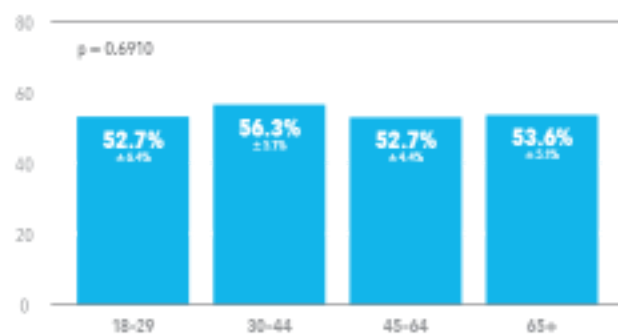


Chart 52: Percentage eating 2+ servings of fruit daily by gender

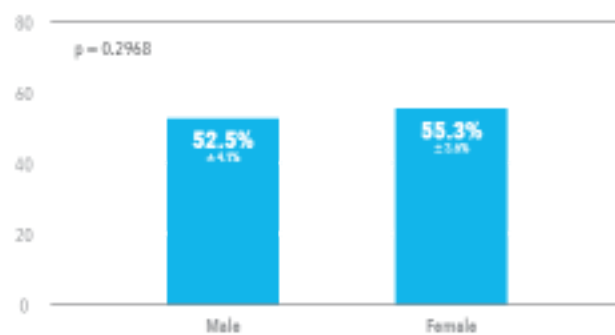


Chart 53: Percentage eating 2+ servings of fruit daily by Race-Ethnicity

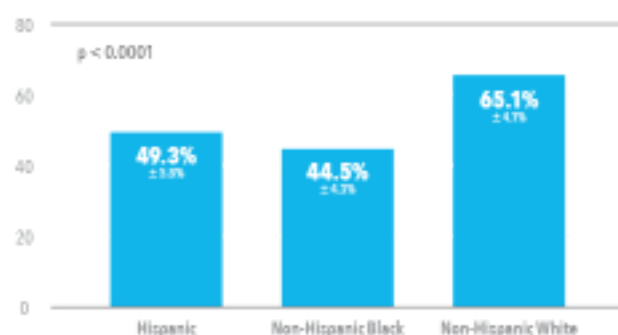


Chart 54: Percentage eating 2+ servings of fruit daily by percentage of federal poverty level



Indicator Definition: Based on the number of servings of fruit the respondent reported eating yesterday. A serving was defined as one medium apple or a handful of grapes.

1. U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2010. 7th Edition, Washington, DC: U.S. Government Printing Office, December 2010.



22.7% or 430,000 Chicago adults

reported eating 3+ servings of vegetables daily

DIET & PHYSICAL ACTIVITY

VEGETABLE CONSUMPTION

- The recommended number of servings of vegetables varies based on a person's age, sex and level of physical activity. For a person who needs 2,000 calories a day to maintain their health, 2.5 cups of vegetables are recommended (1). Overall, 22.7% of adults reported eating 3 or more servings of vegetables daily.
- Participants aged 30-44 years of age reported significantly higher rates of vegetable consumption than any other group. (**Chart 55**).
- Men and women were equally likely to eat 3+ servings of vegetables per day (**Chart 56**).
- Non-Hispanic whites and those in the highest income group were more than twice as likely to report meeting the vegetable recommendation compared to non-Hispanic blacks and Hispanics and those in the lowest income groups (**Charts 57 and 58**).

Chart 55: Percentage eating 3+ servings of vegetables daily by age category

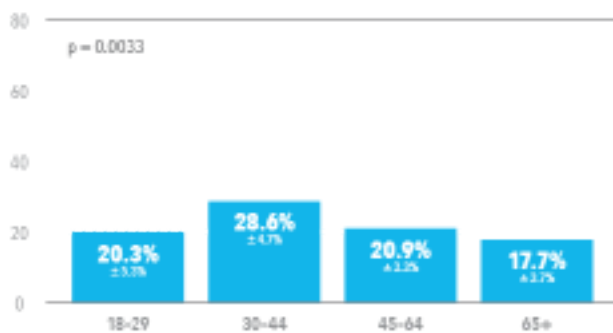


Chart 56: Percentage eating 3+ servings of vegetables daily by gender

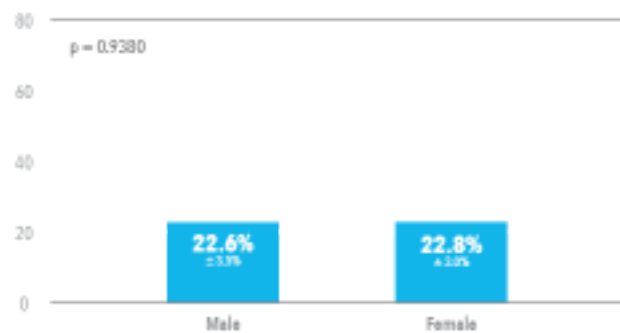


Chart 57: Percentage eating 3+ servings of vegetables daily by Race-Ethnicity

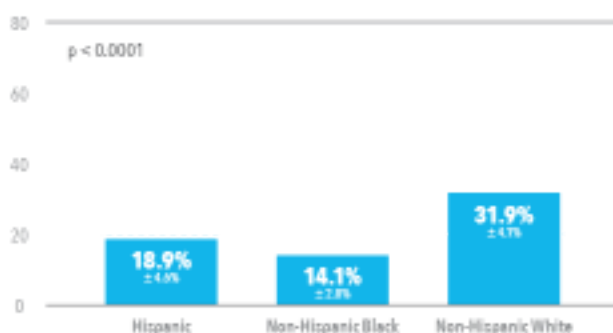
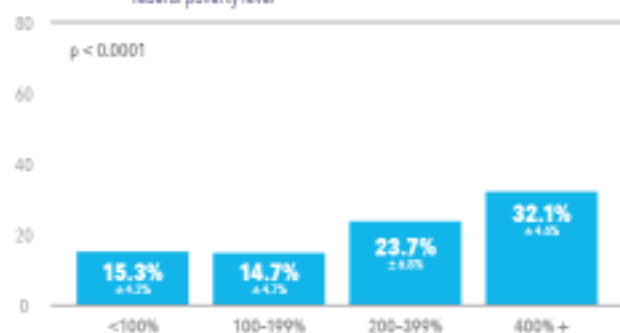


Chart 58: Percentage eating 3+ servings of vegetables daily by percentage of federal poverty level



Indicator Definition: Based on the number of servings of vegetables the respondent reported eating yesterday. A serving was defined as a handful of broccoli or a cup of carrots.

1. Fruits and Vegetables. Centers for Disease Control and Prevention. [<http://www.cdc.gov/nutrition/everyone/fruitsvegetables/index.html>] Accessed: 05/05/2015

18.3% or 350,000 Chicago adults

reported not participating in any physical activity in the past month



DIET & PHYSICAL ACTIVITY

NO LEISURE-TIME PHYSICAL ACTIVITY

- The Physical Activity Guidelines for Americans stress that all adults should avoid inactivity and that any amount of physical activity can lead to health benefits (1).
- Overall, 18.3% of adults in Chicago reported not participating in any physical activity in the past month.
- Older adults, women, non-Hispanic blacks, and Hispanics reported the highest rates of no physical activity within the last month compared to younger adults, men, and non-Hispanic whites (Charts 59, 60, 61).
- Those with higher poverty were more likely to not report any physical activity (Chart 62).

Chart 59: Percentage with No Physical Activity in Past Month by Age Category

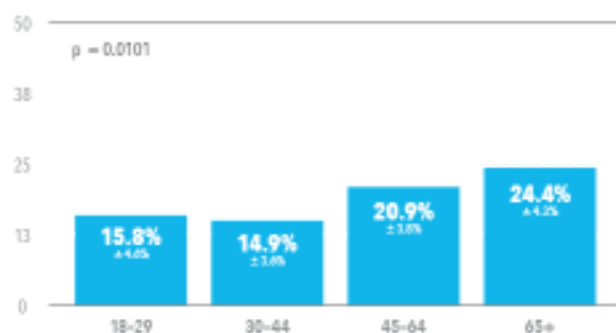


Chart 60: Percentage with No Physical Activity in Past Month by Gender

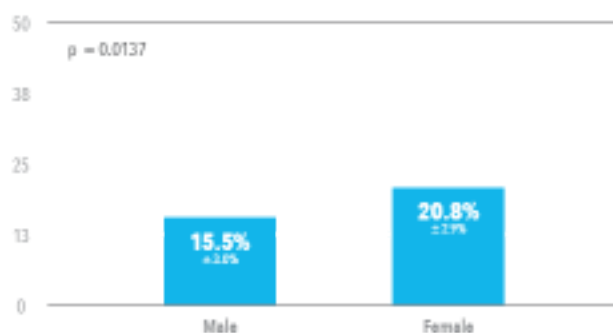


Chart 61: Percentage with No Physical Activity in Past Month by Race-Ethnicity

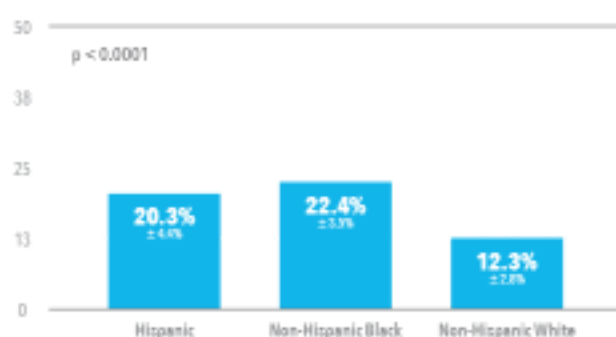
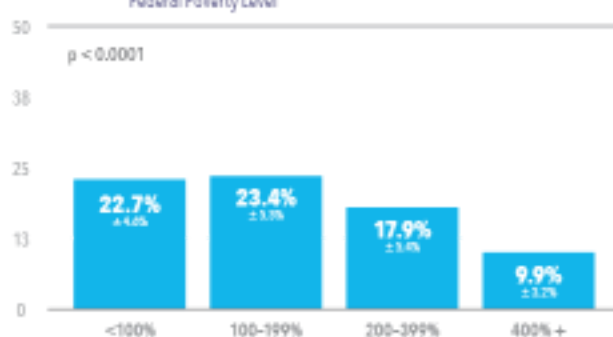


Chart 62: Percentage with No Physical Activity in Past Month by Percent of Federal Poverty Level



Indicator Definition: Based on those who responded 'no' to the question, "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?"

1. 2008 Physical Activity Guidelines for Americans Summary. Office of Disease Prevention and Health Promotion, US Department of Health and Human Services (<http://www.health.gov/paguidelines/guidelines/summary.aspx>) Accessed: 05/05/2015



24.4% or 417,000 Chicago adults

reported meeting the national physical activity guideline

DIET & PHYSICAL ACTIVITY

MEETING PHYSICAL ACTIVITY GUIDELINE

- The Physical Activity Guidelines for Americans recommend that adults should do at least 150 minutes a week of moderate intensity or 75 minutes a week of vigorous intensity aerobic physical activity, in addition to muscle strengthening activities on 2 or more days a week (1).
- Overall, 57.9% of adults met the aerobic guideline, and 34.5% of adults met the strength guideline, but only 24.4% of adults met both guidelines.
- Those between the ages of 18 and 44 report the highest levels of physical activity (**Chart 63**).
- Significantly more men reported meeting the physical activity guideline compared to women (**Chart 64**).
- Non-Hispanic whites were more likely to report meeting the physical activity guideline compared to non-Hispanic blacks and Hispanics (**Chart 65**).
- Participants from the highest income group were twice as likely to report meeting physical activity guidelines compared to those in the lowest income group (**Chart 66**).

Chart 63: Percentage Meeting Physical Activity Guideline by Age Category

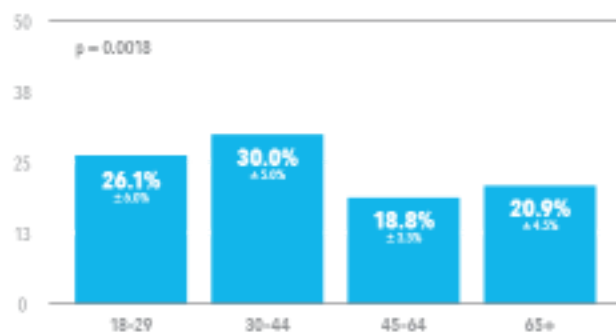


Chart 64: Percentage Meeting Physical Activity Guideline by Gender

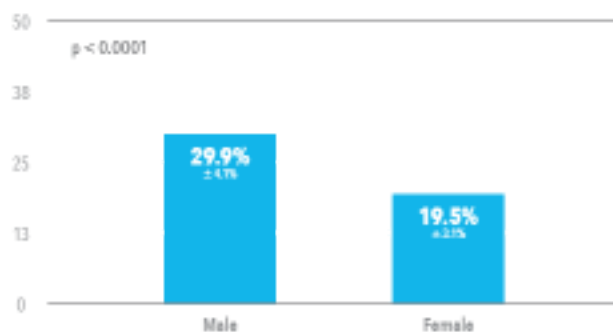


Chart 65: Percentage Meeting the Physical Activity Guideline by Race-Ethnicity

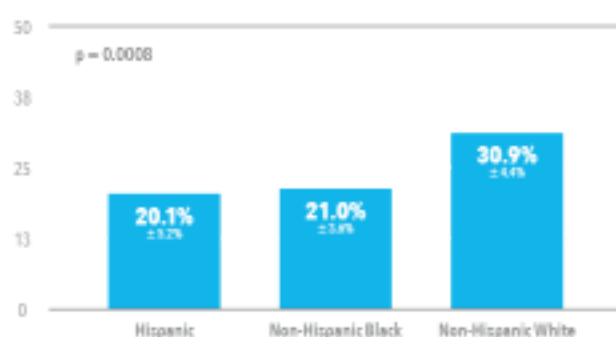
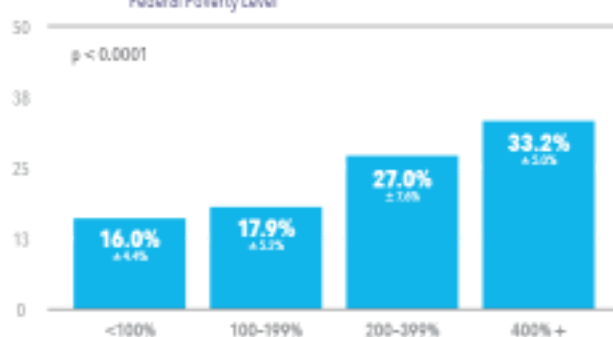


Chart 66: Percentage Meeting the Physical Activity Guideline by Percent of Federal Poverty Level



Indicator Definition: Variable is calculated by calculating the metabolic equivalents (METs) for each listed physical activity, their intensity, each respondent's maximal oxygen uptake, total minutes each week for each activity and total minutes of exercise per week to assess whether respondent meets the aerobic component of the 2008 Physical Activity Guidelines for Americans. This is combined with the number of times per week or per month the respondent reports doing physical activities or exercises to strengthen their muscles.

1. 2008 Physical Activity Guidelines for Americans Summary. Office of Disease Prevention and Health Promotion, US Department of Health and Human Services (<http://www.health.gov/paguidelines/guidelines/summary.aspx>) Accessed: 05/05/2015

49.1% or 932,500 Chicago adults

reported using walking paths, parks, playgrounds or sports fields in their neighborhood for physical activity



DIET & PHYSICAL ACTIVITY

USE OF NEIGHBORHOOD OUTDOOR SPACE FOR PHYSICAL ACTIVITY

- Overall, 49.1% of adults reported using walking paths, parks, playgrounds or sports fields in their neighborhood for physical activity.
- The use of neighborhood outdoor space was reported more frequently by younger adults (**Chart 67**) and Hispanics (**Chart 68**).
- There was no difference in the use of neighborhood outdoor spaces by gender (**Chart 69**) or poverty (**Chart 70**).
- Seven percent (133,000 adults) reported that their neighborhood does not have any of these facilities. Those who reported this were more likely to be non-Hispanic black ($p = 0.003$) or below the federal poverty level ($p = 0.002$).

Chart 67: Percentage Using Neighborhood Outdoor Space by Age Category

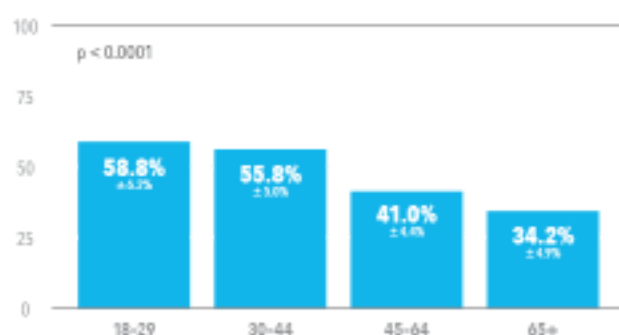


Chart 68: Percentage Using Neighborhood Outdoor Space by Gender

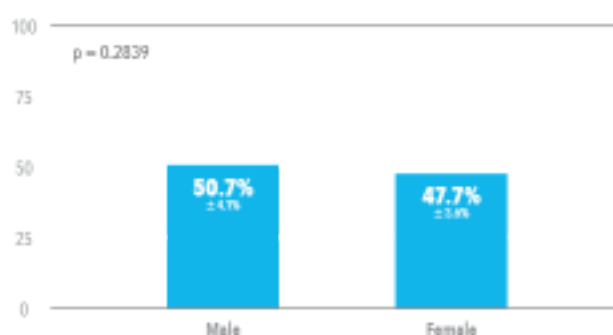


Chart 69: Percentage Using Neighborhood Outdoor Space by Race-Ethnicity

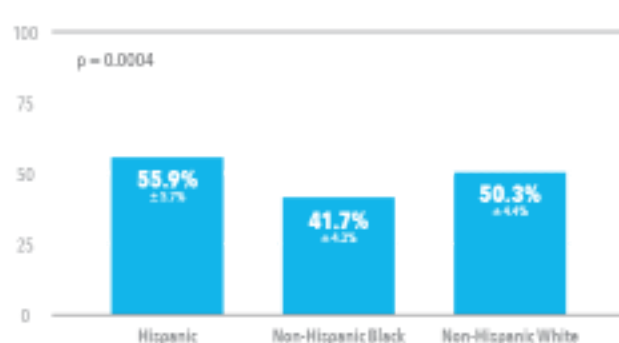
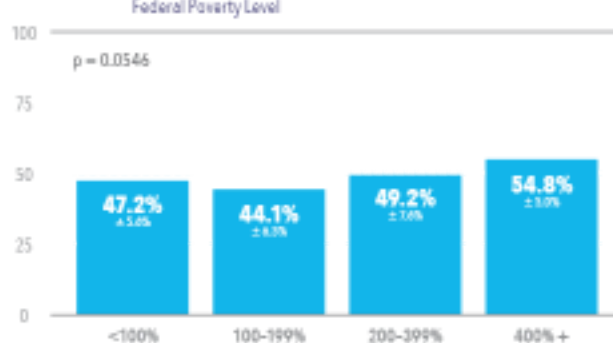


Chart 70: Percentage Using Neighborhood Outdoor Space by Percent of Federal Poverty Level



Indicator Definition: Respondents who report that they use walking paths, parks, playgrounds or sports fields in their neighborhood for physical activity.



81.9% or 1,398,000 Chicago adults

reported that it is very or somewhat safe to walk or to use parks, playgrounds and sports fields in their neighborhood

DIET & PHYSICAL ACTIVITY

SAFETY OF NEIGHBORHOOD OUTDOOR SPACES

- Overall, 81.9% reported that it is very or somewhat safe to walk or to use parks, playgrounds and sports fields in their neighborhood.
- Those aged 18-29 were significantly less likely to feel safe in neighborhood outdoor spaces (**Chart 71**).
- Men were more likely to report feeling safe in neighborhood outdoor spaces compared to women (**Chart 72**).
- More non-Hispanic whites reported feeling safe in neighborhood outdoor spaces compared to Hispanics and non-Hispanic blacks (**Chart 73**).
- Those in the highest income group reported the highest rates of feeling safe in neighborhood outdoor spaces, compared to those in the lowest income groups (**Chart 74**).

Chart 71: Percentage That Feel Safe Using Neighborhood Outdoor Spaces by Age Category

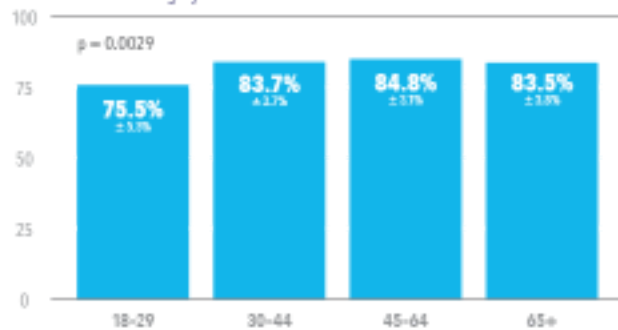


Chart 72: Percentage That Feel Safe Using Neighborhood Outdoor Spaces by Gender

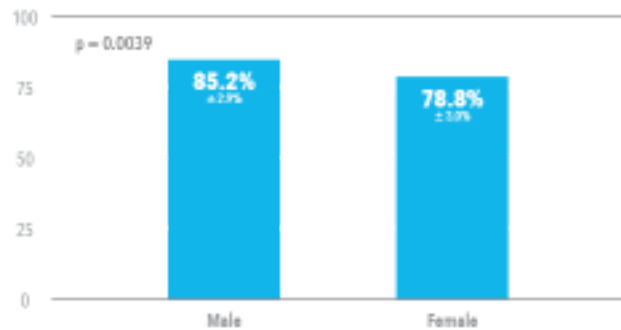


Chart 73: Percentage That Feel Safe Using Neighborhood Outdoor Spaces by Race-Ethnicity

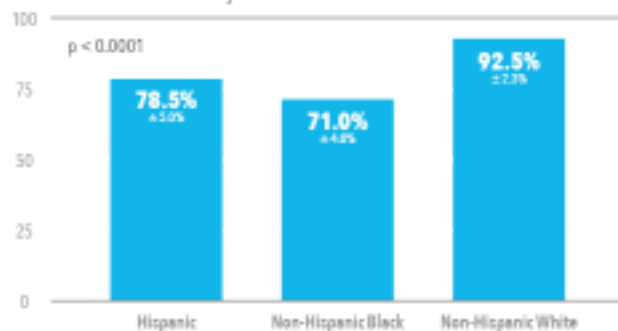
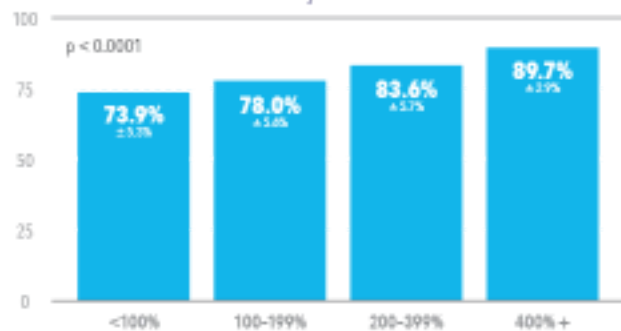


Chart 74: Percentage That Feel Safe Using Neighborhood Outdoor Spaces by Percent of Federal Poverty Level



Indicator Definition: Respondents who report that it is very safe or somewhat safe to walk or to use parks, playground and sports fields in their neighborhood.

2014 Healthy Chicago Survey

TOBACCO USE



TOBACCO USE

The cigarette smoking rate among Chicago adults was 18.4%, similar to the national rate, 17.8%, but above the Healthy People 2020 target of 12.0% (1,2). Cigarette smoking in Chicago remains disproportionately high in certain populations. Smoking rates among men were higher than women, and non-Hispanic blacks had higher rates than other racial-ethnic groups. There was a strong relationship between poverty and current smoking, with a three-fold difference in smoking rates between those with the highest household incomes and those living below the federal poverty line.

In Chicago, the number of current smokers was similar to the number of former smokers (19.4%). This is similar to the national trend, where the historical decrease in smoking rate in the U.S. has been driven in part by an increase in the number of people quitting smoking (3). In the U.S., the prevalence of former smokers now exceeds that of current smokers. Of current smokers in Chicago, 71% indicated that they stopped smoking at least once in the past year because they were trying to quit. A total of 26% of former smokers quit within the past year. Many of the health benefits of quitting smoking, including decreased respiratory symptoms,

reduced risk of lung and other cancers, and reduced risk of heart disease are observed within 1-2 years of quitting (4).

Electronic cigarettes, also known as “e-cigarettes” or “e-cigs,” are battery-powered devices that deliver nicotine and/or flavorings and other chemicals in a vapor. There are many variations, but most are cylindrical and deliver vapor when the user takes a puff (also known as “vaping”). Some are disposable while others are refillable. Since their introduction to the global market in 2004, their use has steadily increased.

The Healthy Chicago Survey provided the first data on e-cigarette use in Chicago. Overall, 16% of adults reported having ever tried an e-cigarette, but only 4% reported using them in the past month (i.e. current e-cigarette use). These numbers are slightly higher than what is reported nationally, where the percentage of adults who have used an e-cigarette at least once is 8.5% and the percentage of current e-cigarette users is 2.6% (5). In Chicago, similar to what is observed nationally, the majority of e-cigarette use is among younger, male adults (5).

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1. Centers for Disease Control and Prevention. Cigarette Smoking in the United States. <http://www.cdc.gov/tobacco/campaign/tips/resources/data/cigarette-smoking-in-united-states.html>. Accessed: 05 May 2015
2. U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at: <http://www.healthypeople.gov/2020/topics-objectives/topic/tobacco-use/objectives>. Accessed: 05 May 2015
3. Malarcher A. Quitting Smoking among Adults – United States, 2001–2010. *Morbidity and Mortality Weekly Report*. 2011; 60(44): 1515–1519
4. US Department of Health and Human Services. *The Health Consequences of Smoking – 50 Years of Progress: A Report of the Surgeon General*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014 [accessed 2015 Aug 05]
5. Brian A. King, Rashni Patel, Kimberly Nguyen, and Shanta R. Dube. “Trends in Awareness and Use of Electronic Cigarettes among U.S. Adults, 2010–2013.” *Nicotine & Tobacco Research*. 2015; 17(2): 219–227

18.4% or 351,100 Chicago adults

reported being current cigarette smokers



TOBACCO USE

CURRENT SMOKING

- The smoking rate among Chicago adults was 18.4%. A total of 19.4% of adults were former smokers and 62.2% had never smoked cigarettes.
- There was no difference in smoking rates by age (**Chart 75**).
- Smoking rates were significantly higher among men (**Chart 76**), non-Hispanic blacks (**Chart 77**) and those living in greater poverty (**Chart 78**).
- During the past 12 months, 71.2% of current smokers stopped smoking for one day or longer because they were trying to quit smoking.
- Of former smokers, 26.2% quit smoking within the past year, 23.5% quit smoking between one and five years ago and 50.3% quit smoking five or more years ago.

Chart 75: Percentage Current Smokers by Age Category

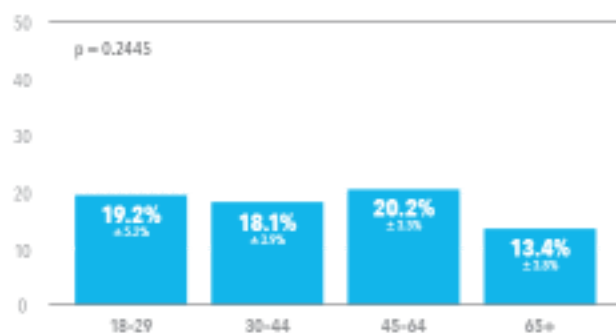


Chart 76: Percentage Current Smokers by Gender

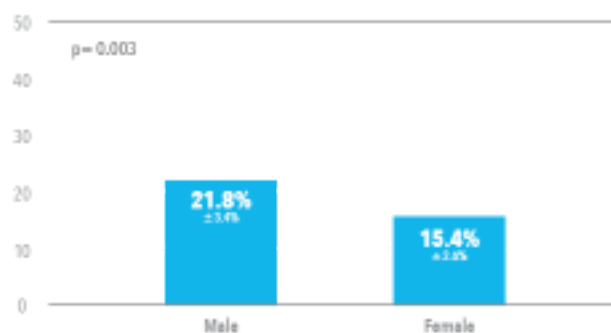


Chart 77: Percentage Current Smokers by Race-Ethnicity

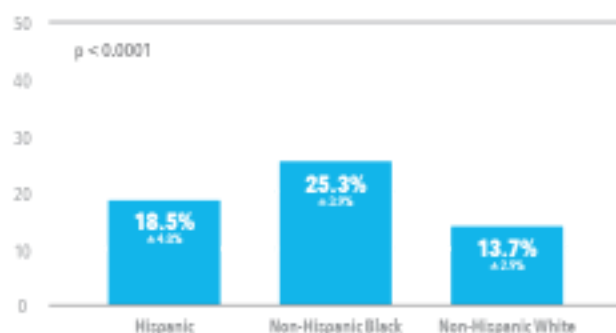
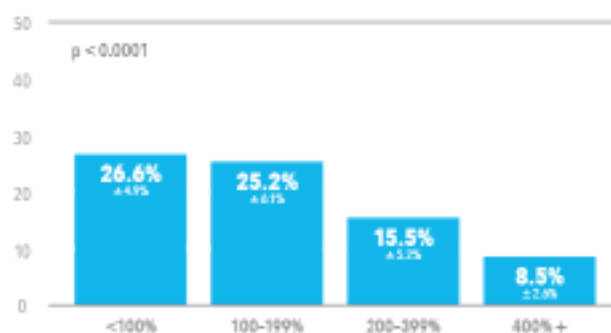


Chart 78: Percentage Current Smokers by Percent of Federal Poverty Level



Indicator Definition: Current cigarette smokers were respondents who reported smoking ≥ 100 cigarettes during their lifetime, and at the time of the interview, reported smoking every day or some days.



15.9% or 304,400 Chicago adults

reported ever trying an e-cigarette

TOBACCO USE

EVER TRIED E-CIGARETTES

- In Chicago, 15.9% of respondents reported that they had ever tried an e-cigarette.
- The prevalence of ever having tried an e-cigarette was significantly higher in younger age categories (**Chart 79**) and among males (**Chart 80**).
- There was no difference in ever having tried an e-cigarette by race-ethnicity (**Chart 81**) or poverty level (**Chart 82**).

Chart 79: Percentage Ever Tried an E-Cigarette by Age Category

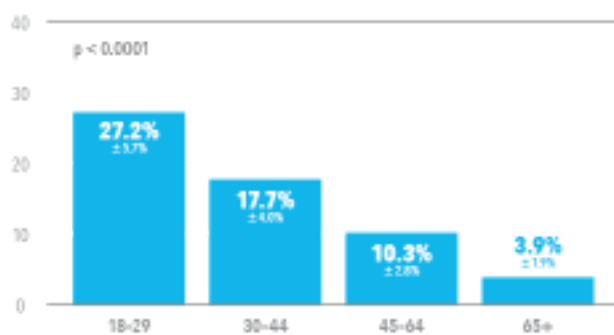


Chart 80: Percentage Ever Tried an E-Cigarette by Gender

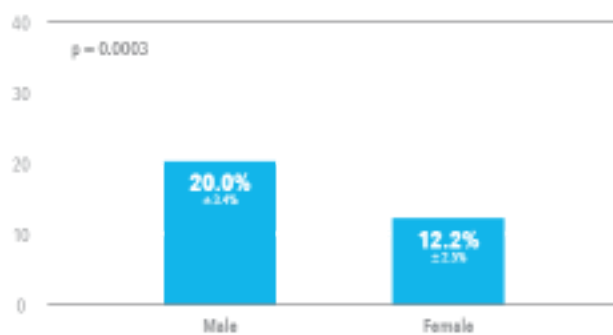


Chart 81: Percentage Ever Tried an E-Cigarette by Race-Ethnicity

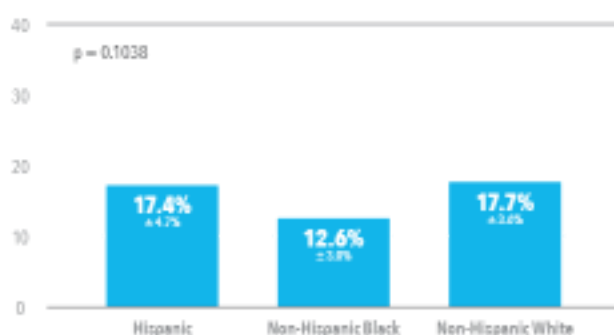
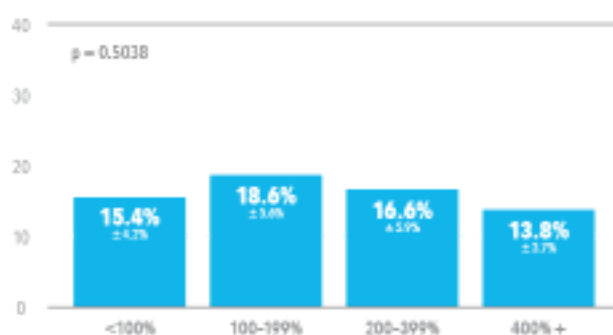


Chart 82: Percentage Ever Tried an E-Cigarette by Percent of Federal Poverty Line



Indicator Definition: Those who answered yes to "E-cigarettes are electronic devices that deliver nicotine in a vapor, but contain no tobacco. They include e-sticks, vaporizers, and vape pens. Some of these devices may actually look like a cigarette. Have you ever tried an e-cigarette?"

3.9% or 75,500 Chicago adults

reported using an e-cigarette in the past 30 days



TOBACCO USE

CURRENT E-CIGARETTE USE

- Overall, 3.9% of Chicago adults reported current e-cigarette use, defined as using an e-cigarette in the past 30 days.
- Current e-cigarette was significantly higher in younger age categories (**Chart 83**) and among men (**Chart 84**).
- There was no difference in current e-cigarette use by race-ethnicity (**Chart 85**) or poverty level (**Chart 86**).

Chart 83: Percentage Current E-Cigarette Use by Age Category

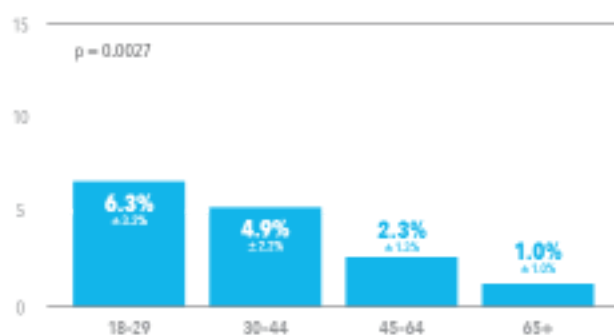


Chart 84: Percentage Current E-Cigarette Use by Gender

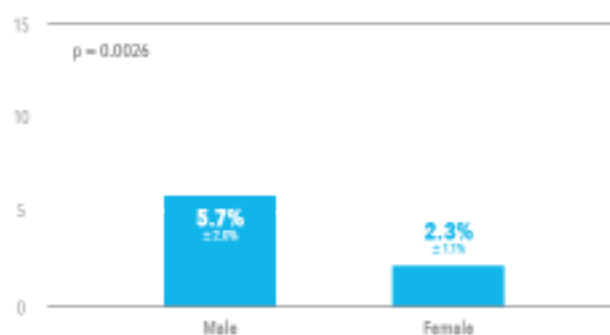


Chart 85: Percentage Current E-Cigarette Use by Race-Ethnicity

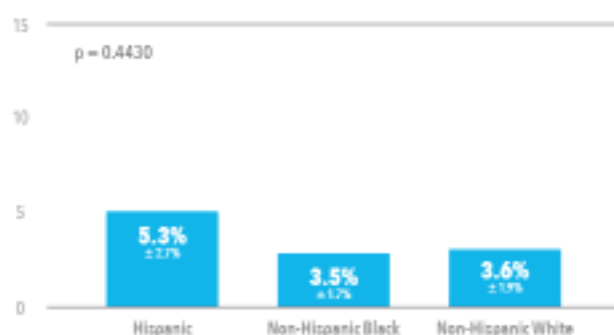
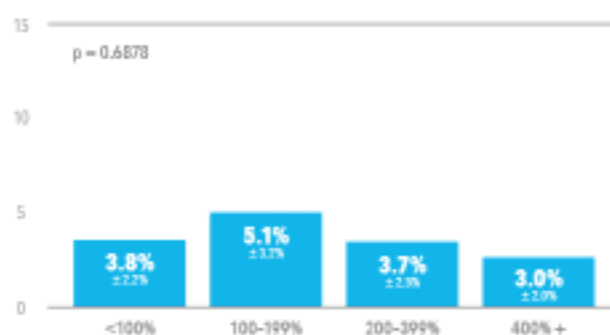


Chart 86: Percentage Current E-Cigarette Use by Percent of Federal Poverty Line



Indicator Definition: Current e-cigarette users were those who responded that they had ever tried an e-cigarette, and reported that they used an e-cigarette in the past 30 days.



2014 Healthy Chicago Survey

CHRONIC DISEASE



CHRONIC DISEASE

Chronic diseases and conditions, (e.g. heart disease, stroke, cancer, diabetes and obesity), represent the leading causes of death and disability in the United States (1, 2). Healthy People 2020 has a strong focus on prevention and management of chronic conditions and the risk factors associated with them. Most chronic conditions can be prevented or adequately managed through access to health services, lifestyle change, and health promoting policies, systems and environmental changes.

High blood pressure, high cholesterol and obesity are known risk factors for more severe chronic conditions such as heart disease, stroke and diabetes. In Chicago, 26.8% of adults have been told they have high blood pressure, 28.5% have high cholesterol and 28.8% are obese. Chicago's rates are similar to national rates of high blood pressure (29.0%) and obesity (35.3%), but the rate of high cholesterol is twice what is observed nationally (12.9%) (3).

In Chicago, there are significant racial-ethnic differences in rates of high blood pressure and obesity. High blood pressure is twice as common among

non-Hispanic blacks compared to Hispanics and non-Hispanic whites. Obesity rates are highest among non-Hispanic blacks and Hispanics, both significantly higher than non-Hispanic whites. Disparities are also observed in the rates of downstream conditions. In Chicago, non-Hispanic blacks and Hispanics are 1.5-2 times more likely to have diabetes as non-Hispanic whites.

Racial-ethnic differences are also seen in asthma rates. While overall, 9.1% of adults currently have asthma in Chicago, a rate that is similar to the national rate (8.0%), this ranges from 7.6% among non-Hispanic whites to 13.0% among non-Hispanic blacks. Racial-ethnic disparities in asthma rates have consistently been observed nationally, with non-Hispanic blacks and Puerto Rican Hispanics at greater risk (4,5). Evidence suggests that these disparities may be influenced by a combination of socioeconomic, unequal access to health services and differences in exposure to environmental determinants (e.g. housing, pollutants or other within-household factors) (5).

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2. Hootman JM, Brauhl MW, Helmick CG, Theis KA, Armour BS. Prevalence and most common causes of disability among adults—United States, 2005. *MMWR*. 2009;58(16):421-6.
3. Centers for Disease Control and Prevention (CDC). National Center for Health Statistics (NCHS). National Health and Nutrition Examination Survey Data. Hyattsville, MD: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2009-2012
4. Blodwell DL, Lucas JW, Clarke TC. Summary health statistics for U.S. adults: National Health Interview Survey, 2012. *National Center for Health Statistics. Vital Health Stat 10(260)*. 2014.
5. Bhan N et al. Time trends in racial and ethnic disparities in asthma prevalence in the United States from the Behavioral Risk Factor Surveillance System (BRFSS) study (1999-2011). *Am J Pub Health*. 2015; 105(8): 1269-1275



26.8% or 509,500 Chicago adults reported having ever been told by a doctor that they have high blood pressure

CHRONIC DISEASE

HIGH BLOOD PRESSURE

- High blood pressure, or hypertension is a known risk factor for coronary heart disease, heart failure, stroke, kidney failure and other health issues (1).
- While 26.8% of adults in Chicago had ever been told by a doctor that they have high blood pressure, this ranged significantly by age (**Chart 87**).
- There was no difference in prevalence of high blood pressure between men and women (**Chart 88**).
- High blood pressure was more prevalent among non-Hispanic blacks (**Chart 89**) and those living in more poverty (**Chart 90**).
- Of those with high blood pressure, 73.7% were treating it with medication. Women treated their high blood pressure with medicine more than men (79.2% vs 67.8%). There was no difference in high blood pressure medication use between racial-ethnic groups. Medication use for high blood pressure ranged from 62.7% for those living below the federal poverty line to 83.9% for those in the highest income category.

Chart 87: Percentage Ever Told Have High Blood Pressure by Age Category

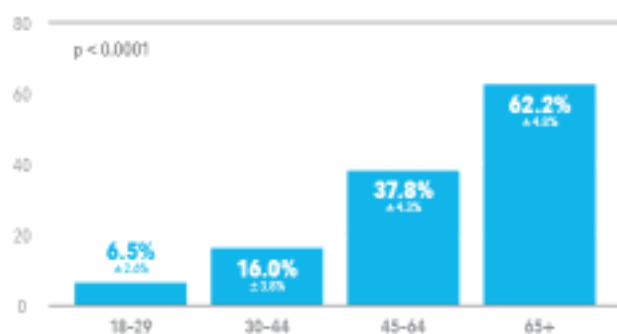


Chart 88: Percentage Ever Told Have High Blood Pressure by Gender

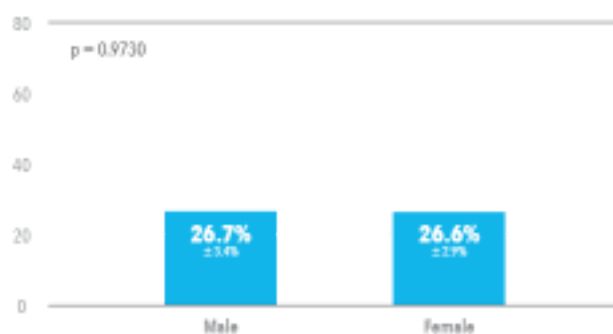


Chart 89: Percentage Ever Told Have High Blood Pressure by Race-Ethnicity

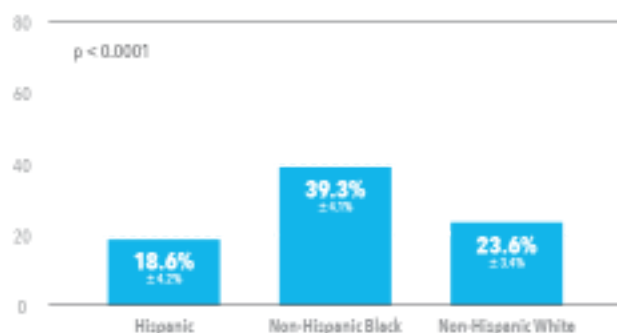
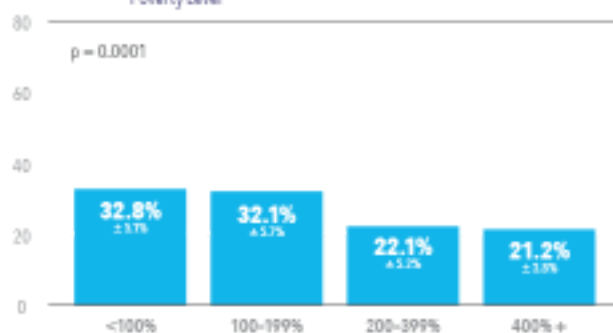


Chart 90: Percentage Ever Told Have High Blood Pressure by Percent of Federal Poverty Level



Indicator Definition: Respondents who have ever been told by a doctor, nurse or other health professional that they have high blood pressure. Excludes women who were told they had high blood pressure only during pregnancy, and those with borderline high blood pressure or pre-hypertension.

1. Farley TA, Dalal MA, Mostafaei F, Frieden TR. Deaths preventable in the US by improvements in the use of clinical preventive services. *Am J Prev Med.* 2010;38:600-9.

28.5% or 424,000 Chicago adults

reported having ever been told by a doctor that they have high cholesterol



CHRONIC DISEASE

HIGH CHOLESTEROL

- Evidence indicates that high cholesterol can increase the risk of atherosclerosis (hardening of the arteries), heart attack and stroke.
- Among adults who have had their cholesterol tested, 28.5% were told that they have high blood cholesterol, ranging from 11.9% of those aged 18-29 years to 45.8% of those aged 65 and older (**Chart 91**).
- High cholesterol was more prevalent among men than women (**Chart 92**).
- There were no differences between racial-ethnic groups (**Chart 93**) or poverty levels (**Chart 94**).

Chart 91: Percentage Ever Told Have High Blood Cholesterol by Age Category

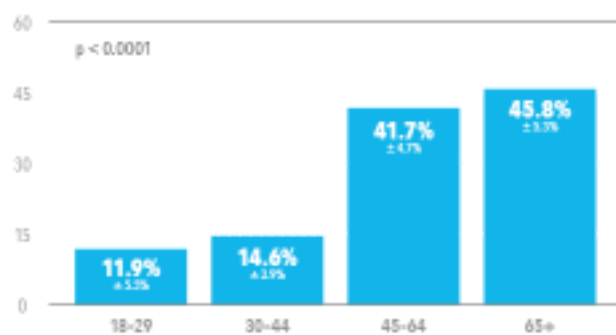


Chart 92: Percentage Ever Told Have High Blood Cholesterol by Gender

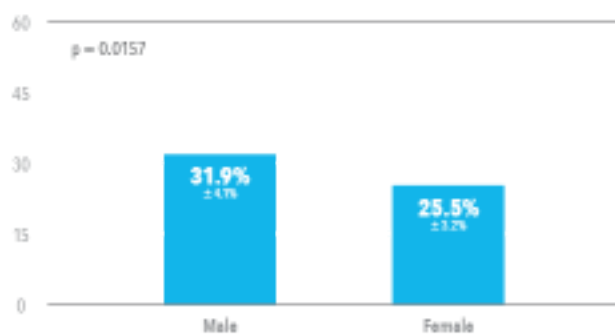


Chart 93: Percentage Ever Told Have High Blood Cholesterol by Race-Ethnicity

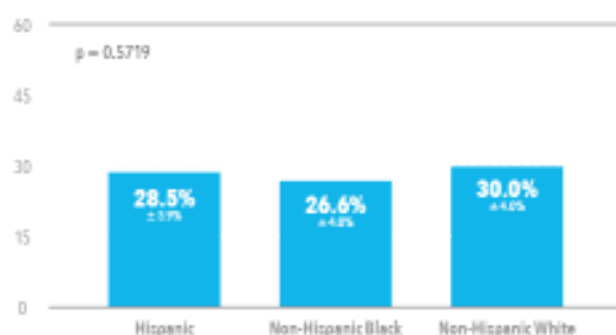
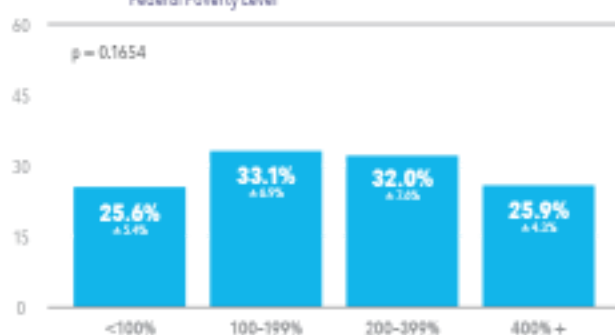


Chart 94: Percentage Ever Told Have High Blood Cholesterol by Percent of Federal Poverty Level



Indicator Definition: Respondents who have had their blood cholesterol tested and have ever been told by a doctor, nurse or other health professional that they have high blood cholesterol.



28.8% or 552,000 Chicago adults

reported being obese

CHRONIC DISEASE

OBESITY

- Obesity, defined as having a body mass index (BMI) of 30.0 or higher, is associated with increased risk for hypertension, cardiovascular diseases, type 2 diabetes, cancer and asthma (1-3).
- In Chicago, 28.8% of adults were classified as obese, 31.7% classified as overweight (BMI between 25.0 and 30.0) and 39.5% classified as normal or underweight (BMI < 25.0).
- The highest prevalence of obesity was among those aged 45-64 years (**Chart 95**). High prevalence of obesity was also seen among women (**Chart 96**) and non-Hispanic blacks and Hispanics (**Chart 97**).
- A strong relationship was observed between poverty level and obesity, as the obesity rate among those living below the federal poverty line was almost twice that of those with the highest incomes (**Chart 98**).

Chart 95: Percentage Obese by Age Category

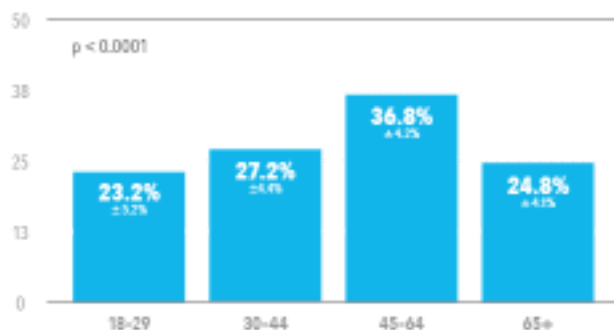


Chart 96: Percentage Obese by Gender

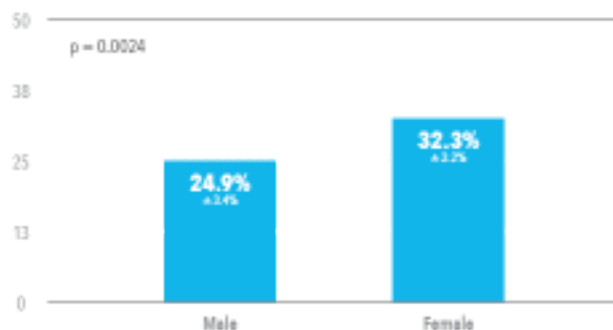


Chart 97: Percentage Obese by Race-Ethnicity

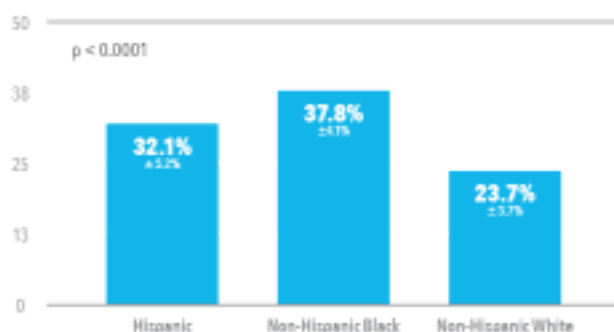
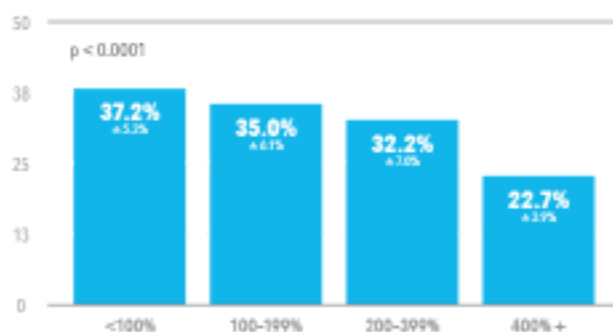


Chart 98: Percentage Obese by Percent of Federal Poverty Level



Indicator Definition: Respondents reported their height and weight without shoes in either metric or English units. For respondents responding in metric, BMI was calculated as: weight (kg) / [height (m)]². For respondents responding in English measurements (pounds and inches), BMI was calculated as: weight (lb) / [height (in)]² x 703. Obese was classified as BMI ≥ 30.0, overweight was classified as BMI ≥ 25.0 and BMI < 30.0, and normal weight or underweight was classified as BMI < 25.0.

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2. James WPT, Jaddou-Leach R, Ni Mhurda C, et al. Overweight and obesity (high body mass index). In: Ezzati M, Lopez AD, Rodgers A, Murray CJL, eds. *Comparative quantification of health risks: global and regional burden of disease attributable to selected major risk factors*, vol 1. Geneva: WHO, 2004: 497-596.
3. De Pergola G, Silvestro F. Obesity as a Major Risk Factor for Cancer. *J Obesity*. 2013; 2013: Article ID 201546

9.0% or 172,600 Chicago adults

reported having ever been told they have diabetes



CHRONIC DISEASE

DIABETES

- Diabetes prevalence in Chicago was 9.0% among adults.
- This rate ranged from 1.0% among those aged 18-29 years to 22.2% among those aged 65 years or older (**Chart 99**).
- There was no difference in rates of diabetes between men and women. (**Chart 100**)
- Non-Hispanic blacks had significantly higher rates of diabetes compared to non-Hispanic whites (**Chart 101**).
- Poverty level was significantly associated with diabetes prevalence (**Chart 102**).

Chart 99: Percentage Ever Having Diabetes by Age Category

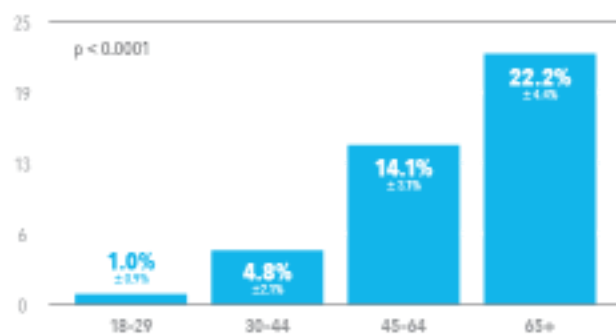


Chart 100: Percentage Ever Having Diabetes by Gender

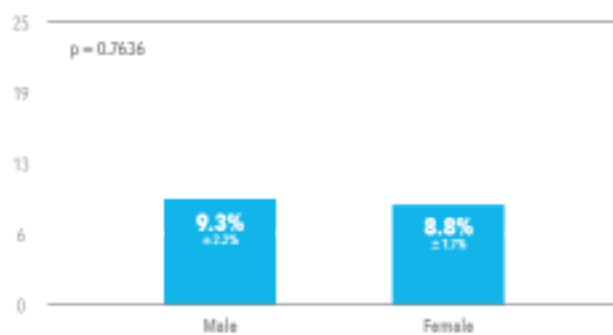


Chart 101: Percentage Ever Having Diabetes by Race-Ethnicity

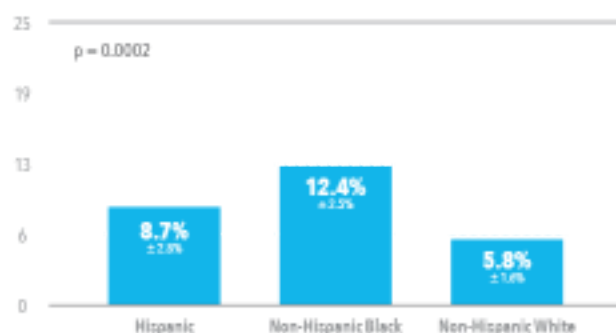
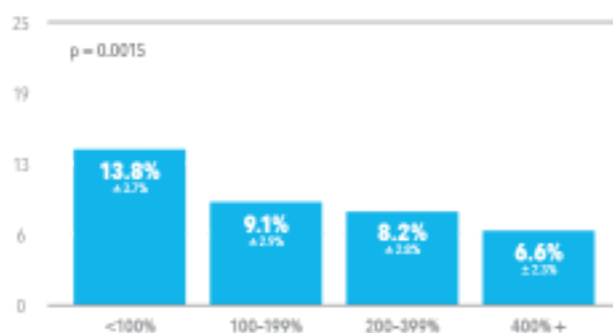


Chart 102: Percentage Ever Having Diabetes by Percent of Federal Poverty Level



Indicator Definition: Respondents who have ever been told by a doctor, nurse or other health professional that they have diabetes.



2.3% or 43,650 Chicago adults

reported having angina or coronary heart disease

CHRONIC DISEASE

ANGINA/CORONARY HEART DISEASE

- Coronary heart disease (CHD) is a disease where plaque builds up inside the coronary arteries. Angina is a term for chest pain caused by reduced blood flow to the heart that can be caused by coronary heart disease.
- The prevalence of angina or CHD among the adult population of Chicago was 2.3%. Angina or CHD was more common among older adults (**Chart 103**) and those with lower incomes (**Chart 106**).
- Rates of angina or CHD were similar between men and women (**Chart 104**), and between racial-ethnic groups (**Chart 105**).

Chart 103: Percentage Ever Having Angina or CHD by Age Category

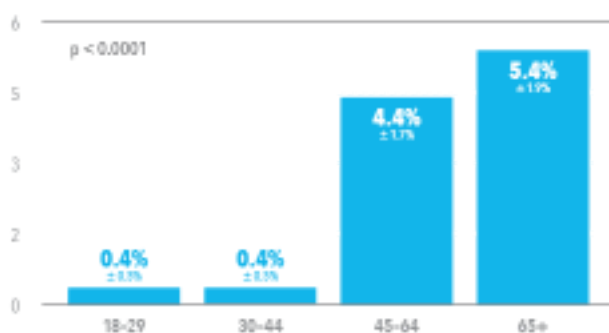


Chart 104: Percentage Ever Having Angina or CHD by Gender

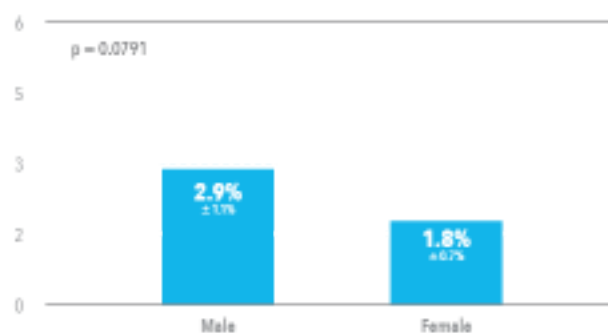


Chart 105: Percentage Ever Having Angina or CHD by Race-Ethnicity

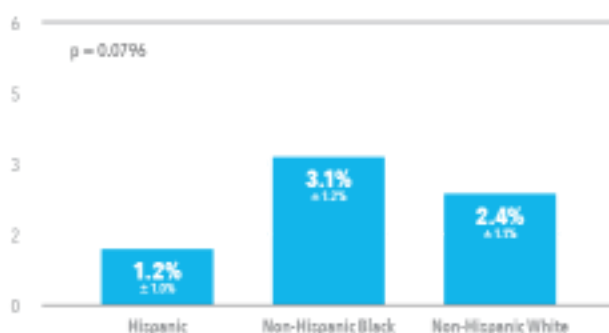
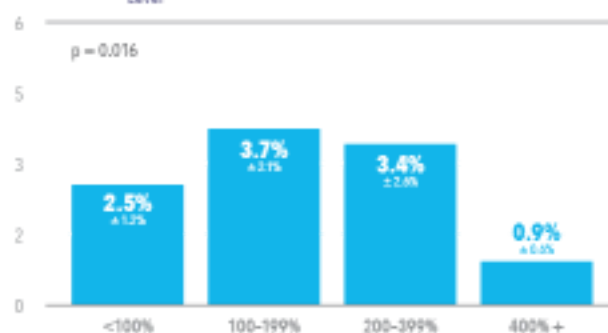


Chart 106: Percentage Ever Having Angina or CHD by Percent of Federal Poverty Level



Indicator Definition: Respondents who have ever been told by a doctor, nurse or other health professional that they have angina or coronary heart disease.

9.1% or 174,000 Chicago adults

reported having asthma



CHRONIC DISEASE

ASTHMA

- Overall, 9.1% of adults in Chicago reported currently having asthma.
- Asthma rates did not differ by age or poverty level among adults (**Charts 107, 110**).
- The rate of asthma among women was more than twice the rate among men (**Chart 108**).
- Asthma rates were significantly higher among non-Hispanic blacks (**Chart 109**).

Chart 107: Percentage With Current Asthma by Age Category

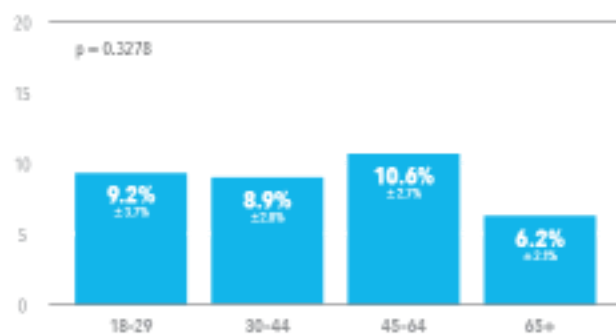


Chart 108: Percentage With Current Asthma by Gender

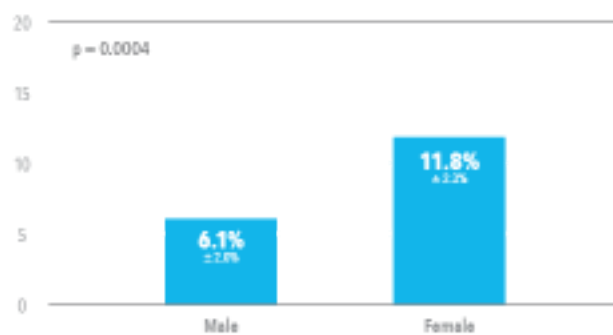


Chart 109: Percentage With Current Asthma by Race Ethnicity

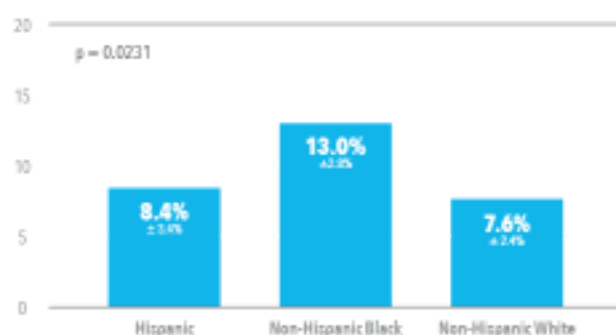
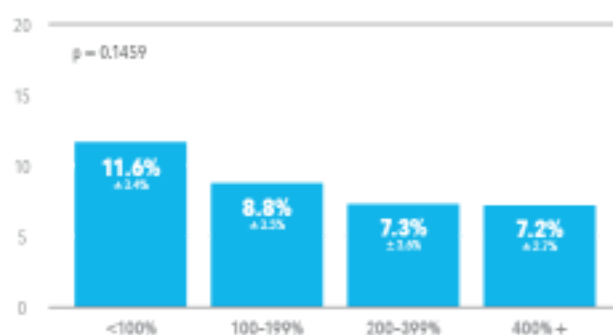


Chart 110: Percentage With Current Asthma by Percent of Federal Poverty Level



Indicator Definition: Respondents who have ever been told by a doctor, nurse or other health professional that they have asthma, and they still have asthma.



2014 Healthy Chicago Survey

MENTAL HEALTH



MENTAL HEALTH

Mental health is a fundamental part of overall health. Mental illness, i.e. any health condition that affects thinking, mood or behavior, is the leading cause of disability in the United States (1). Healthy People 2020 aims to improve mental health through objectives that focus on prevention, diagnosis and treatment of mental disorders (1).

In the past month, approximately 15% of all Chicago adults experienced some level of “psychological distress,” a non-specific measure associated with depression and anxiety (2). Overall, 1 in 20 adults experienced serious psychological distress (SPD), indicating psychological distress severe enough to impair functioning at school, work or in social settings (2,3). In Chicago, a strong linear relationship exists between poverty and serious psychological distress. Those living below the federal poverty level are more than ten times as likely to report SPD as those in the highest income level. This trend is also observed nationally. Research suggests that the relationship is bidirectional, that poverty may contribute to increased psychological distress and psychological distress may contribute to lower earning potential (3,4).

If not effectively diagnosed and treated, SPD may become persistent or increasingly severe and can contribute to a higher risk of morbidity and mortality (5,6). Only half of those with SPD in Chicago reported that they are currently taking medicine or receiving treatment for a mental health condition. One third of those with SPD reported that there was a time in the past year where they needed treatment but couldn’t get it.

Current evidence indicates that psychological distress and other psychological factors, along with genetic, biological, environmental factors play an important role in the onset of depression. Overall, nearly 1 in 5 adults in Chicago have been diagnosed with depression or a depressive disorder in their lifetime. This rate was significantly higher among women, a trend that has also been observed nationally (7). A strong relationship was also observed between depression and poverty, similar to what was observed between SPD and poverty.

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3. Pratt LA et al. Characteristics of adults with serious psychological distress as measured by the K6 scale: United States, 2001-04. *Advance data from vital and health statistics*; no 382. Hyattsville, MD: National Center for Health Statistics. 2007.
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6. Pratt LA et al. Serious Psychological Distress, as measured by the K6, and Mortality. *Annals of Epidemiology*. 2009; 19(3): 202-209
7. Pratt LA, Brody DJ. Depression in the United States Household Population, 2005-2006. *NCHS Data Brief* 2008; 7



16.7% or 319,000 Chicago adults

reported having ever been told they have depression

MENTAL HEALTH

DEPRESSION

- Among adults, 16.7% had ever been told by a health professional that they had a depressive disorder—including depression, major depression, dysthymia or minor depression.
- This rate was significantly higher for women compared to men (**Chart 112**) and for those below the federal poverty level compared to those with the highest level of household income (**Chart 114**).
- No significant differences were seen between age categories (**Chart 111**) or racial-ethnic groups (**Chart 113**).

Chart 111: Percentage Ever Diagnosed with Depression by Age Category

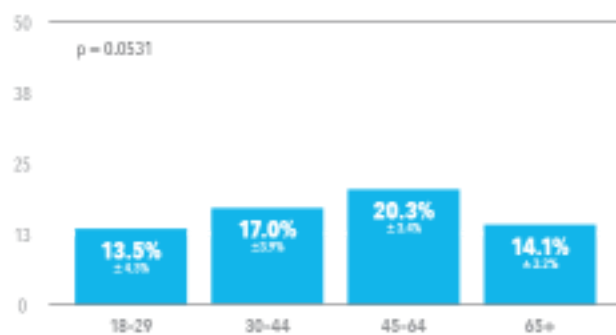


Chart 112: Percentage Ever Diagnosed with Depression by Gender

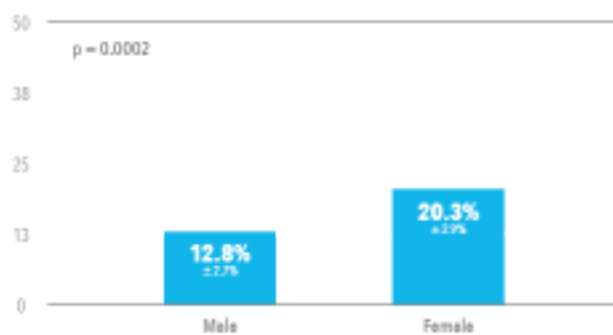


Chart 113: Percentage Ever Diagnosed with Depression by Race-Ethnicity

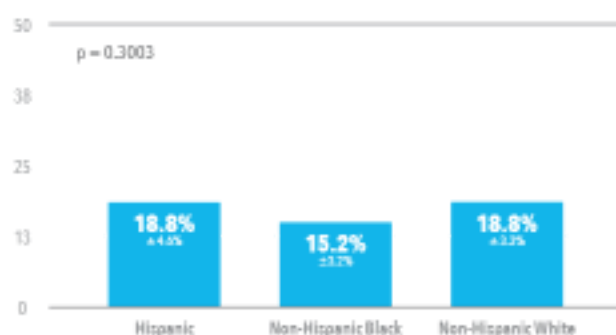


Chart 114: Percentage Ever Diagnosed with Depression by Percent of Federal Poverty Level



Indicator Definition: Respondents who reported that a doctor, nurse or other health professional had ever told them they had a depressive disorder, including depression, major depression, dysthymia or minor depression.

5.2% or 99,000 Chicago adults

reported serious psychological distress



MENTAL HEALTH

SERIOUS PSYCHOLOGICAL DISTRESS

- The Kessler 6 (K6) is a standard measure of psychological distress, based on how often someone feels nervous, hopeless, restless or fidgety, depressed, worthless or that everything is an effort. A score of 13 or greater indicates serious psychological distress (SPD) (1).
- Overall, 5.2% of adults reported SPD in the past 30 days.
- There was no significant difference in SPDs among age categories (**Chart 115**), by gender (**Chart 116**) or by race-ethnicity (**Chart 117**).
- There was a very strong relationship between SPD and percent of federal poverty level (**Chart 118**).
- Overall, 50.3% of those with SPD reported that they are currently taking medicine or receiving treatment for a mental health problem.
- Among those with SPD, 34.2% reported that there was a time in the past 12 months where they needed mental health treatment but didn't get it.

Chart 115: Percentage with Serious Psychological Distress by Age Category

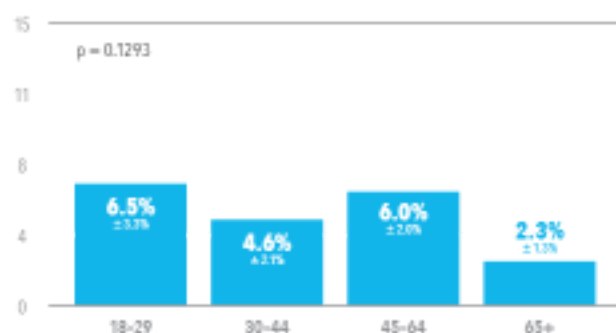


Chart 116: Percentage with Serious Psychological Distress by Gender

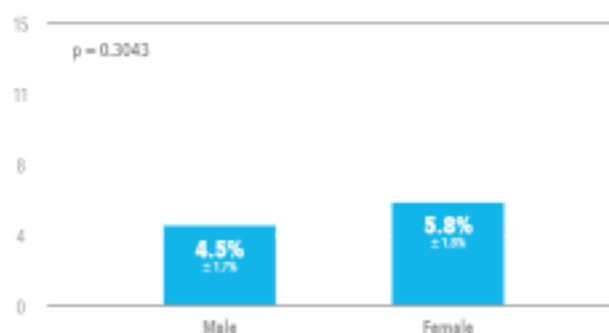


Chart 117: Percentage with Serious Psychological Distress by Race-Ethnicity

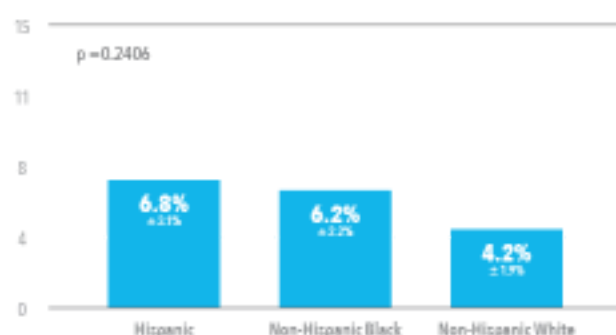
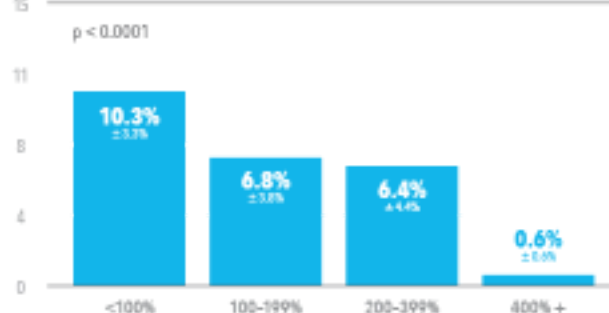


Chart 118: Percentage with Serious Psychological Distress by Percent of Federal Poverty Level



Indicator Definition: Calculated variable based on how often in the past 30 days the respondent felt nervous, hopeless, restless or fidgety, so depressed that nothing could cheer them up, worthless or that everything was an effort. A response of "all of the time" was assigned a score of 4, "most of the time" was assigned a score of 3, "some of the time" was assigned a score of 2, "a little of the time" was assigned a score of 1 and "none of the time" was assigned a score of 0. These scores were summed to give an overall score between 0 and 24. Serious psychological distress is defined as a K6 score of 13 or greater.

1. Kessler, R.C., et al. Screening for serious mental illness in the general population with the K6 screening scale: results from the WHO World Mental Health (WMH) survey initiative. *International Journal of Methods in Psychiatric Research* 2010; 19(5): 4-22.

2014 Healthy Chicago Survey

EMERGENCY PREPAREDNESS



EMERGENCY PREPAREDNESS

The Chicago region has experienced flooding, severe temperatures, disease outbreaks and high profile special events in the last several years. Often these events resulted in persons having to evacuate their damaged homes, shelter in place or seek additional resources from the public health or health care system. In 2013, there were 39 fatalities and over \$1.5 billion in property damage in Illinois related to hazardous weather (1).

Emergencies such as blizzards, severe cold, pandemic influenza or chemical releases may cause people to have to remain in their home and be self-sufficient

for at least three days. Other emergencies, such as flooding or extreme heat may cause people to be displaced from their homes and evacuated to shelters or cooling centers. It is recommended that individuals and households have both an emergency plan to meet or call family members and a disaster supply kit that includes a 3-day supply of water, non-perishable food and medications in order to be prepared for such an incident. In Chicago, 17.0% of residents reported having both an emergency plan and a disaster supply kit; 55.6% reported having neither.

References:

1. National Oceanic and Atmospheric Administration. National Weather Service. 2013 Summary of Hazardous Weather Fatalities, Injuries, and Damage Costs by State. Available at: <http://www.msc.noaa.gov/os/hazstats/state13.pdf>. Accessed: 07 May 2015.



17.0% or 316,600 Chicago adults

reported having an emergency plan to meet or call family members after a disaster and a disaster supply kit

EMERGENCY PREPAREDNESS

EMERGENCY PREPAREDNESS

- Overall, 17.0% of adults reported having an emergency plan to meet or call family members and a disaster supply kit. 13.2% of adults reported having an emergency plan, but no disaster kit. 14.2% of adults reported having a disaster supply kit, but no emergency plan.
- There were no differences between age categories (**Chart 119**), gender (**Chart 120**) or poverty levels (**Chart 122**).
- Non-Hispanic blacks were significantly more likely than non-Hispanic whites to have both an emergency plan and a disaster supply kit (**Chart 121**). There was no difference between Hispanics and either other race-ethnicity group.
- More than half of respondents (55.6%) reported having no emergency plan and no disaster kit. It was more common for those aged 18-29 (60.2%) and aged 30-44 (58.3%) to not have either an emergency plan or disaster kit, compared to other age groups. There were no significant differences between gender or poverty levels.

Chart 119: Percentage with an Emergency Plan and a Disaster Supply Kit by Age Category

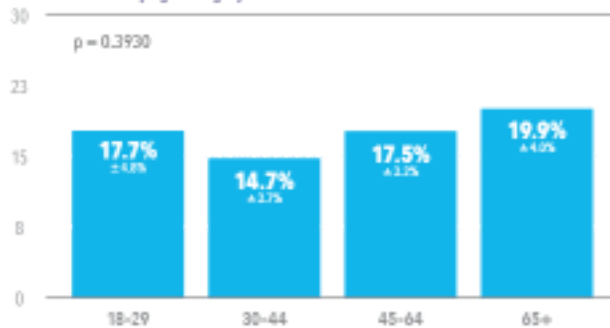


Chart 120: Percentage with Emergency Plan and Disaster Supply Kit by Gender

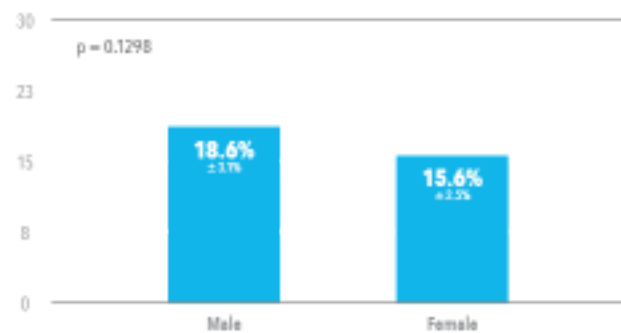


Chart 121: Percentage with Emergency Plan and Disaster Supply Kit by Race-Ethnicity

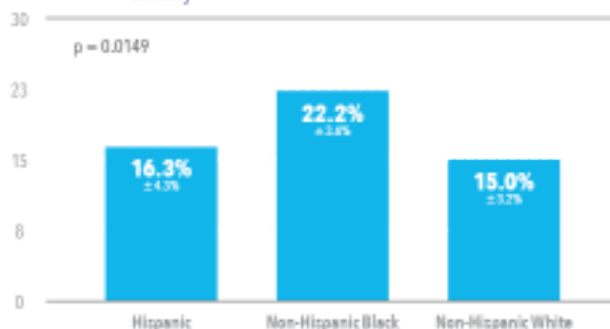
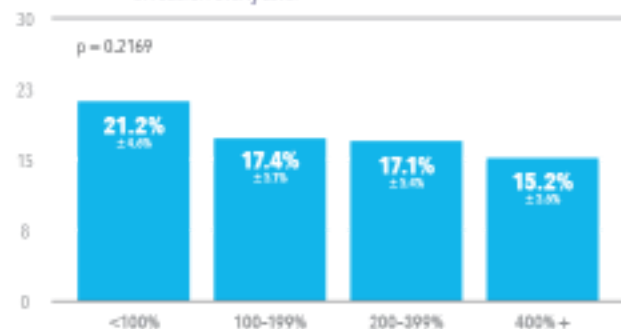


Chart 122: Percentage with Emergency Plan and Disaster Supply Kit by Percent of Federal Poverty Level



Indicator Definition: Respondents who report that they or their household has an emergency plan to meet or call family members in the case of a large-scale disaster or emergency. Respondents who report that they or their household has a disaster supply kit for use in the case of a large-scale disaster or emergency.

2014 Healthy Chicago Survey

METHODOLOGY

SURVEY POPULATION

The HCS target population included the household population of non-institutionalized adults 18 years of age and older residing in the City of Chicago. Landline and cellular telephone samples for the study were provided by Survey Sampling, Inc. (using an overlapping dual frame design), with the coverage area defined by exchanges assigned to census tracts that fall within the city limits of Chicago. The cellular frame included telephone numbers based on the original point of purchase of the cell phone (rate centers) which is the only geographic information available. All rate centers in Cook County were sampled for HCS but the samples were selected at different rates based on the predicted geographic eligibility rate of that rate center. A total of 45.5% of completed interviews were conducted from the cell phone sample frame (n=1,145) and 54.5% of completed interviews were conducted from the landline frame (n=1,372).

Potential respondents were screened for eligibility criteria: age 18 years or older, residency in Chicago and living in a private residence. Residency in Chicago

was determined by the respondent's self-reported ZIP code. For respondents who preferred not to provide their ZIP code or for respondents whose ZIP code extended beyond Chicago, interviewers asked in what city or town they lived. Interviews were administered in English or Spanish and only respondents who were able to answer the survey in one of these languages were able to continue. Landline telephone numbers were considered household devices and one household member was randomly selected from each eligible landline household. Cell phones were considered personal accessories, so no household selection process was used for the cell phone sample. After an eligible respondent was selected, they were read the informed consent statement. Participants provided verbal consent before proceeding.

The survey protocol was approved by the Chicago Department of Public Health Institutional Review Board (Protocol #13-06, Approved: 12/03/2013, 07/28/2014) and the Abt SRBI Institutional Review Board (Protocol #5951, Approved: 01/09/2014).

QUESTIONNAIRE

The questionnaire was developed by the Chicago Department of Public Health (CDPH) in consultation with Abt SRBI. Most questions were taken from other well-established and recognized public health surveys, including the Behavioral Risk Factor Surveillance System (BRFSS) (1), the Los Angeles County Health Survey (LACHS) (2) and the New York City Community Health Survey (NYC CHS) (3). CDPH compiled an initial draft of the questionnaire, and Abt SRBI reviewed the instruments and provided feedback on question wording, question sequencing, proper skip patterns, and interview duration. The main section of the

survey, excluding screening questions, included 106 questions (although not every question was applicable to or asked of every respondent). The topic areas that made up the core of the main section were: health status, health care access, oral health, hypertension awareness, cholesterol awareness, chronic health conditions, pre-diabetes, diabetes, tobacco use, demographics, fruits and vegetables, exercise (physical activity), breast/cervical cancer screening, colorectal screening, HIV/AIDS, disability, mental health and emergency preparedness.

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SURVEY ADMINISTRATION

After the English questionnaire was developed, Abt SRBI conducted a pretest with 30 respondents using the landline sample. The pretest was conducted March 11-13, 2014. Pretest interviews were conducted in English only using trained interviewers who could provide feedback on administration issues, the degree to which respondents understood the questions and the length of time it took to complete. Additional changes were made to the questionnaire based on the monitored pretest interviews.

After revisions were made to the survey instrument following the pretest, Abt SRBI project staff compiled Spanish language versions of the items that were included from other surveys that had already been translated (e.g. BRFSS, NYC CHS, LACHS). For the remaining items for which there were no existing translations, a bilingual staff person from one of Abt SRBI's data collection subcontractors, CR Market Surveys, translated the item. As a quality check, two Abt SRBI bilingual staff persons checked the entire survey instrument to be sure all items had been translated correctly. After revisions to the questionnaire were finalized, a pilot test was conducted May 6-9, 2014. A total of 30 interviews were completed as part of

the pilot test. Since no changes were made to the instrument as a result of the pilot test, these interviews were included in the final study sample.

Interviews were conducted in both English and Spanish as appropriate, from May 6 -September 23, 2014. A \$10 incentive check was offered to respondents who completed the interview by cell phone and were willing to provide a mailing address. Respondents were told about the \$10 incentive prior to the interview beginning. Participants who completed the interview by landline telephone were not offered an incentive.

During the interview, respondents were asked for their home address or cross-street information which was geocoded in real time to determine in which of Chicago's 77 community areas the respondent lived. If this process failed to produce a usable community area, the interviewer asked explicitly for the respondent's neighborhood and recorded it on a pre-coded list of neighborhoods that had been mapped to community areas.

The final survey sample size was 2,517. A total of 171 of the 2,517 completed interviews (6.8%) were conducted in Spanish.

DATA PROCESSING

Final analysis weights were calculated to adjust the collected data to represent the population from which the sample was drawn, the household population of adults 18 years of age and older who reside in the City of Chicago.

First, base weights were computed based on the inverse of the respondent's probability of being selected from the frame. Second, frame integrated weights were calculated to account for higher chances of selection for respondents who have both landline phones and personal or shared cell phones. Finally, weights were calibrated so that the weighted sample estimates of the totals/proportions of the calibration variables agreed with the known population figures. The variables used to calibrate the weights were gender, age, race/ethnicity, education, housing tenure, marital status, presence of children in the household,

phone use and indicators of public use microdata area (PUMA). The weighting parameters came from the 2013 American Community Survey (ACS), except PUMAs which came from the 2007-2011 ACS file and telephone usage which were projected based on data from the National Health Interview Survey (4). A raking procedure was repeated until the weights stabilized. To correct for large weights and reduce variability, the 2nd and 98th percentile of the distribution of weights were then used as hard limits, and the raking procedure was repeated with trimming performed simultaneously with calibration (i.e. weights were trimmed to these hard levels, if necessary, within each cycle of raking).

Throughout the report, the number of Chicago adults corresponding to the overall percentage is calculated by summing the weights of those meeting the indicator definition.

SAMPLE DEMOGRAPHICS

		n (unweighted)	n (weighted)	% (weighted)
Total		2,517	1,917,195	100.0
Age				
	18-29	315	476,331	24.8
	30-44	551	593,515	31.0
	45-64	893	582,964	30.4
	65+	758	264,385	13.8
Gender				
	Male	1,041	906,349	47.3
	Female	1,471	1,009,016	52.7
Transgender				
	Male-to-Female	< 5	1458	0.1
	Female-to-Male	< 5	830	< 0.1
	Gender Non-Conforming	< 5	3642	0.2
Sexual Identity				
	Heterosexual or straight	2,224	1,661,099	93.4
	Homosexual, gay or lesbian, or bisexual	120	116,694	6.6
Race-Ethnicity				
	Hispanic	397	481,533	25.6
	Non-Hispanic Black	1,049	568,693	30.2
	Non-Hispanic White	936	694,730	36.9
	Non-Hispanic American Indian or Alaska Native	13	7,221	0.4
	Non-Hispanic Asian	55	123,420	6.4
	Non-Hispanic Pacific Islander	< 5	3,862	0.2
	Non Hispanic Other	9	5,212	0.3
Marital Status				
	Married	826	643,859	34.0
	Divorced	322	144,434	7.6

	n (unweighted)	n (weighted)	% (weighted)
Marital Status (cont)			
Widowed	321	102,028	5.4
Separated	118	69,507	3.7
Never married	794	832,747	44.0
A member of an unmarried couple	81	75,949	4.0
A member of a civil union	19	23,787	1.3
Education			
Never attended school or only attended kindergarten	9	7,133	0.4
Grades 1 through 8	94	79,448	4.2
Grades 9 through 11	209	183,397	9.6
High School graduation or GED	535	497,206	26.1
1 to 3 years of college	696	478,066	25.1
4 or more years of college	954	659,572	34.6
Employment Status			
Employed for wages or salary	1,169	1,098,999	57.8
Self-employed	99	81,665	4.3
Homemaker	112	96,916	5.1
Student	73	90,623	4.8
Retired	666	234,679	12.3
Unable to work	174	114,212	6.0
Unemployed for 1 year or more	116	96,704	5.1
Unemployed for less than 1 year	83	87,262	4.6
Percent of Federal Poverty Level			
< 100%	528	445,993	28.4
100-199%	425	321,155	20.4
200-399%	332	238,257	15.2
≥ 400%	740	566,197	36.0
Home Ownership			
Own	1,234	845,357	44.6
Rent	1,130	918,212	48.4
Other arrangement	115	133,473	7.0

MEASURING CHICAGO'S HEALTH: Findings from the 2014 Healthy Chicago Survey

Authors:

Emily Laflamme, MPH
Kirsti A. Bocskay, PhD, MPH, MPP
Margarita Reina, MPH
Janis Sayer, MSW
Kingsley N. Weaver, MPH
Nikhil Prachand, MPH

Office of Epidemiology & Public Health Informatics
Bureau of Strategy & Development
Chicago Department of Public Health

Suggested Citation:

Laflamme EM, Bocskay KA, Reina M, Sayer J, Weaver KN, Prachand NG. Measuring Chicago's Health: Findings from the 2014 Healthy Chicago Survey. City of Chicago, October 2015.

Acknowledgements:

For their contributions to the production of this report, we thank:

Juan Mejia, MD, James Anderson, MSW, Hollendoner, MSW, Brian Johnson, MD, MPH, Kristin Lee, PhD, Cristina Villareal, JD, Arden Frankson, MD, MS, Frank Cohen, MPH, Juan Pesó, MD, MPH, MCHES, Jaclyn Castellonet, MS, RD, LDN, Kate Scheffinger, MPH, Dana Harper, BS, Nhan Nguyen, MPH, Chicago Department of Public Health; Jen Brown, MPH, Alliance for Research in Chicagoland Communities (ARCC); Eric Hans, Active Transportation Alliance; Fernando De Maio, PhD, DePaul University; Jennifer Hebert-Beimer, PhD, Victoria Persky, MD, University of Illinois at Chicago; Wesley Eppin, MPH, Health & Medicine Policy Research Group

Design and layout by Jonathan Hart, jhartdesign.com

This report made possible by the generous support of the Otho S.A. Sprague Memorial Institute.