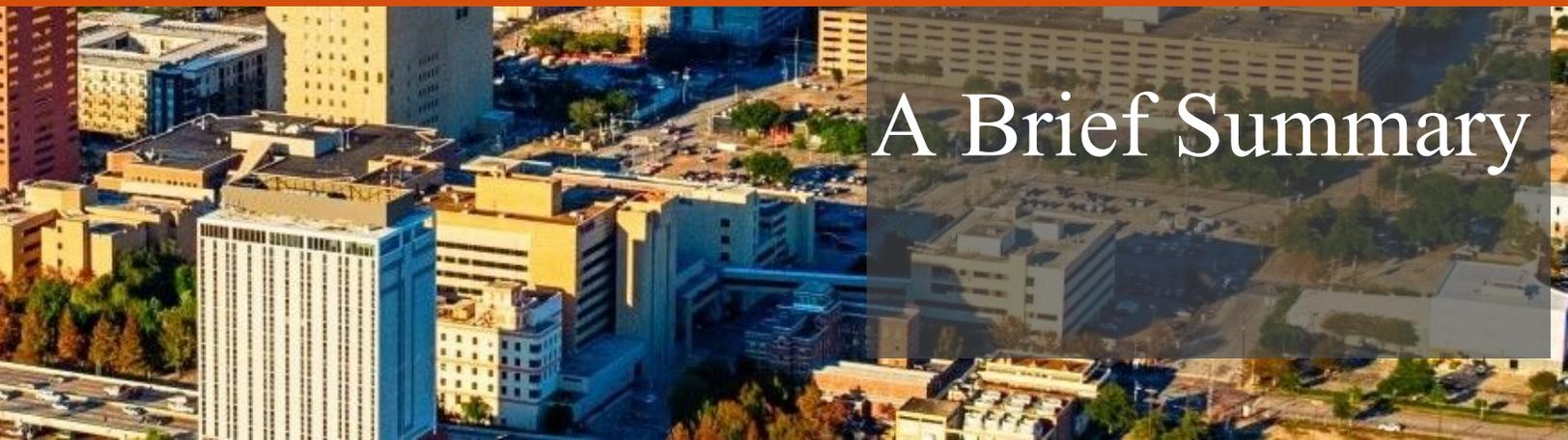




Health *of* Houston Survey 2017-18

UTHealth School of Public Health

Institute for Health Policy



A Brief Summary

HEALTH OF HOUSTON SURVEY 2017-18

Institute for Health Policy

School of Public Health

The University of Texas Health Science Center at Houston

A Brief Summary

Health *of* Houston Survey

Visit the Survey's website at: HealthofHouston.org

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Overview

The Institute for Health Policy at the UTHealth School of Public Health conducted the first Health of Houston Survey in 2010. At the time, it was the largest sample survey of its kind and provided extensive health data for 28 areas covering Harris County.

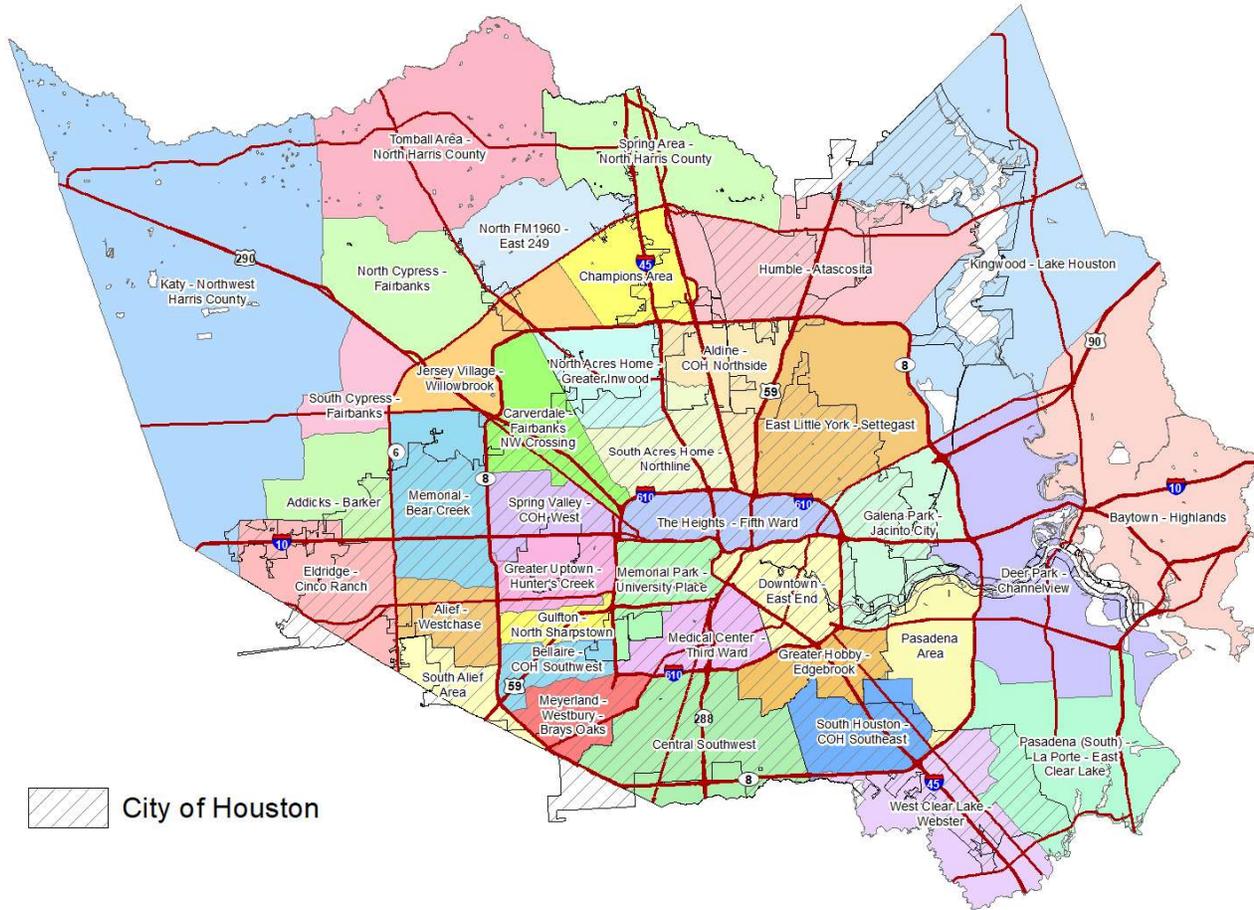
Our Survey for 2017-18 builds on the accomplishments of 2010 and continues its mission to provide accurate and timely information on the health status of the population. With a focus on 38 geographic areas making up the county, we are able to depict the general location of health disparities and unmet needs across the area with greater precision than in 2010. This vital information is intended to help public health professionals, leaders and policy makers, local government and non-governmental organizations to set evidence-based priorities, allocate resources more efficiently, and implement programs where the need is greatest.

Survey content, determined in 2010, through input from organizations within the Houston area (Health of Houston Survey, 2010), was updated with new themes and topics informed by new information needs and priorities, as well as events with an unusual impact on the health of population. Hurricane Harvey's devastating effects prompted us to halt the interviews temporarily, and at the same time underscored the need to evaluate its impact on people's health, needs and resiliency, which resulted in the addition of new Harvey-related questions to the survey.

Between June 2017 and May 2018, we carried out interviews via cellphone and landline phones, which were randomly selected in each subcounty geographical stratum. These strata followed the American Community Survey's Public Use Microdata Area (PUMA) boundaries, and divided Harris County into seven sampling areas (see our Survey Methodology at www.healthofhouston.org) (HHS, 2018). Close to 5,700 adult respondents, representing the entire adult population of Houston and Harris County and selected randomly at the household and within-household level, answered questions on health, health insurance and care access, mental health, prenatal care, diet and exercise and neighborhood conditions, among other issues. Respondents also provided details on the health and health care issues of a randomly-selected child in over 1500 households. The telephone interviews were conducted in both English and Spanish.

This sampling strategy enables us to create various geographical divisions within the county for public use. In InstantAtlas™ we have updated the maps of our principal health indicators for the 28 ZIP Code aggregations that we used in 2010, with a new geographic layer for 2018, consisting of 38 PUMAs (see the map with descriptive labels for each PUMA on the next page). Both 2010 and 2018 data will be available, free to the public, through Nesstar 4.0, which supports extensive variable browsing, data weighted tabulations, building graphs and charts, as well as downloading of the full, public use file, along with the corresponding metadata. Both InstantAtlas™ and Nesstar 4.0 can be accessed at www.healthofhouston.org. Note, the results in this summary are based on the HHS Public Use Data File as of May 15, 2019.

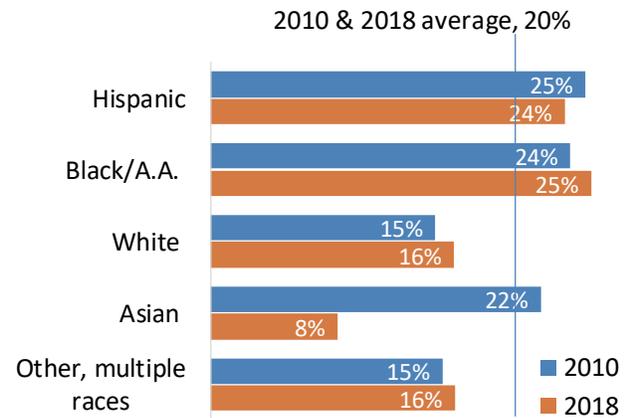
HARRIS COUNTY PUBLIC USE MICRODATA AREAS (38 AREAS)



Health Status and Chronic Conditions

Health remains a difficult concept to measure across neighborhoods. According to the World Health Organization’s definition, it is “a complete state of physical, mental and social well-being,” and achieving its highest attainable level is the right of every human being without distinction of race, religion, political belief, economic or social condition (WHO, 2014). The Health of Houston Survey (HHS) relies on a variety of survey metrics to gauge the many facets of health and includes relevant socioeconomic conditions, access to health services, and behaviors that have a documented effect on preserving and improving health. We measure the health of area residents through a self-assessment scale, ranging from poor to excellent, and a count of how many days of bad physical and mental health they experienced in the last month.

PERCENT OF ADULTS IN FAIR OR POOR HEALTH



Residents experienced on average 5 days of bad mental health, and 4 days of bad physical health in the past month.

The overall county average of people reporting fair or poor health was 20%¹, the same as in 2010. The rate of poor health among both Hispanic and African American respondents was four to five percentage points higher than the average². Although the Asian group seems to have experienced a large improvement in health status, this change might be due in part to the makeup of Asian sample in the 2010 survey, which favored the Vietnamese, who reported higher rates of poor health compared to other Asian groups.

Poor health is often linked to poverty, which adversely affects health by increasing everyday stress and the difficulties of meeting basic needs. Poverty, in many instances, requires trade-offs between adequate food and shelter, and access to needed medical treatment, prescription medicines or preventive care (RWJF, 2008).

In contrast to income level, economic hardship is sensitive to income instability, debt and other unforeseen economic challenges that can lead to poverty. Thirty-four percent of residents reported economic hardship at some point in the last year in 2018, compared to 48% in 2010. Economic hardship was defined as financial difficulties that prevented respondents from buying food or paying rent or mortgages during last year. One in 12 (8%) reported experiencing economic hardship often or always, although this ratio varied across economic levels. Among those with household income below the poverty level, 1 in 6 (17%) reported this type of frequent hardship compared to 1 in 100 (1%) among residents with income at 500% or greater of the federal poverty level (FPL).

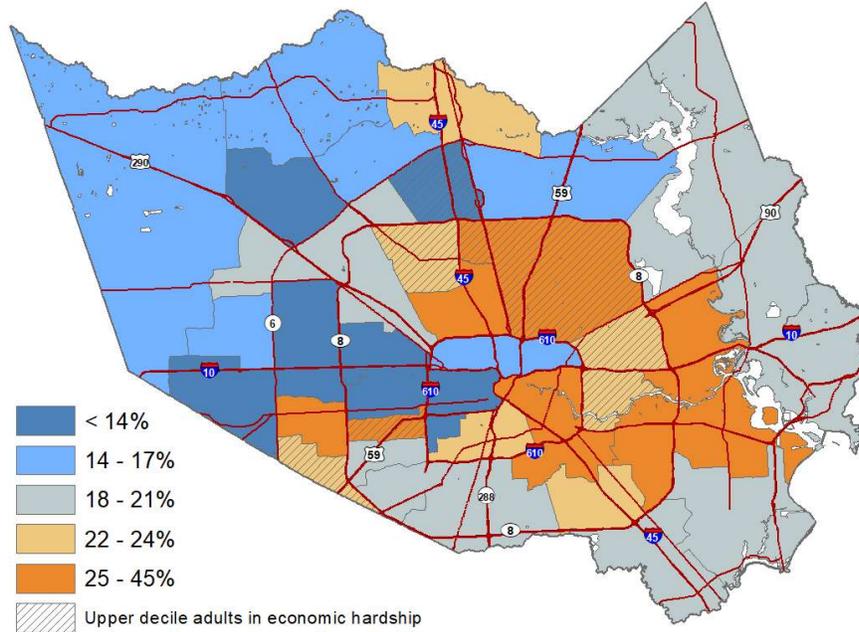
Among residents with income less than 300% FPL, almost half experienced economic hardship at some point last year.

¹ Percentages throughout the report might not add to 100% due to rounding.

² ‘Other, multiple races’ include Pacific Islander, American Indian, other races than the ones presented in the tables of the report and those of more than one race. All races presented in the report are non-Hispanic.

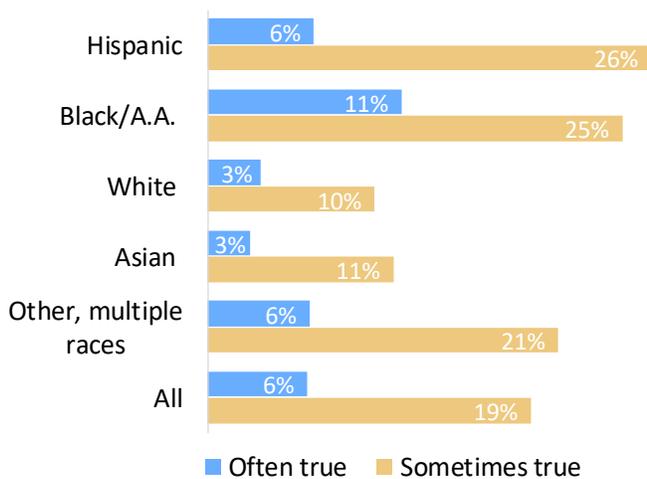
The highest percentage of people who reported fair or poor health resided in areas to the East of downtown, including central Northeast and Southeast areas of the county. These areas included Aldine and Settegast, followed by Edgebrook, Gulfton and South Acres Home.

PERCENT ADULTS IN FAIR OR POOR HEALTH AND PERCENT ADULTS IN ECONOMIC HARDSHIP



The highest rates of residents reporting fair and poor health, as well as experiencing economic hardship in the last year, were in Aldine, Settegast, and Gulfton areas. Areas with the highest percentage of adults facing economic hardship also included North Acres Home, Champions, Galena Park and South Alief.

PERCENT OF ADULTS WITH FOOD INSECURITY IN THE LAST YEAR



Food insecurity, defined by an inability to access adequate food, occurred “often” for 6% of our adult residents and “sometimes” for 19% of residents in the last 12 months. A quick look at food insecurity across racial/ethnic groups revealed that African American residents were more likely than any other group to face food insecurity regularly (11% versus 6%, the Houston area average).

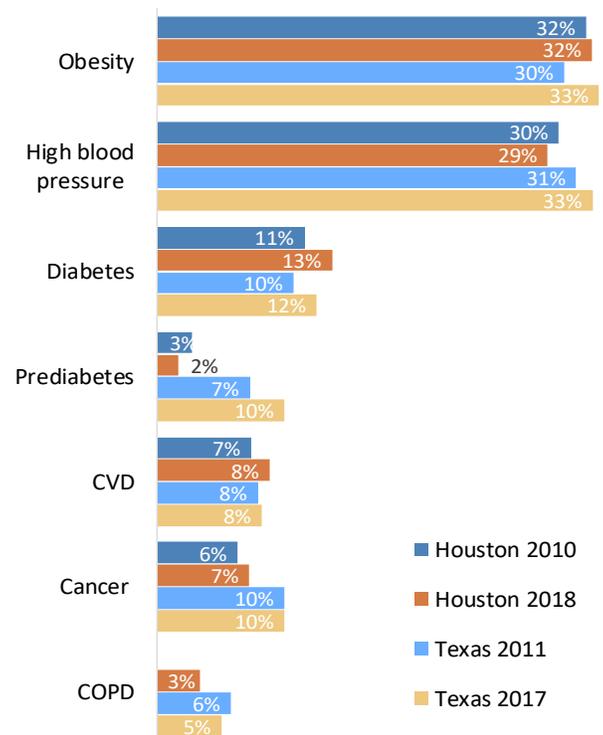
We found similar disparities in economic hardship, experienced often or always by 13% of African American residents compared to 8% of Hispanic residents, 5% of White residents and 4% of Asian residents.

Chronic conditions make up most of the disease burden afflicting the area's population. The Centers for Disease Control and Prevention report that 6 in 10 US adults have a chronic disease and 4 in 10 suffer from two or more (CDC, 2019). The figure on the right depicts the chronic conditions reported in the HHS and compares rates between 2010 and 2018, as well as between Houston and Texas (BRFSS, 2017).

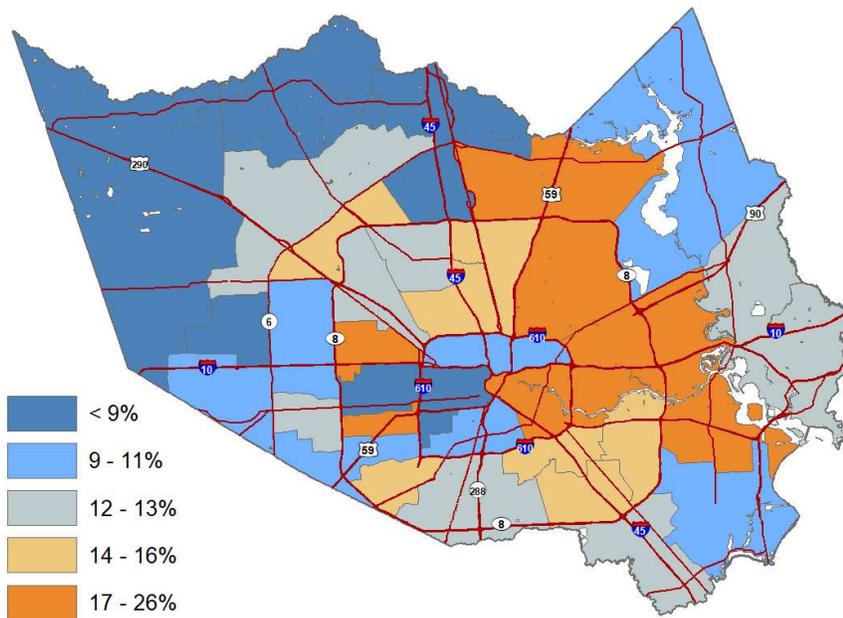
Fewer than 3 in 10 residents in the Houston area suffer from two or more chronic conditions versus 4 in 10, nationally.

Rates of cardiovascular diseases, hypertension and cancer have remained stable from 2010. Although the Texas obesity³ rate increased slightly from 30% in 2010 to 33% in 2018, the increase in the Houston area was smaller, from 31.7% in 2010 to 32.5% in 2018. These rates are still lower than the national rate of 39.8% (CDC, 2017). On average, diabetes prevalence among Houston area residents rose from 11% in 2010 to 13% in 2018, although self-reported prediabetes decreased slightly, from 3% to 2%. The Houston

CHRONIC CONDITIONS AMONG HOUSTON AREA RESIDENTS



PERCENT ADULTS WITH DIABETES MELLITUS



prediabetes rate was 2% compared with 10% statewide. Part of that difference, however, may be due to the way prediabetes information was collected. The HHS estimates of diabetes depend on respondents answering our diabetes question that they were told by a health professional they had borderline or prediabetes, versus a direct prediabetes question used for the state estimate. Diabetes rates in the area varied dramatically from less than 9% in the far Northwest of the county to 17-26% in Northeast and East.

The areas with the highest diabetes rates included Humble, Galena Park, East End, Settegast and Gulfton. In 2010, the highest rate among our 28 ZIP Code aggregations was just under 20%. For the Gulfton area in 2010, for example, then the 3rd highest in the county, the rate was just over 15%. The rate now for Gulfton-North Sharpstown is 21.3%.

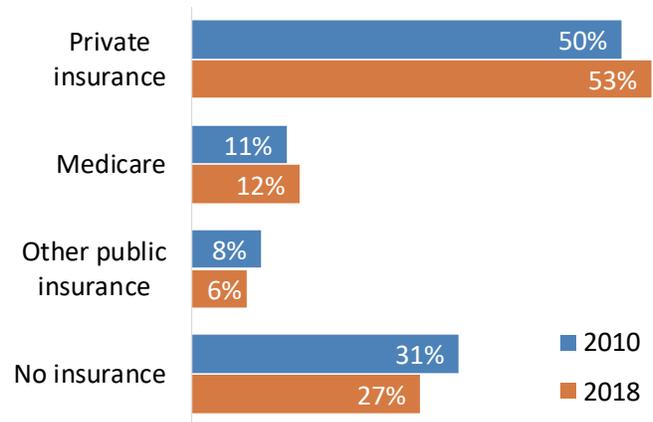
³ Biological implausible values were excluded from analysis, based on CDC's practice.

Health Insurance and Access to Care

The passage of the Affordable Care Act (ACA) in 2010 and its full implementation in 2014 coincided with improvements in insurance coverage in Texas, at least until 2016 (Marks, 2016) (Buettgens, 2018).

We found that 27% of Houston area residents, ages 18 and older, were uninsured in 2018 compared to 31% in 2010. While rates of private insurance and Medicare coverage increased slightly from 2010 to 2018, the rate of “other public insurance”⁴, which includes Medicaid, decreased from 8% to 6%.

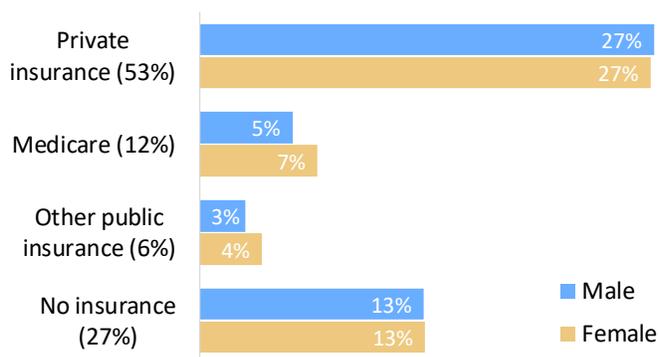
INSURANCE COVERAGE FOR ADULT RESIDENTS (18 AND OLDER)



37%

of adults under 65 were without insurance at some time over the last 12 months. Hispanics were disproportionately uninsured (56%) compared to other groups.

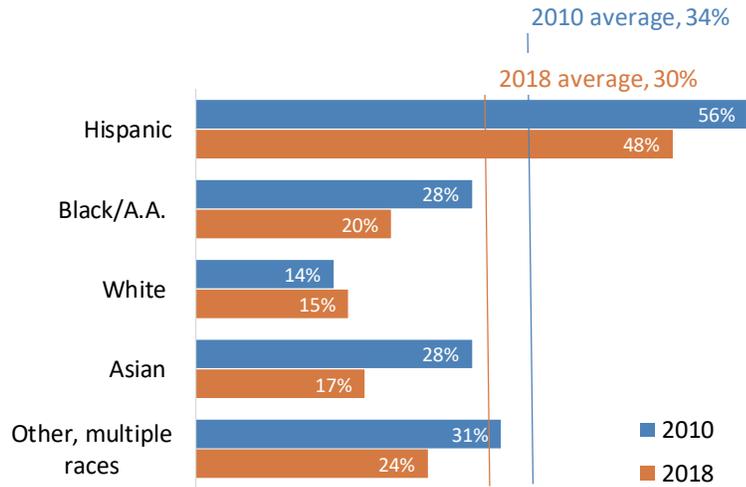
GENDER BY TYPES OF INSURANCE COVERAGE FOR ADULT RESIDENTS (18 AND OLDER)



Lack of insurance and private insurance coverage were distributed equally between male and female adult residents, although slight differences were seen in public coverage rates. Among area residents, more females than males had Medicare (7% females versus 5% males) or “other public” coverage (4% females versus 3% males).

⁴ Other public insurance includes Veteran Administration (VA) and Medicaid. A small percentage of adults had non-insurance kinds of support for health expenses and are not included in the figures above.

UNINSURED ADULTS ACROSS POPULATION GROUPS (UNDER 65)

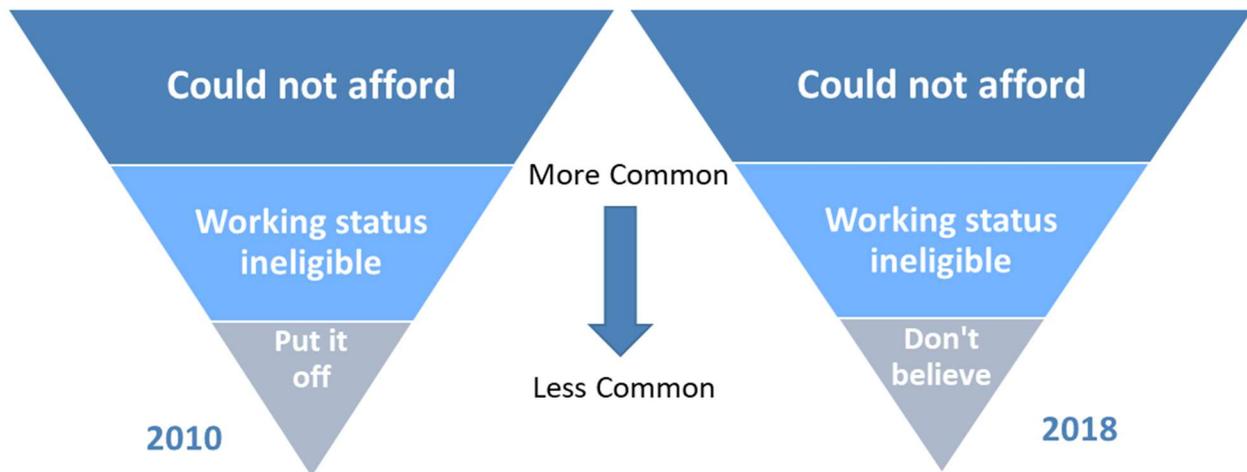


Adult residents under 65 years old were even more likely to be uninsured compared to everyone over 18 (30% and 27% respectively). Lack of insurance among the 18-65 year-olds was distributed unevenly across racial and ethnic categories. Hispanic residents were more likely to be uninsured (48%), followed by residents of “other and multiple races” (24%) and African American residents (20%).

Although there was a similar pattern of disparity in 2010, by 2018 all, except White residents, had experienced a reduction of between 7 and 10 percentage points in their rates of uninsurance relative to 2010. White residents remained at the lowest level of uninsurance in both 2010 and 2018 (14% and 15% respectively) and experienced a slight increase.

One out of every two adult residents, who were currently uninsured, cited the cost of coverage as the key reason. Another common reason was “ineligibility due to working status,” reported by 15% of those uninsured, and “don’t believe in insurance,” reported by 10% of uninsured adults. The top two reasons were consistent from 2010, stressing the cost of personal coverage as the most important barrier to full insurance coverage. Lack of belief in insurance as a reason moved from the 8th most mentioned in 2010 to 3rd in 2018.

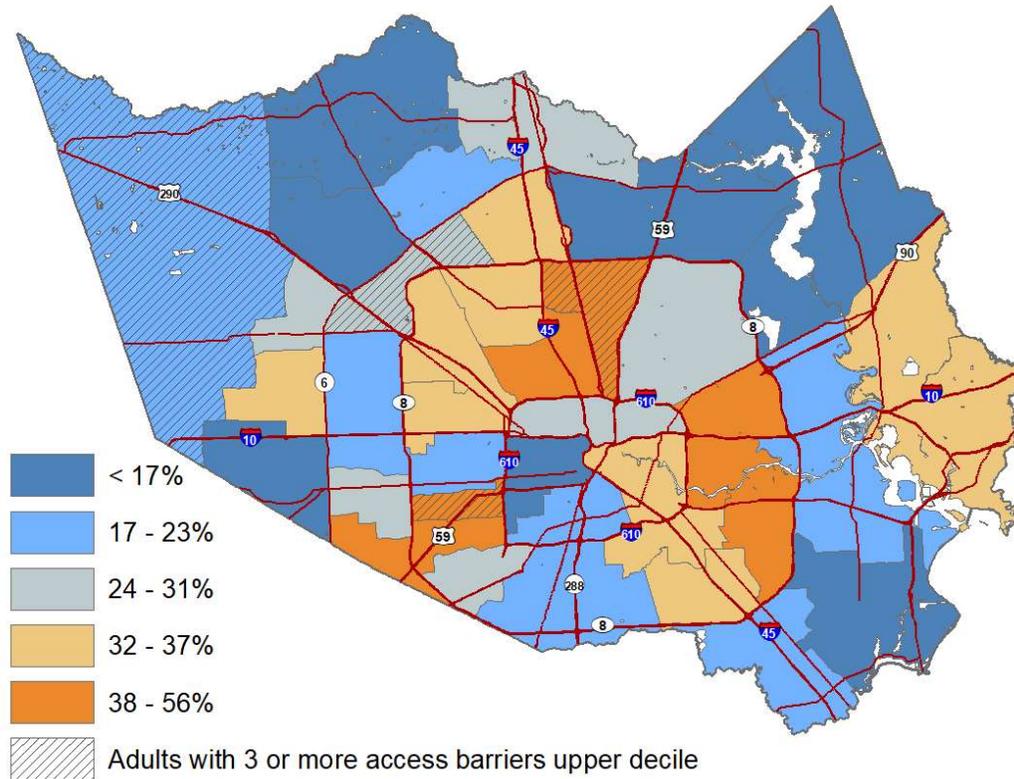
REASONS WHY RESIDENTS WERE UNINSURED AT THE INTERVIEW (18 AND OLDER)



The high cost, or a lack of insurance, prevented residents from accessing needed health care services or caused a delay in getting those services. Close to 16% of adult residents reported that they could not afford or delayed filling a prescription for themselves or a family member in the last 12 months.

Moreover, 18% delayed or could not see a doctor, 18% could not see or delayed seeing a specialist, 10% did not or delayed seeking mental healthcare, and 24% delayed or could not get dental care services. One in three adult residents reported facing one or more of these barriers to care.

UNINSURED ADULTS AND BARRIERS TO HEALTHCARE ACCESS (18 AND OLDER)



The map above shows the geographic distribution of uninsured adult residents in Harris County, which varied dramatically across our 38 areas, from 7% to 56%. Areas where residents were more likely to be uninsured included: Pasadena, Bellaire, Galena Park, Gulfton and Aldine. Superimposed are hatched areas showing locations with the highest percentages (upper decile) of people facing three or more healthcare access barriers. Gulfton and Aldine areas had the highest percentage of residents who were both uninsured and facing three or more barriers to access (25% and 21% respectively).

15%
of adults delayed, or did not get, at least 3 kinds of care they needed because of cost or lack of insurance: fill prescription, see doctor, see specialist, get dental care, get mental health care.

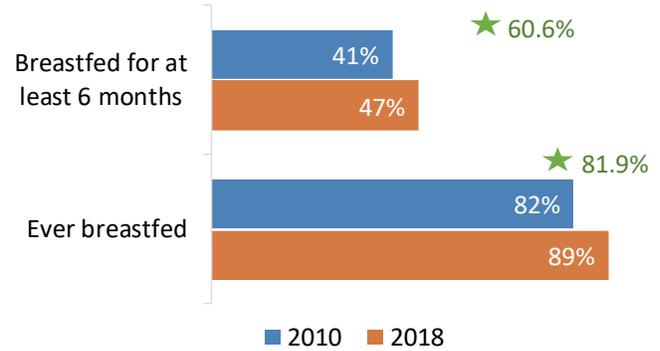
Regarding dental insurance, 40% of adults had no dental insurance last year compared to 49% in 2010. Coverage for the entire 12-month period increased from 41% in 2010 to 47% in 2018.

Maternal and Child Health

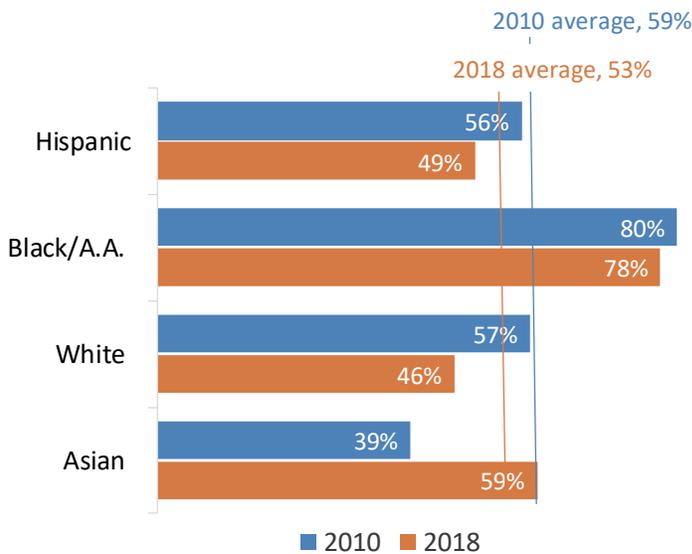
Healthy People 2020 objectives related to maternal, infant and child health include increasing the proportion of infants who are breastfed, as well as the duration of breastfeeding (U.S. DHHS, 2019).

We saw an increase in the percentage of mothers who ever breastfed their babies, from 82% in 2010, to 89% in 2018 and an increase in the percentage of mothers who breastfed for at least six months (shown on the right). This increased from 41% in 2010 to 47% in 2018 and moved closer to 60.6%, the Healthy People 2020 (HP2020) target. The percentage of women who ever breastfed (89%) has surpassed the 81.9% target. Rates are based on responses of women ages 18-50, who gave birth in the last 5 years.

BREASTFEEDING RATES IN HOUSTON AREA COMPARED TO HP2020 TARGET (GREEN STAR)

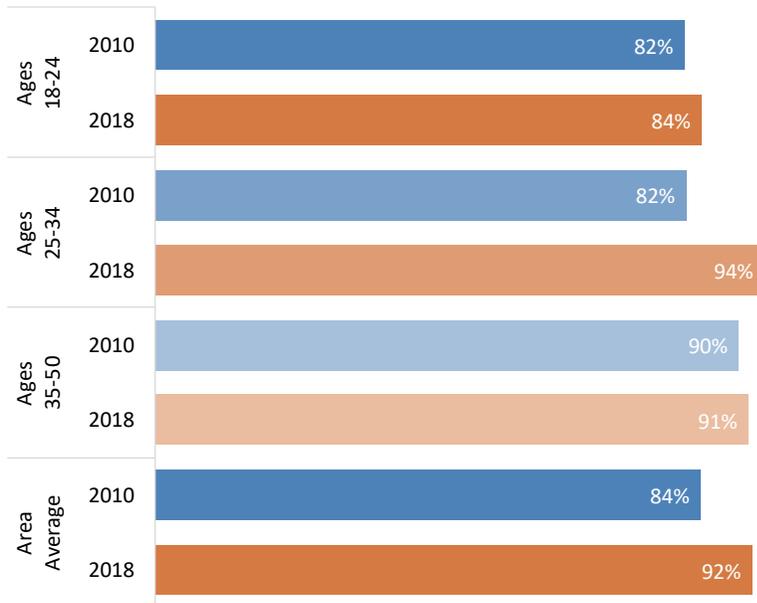


WOMEN WHO BREASTFED LESS THAN SIX MONTHS OR NOT AT ALL



In 2010, we noticed disparities across groups in the percentages of women who breastfed for a shorter period than six months, or who did not breastfeed at all. These persist in 2018. The rate of breastfeeding, for less than the minimum recommended time of six months, dropped among all groups except among Asian women, for whom the rate increased. The largest decrease was seen among White women, from 57% to 46%. The rate among African American women decreased two percentage points, from 80% to 78%, which continues to be disproportionately higher than the rates among other groups.

RATES OF FIRST TRIMESTER PRENATAL CARE BY AGE GROUP IN HOUSTON AREA



Another objective of HP2020 is to increase the proportion of pregnant women who start receiving prenatal care in the first trimester of pregnancy. In our survey, we found that 92% of the women 18-50, who were pregnant at the time of the interview, or had had a child in the last five years, entered prenatal care in the first trimester, 5% in the second trimester and 3% either in the third trimester or did not receive prenatal care at all. The largest increase in early prenatal care was seen among women of ages 25-34 (94%).

92%
of women received
prenatal care in the first
trimester in 2018
(84% in 2010).

Because prenatal visits usually are planned around the 8th- 9th week of pregnancy, we asked women who started prenatal care after the 9th week of pregnancy, or had no prenatal care, about the reasons that prevented them from getting prenatal care earlier. Twenty-seven percent of women mentioned cost or lack of insurance/Medicaid as one of the reasons. Another frequent reason, reported by 40% of women in this group, was not knowing they were pregnant.

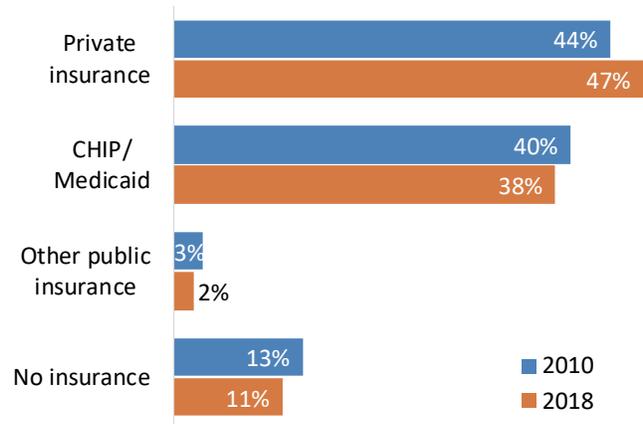
27%
of women reported cost or
lack of insurance as a reason
for not starting prenatal in the
first trimester
(32% in 2010).

We also asked women, who were not pregnant at the time of the survey, or had not given birth in the last five years, about the reasons that would prevent them from getting prenatal care, were they to become pregnant in the future. A large number, 63%, thought they would not have any issues in accessing prenatal care, while 7% thought that lack of insurance would be a problem. Four percent said they would not need prenatal care. This reinforces the importance of both greater access and continuing education about the role of prenatal care in ensuring healthy pregnancies and preventing possible complications for mothers and babies.

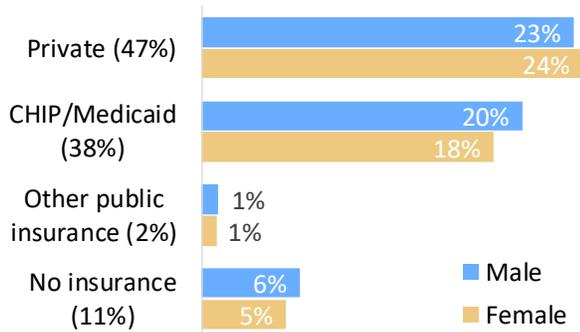
Children’s Health Insurance and Access to Care

HHS gathers health information for children 0-17 years through questions asked to the adult respondents, who are either parents, legal guardians or grandparents. In 2018 we found fewer children who were without health insurance coverage (11% uninsured) compared to 2010 (13% uninsured), although the reduction was not substantial. Private insurance increased from 44% in 2010 to 47% in 2018, while coverage through Children’s Health Insurance Program/Medicaid slightly dropped from 40% in 2010 to 38% in 2018. The rate of children covered by other types of public insurance⁵ also fell from 3% in 2010 to 2% in 2018.

INSURANCE COVERAGE FOR CHILDREN (0-17 YEARS)



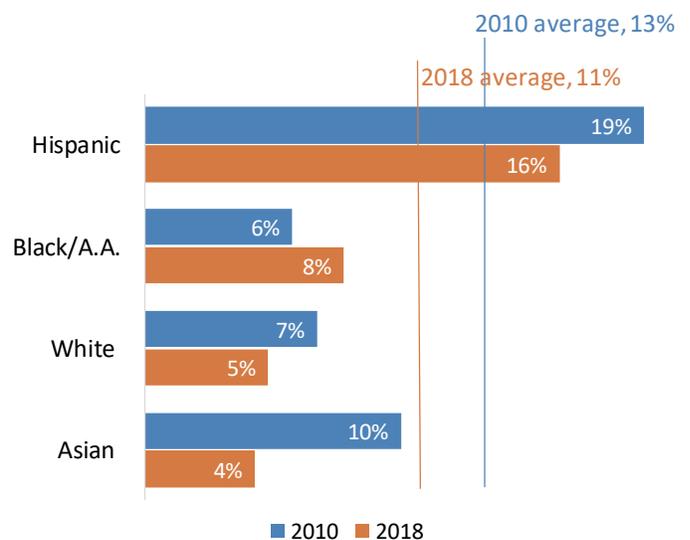
TYPES OF INSURANCE COVERAGE FOR CHILDREN BY GENDER (0-17 YEARS)



A slightly higher number of boys were uninsured (6%) compared to girls (5%) in 2018. A higher percentage of boys (20%) were covered by CHIP/Medicaid than girls (18%). Meanwhile, 24% of girls were covered by private insurance compared to 23% of boys.

Lack of insurance decreased unevenly across racial and ethnic groups, except among African Americans, who were uninsured at a higher rate in 2018 (8%) compared to 2010 (6%). Disparities across groups were still evident with the highest rate of uninsured among Hispanic children at 16%, which was five percentage points higher than the area average.

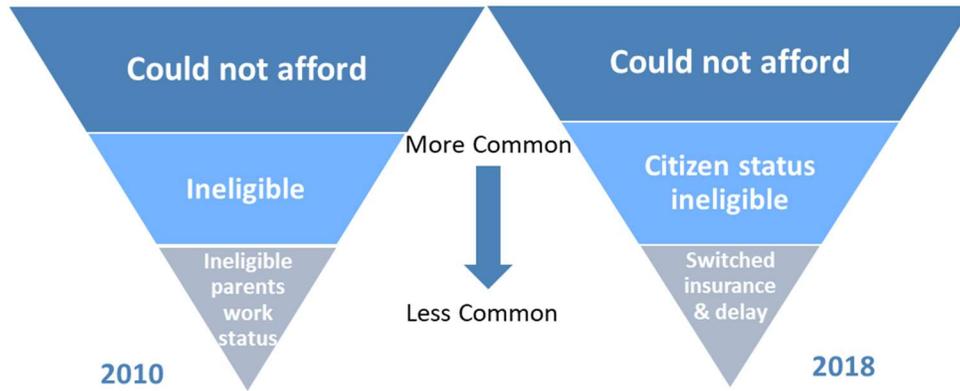
UNINSURED CHILDREN ACROSS RACIAL AND ETHNIC GROUPS



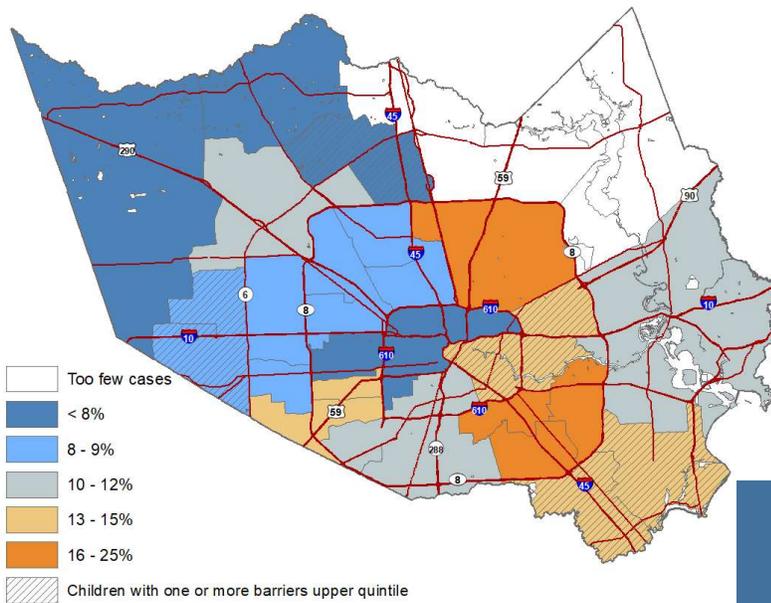
⁵ Other public insurance includes Veteran Administration (VA) and Medicare. A small group of children were covered by non-traditional types of health coverage.

The top reason for children being uninsured, similarly to 2010, was cost of insurance, which was mentioned by 30% of respondents, whose children were uninsured. It was followed by “being ineligible for coverage due to non-citizen status,” which was mentioned by 19% of the respondents of uninsured kids. Switching between types of insurance, or between plans, was the third most-cited reason for lack of insurance among children (14%).

REASON FOR LACK OF INSURANCE IN CHILDREN



PERCENT OF UNINSURED CHILDREN AND PERCENT OF CHILDREN WITH ONE OR MORE HEALTHCARE ACCESS BARRIERS



The map on the left depicts the distribution of uninsured children (0-17 years) across 15 PUMA aggregation areas⁶ with a hatched overlay showing areas with the highest percentage of children facing more than one healthcare access barrier over the last 12 months. Areas with the highest percentages of uninsured children were Aldine, Settegast, Pasadena, Edgebrook and South Houston. Top areas with both high percentages of uninsured kids (13-15%) and access barriers included La Porte, West Clear Lake, East End, and Galena Park (16%).

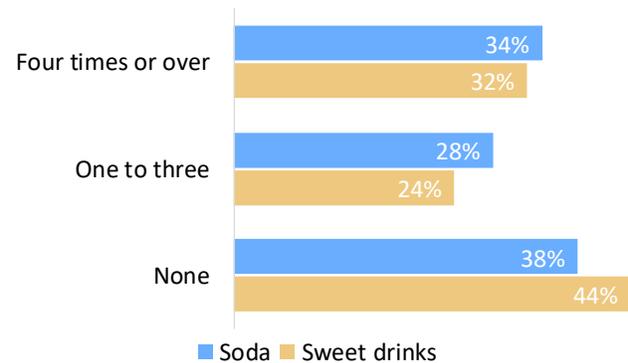
12% of children had delays, or did not get one or more services, because of cost or lack of insurance: fill a prescription, see a doctor, see a specialist, get dental care, get mental health care.

⁶ To increase the children’s sample size in each subcounty area, we aggregated 38 Harris County’s PUMAs into 15 areas based on median income and adjacent location.

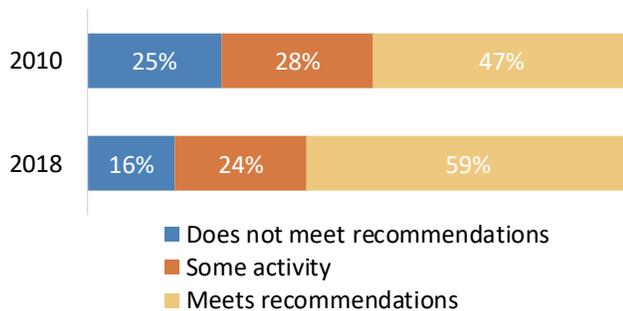
Behavioral Risk Factors

The American Heart Association recommends consuming no more than 450 calories from sugar-sweetened beverages per week, which is the amount in three cans of Coca Cola (AHA, 2014). Drinking sugar-sweetened beverages has been linked to increased risk for obesity and type 2 diabetes, heart, kidney and liver disease (CDC, 2017). One in three adults in the Houston area reported drinking sodas four or more times in the last week. Almost the same percentage of adults reported drinking sugar-sweetened drinks four or more times last week, and close to 1 in 2 adults consumed soda or sweetened drinks four times or more.

TIMES PER WEEK ADULTS DRANK SODA OR SUGAR-SWEETENED DRINKS



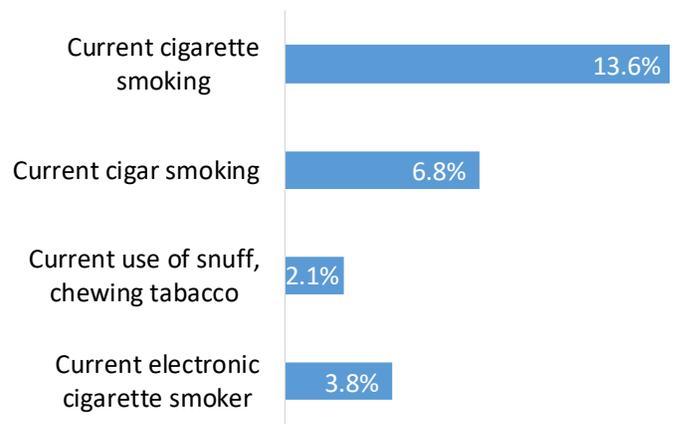
PERCENT OF ADULTS FOLLOWING CDC'S GUIDELINES ON PHYSICAL ACTIVITY



CDC's guidelines on the amount of physical activity recommended for adults specify achieving at least 150 minutes a week of moderate-intensity aerobic physical activity, or 75 minutes a week of vigorous-intensity aerobic activity (CDC, 2019). The percentage of residents meeting CDC's recommendations on physical activity was 59%, which is higher than the 47% percent in 2010, and 6% higher than the national average in 2017 (54%). The percent of adults in the county, who did not have any physical activity, decreased from 25% in 2010 to 16% in 2018. Although physical activity across areas has increased over time, the rate of obesity in adults remained the same at 32% in 2018.

The proportion of adults who currently smoke cigarettes was close to 13.6% in 2018, lower than the Texas rate of 15.7% (BRFSS, 2017) and lower than the rate of 16.8% in 2010. Nonetheless, we are behind the HP2020 target of 12%. Approximately 7% of adults reported currently smoking cigars, which is higher than the 0.3% target rate in HP2020. Use of smokeless tobacco was higher (2%) than the HP2020 target rate of 0.2%, but lower than Texas rate of 4.3% (CDC, 2019). Among Houston's adult residents, 3.8% reported currently using electronic cigarettes compared to 4.7% reported statewide (TDSHS, 2019).

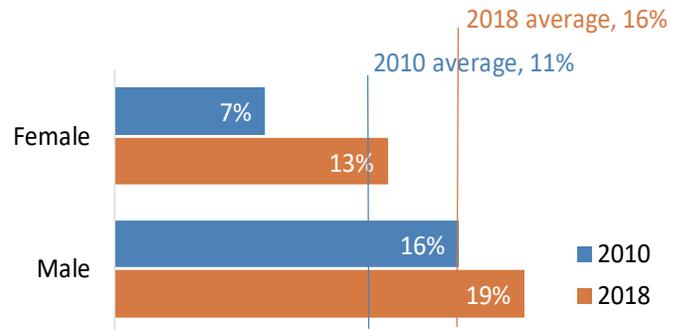
PERCENT ADULTS SMOKING TOBACCO, USE OF SMOKELESS TOBACCO AND ELECTRONIC CIGARETTES



Children’s Behavioral Risk Factors and Cancer Prevention

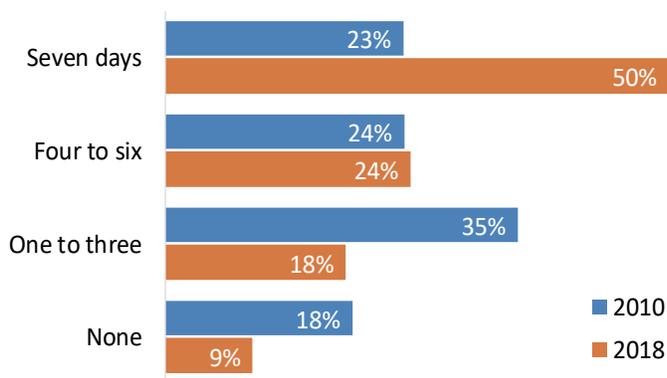
Recently, communities, schools, local organizations and government authorities have implemented a range of policies and programs to curb the rise of childhood obesity. Obesity in kids is associated with a plethora of health complications, such as, diabetes, sleep disorders, hypertension, high cholesterol, and liver damage. It can also affect the social and emotional development of children and increase their risk for developing chronic diseases as adults. HHS data suggest an increase in the obesity⁷ rates of teens aged 14-17. The county average rose from 11% in 2010 to 16% in 2018.

OBESITY IN TEENS ACROSS GENDER (14-17 YEARS)



Although the rate among males (19%) continues to be higher than that among females (13%) in 2018, the rate among females has increased from 7% to 13%, while the rate among males has increased only half as much, from 16% to 19%, highlighting the need for gender-specific prevention efforts.

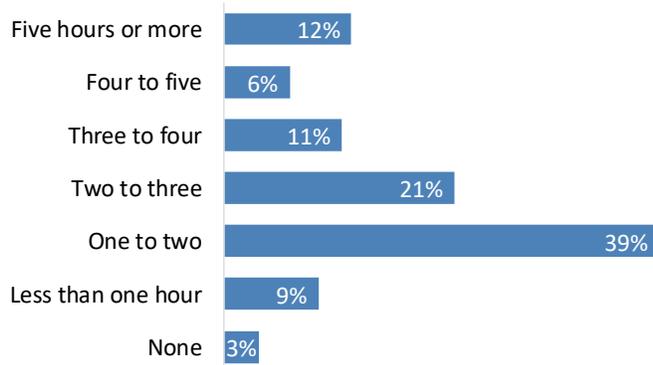
DAYS CHILD HAD 60 MINUTES OF PHYSICAL ACTIVITY LAST WEEK (0-17 YEARS)



Among the array of factors that increase obesity risk are an unhealthy diet, lack of physical activity and time spent in sedentary activities. Findings from HHS showed that 1 in 2 children, 0 to 17 years, did at least 60 minutes of physical activity for seven days in the last week, while close to 1 in 10 had not had any physical activity during the entire week. The figure to the left offers comparisons with 2010 data. Note that the question asked in 2010 focused only on physical activities outside the school setting, which could partly account for the lower rate in 2010 of kids having 60 minutes or more of physical activity for seven days of the last week.

⁷ Obesity was defined as a BMI at or above the 95th percentile for children of the same age and sex. Biological implausible values were excluded from analysis based on CDC’s practice.

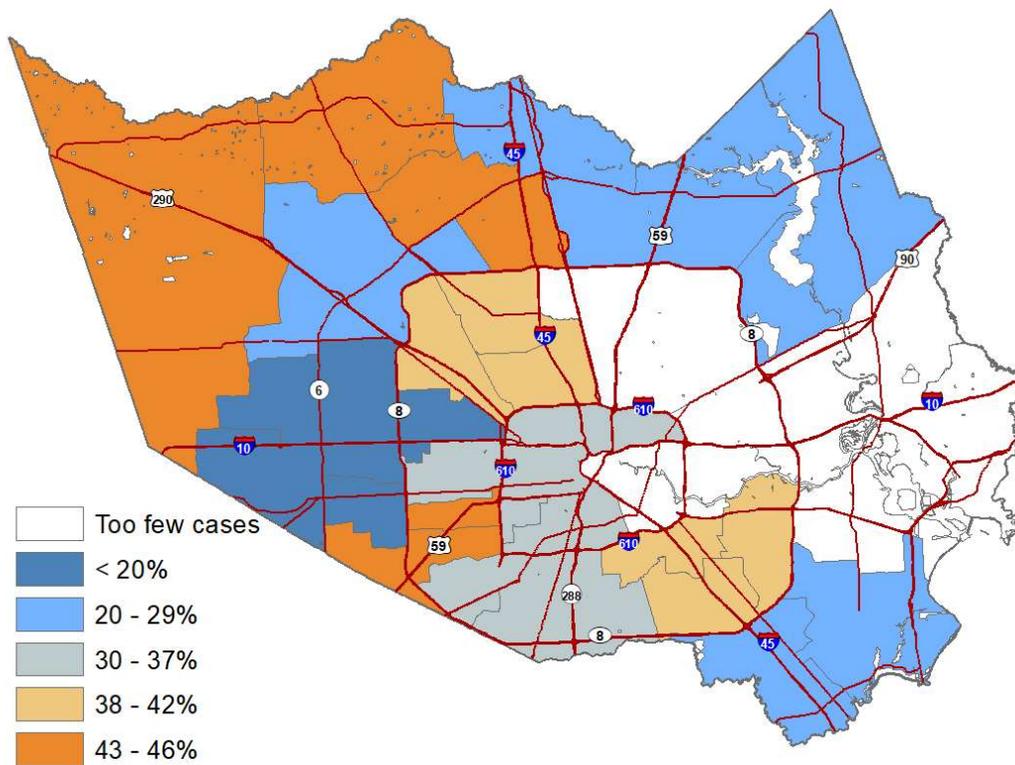
HOURS PER DAY CHILD SPENDS WATCHING TV, VIDEOS, DVDS, OR PLAYING VIDEO GAMES (6-17 YEARS)



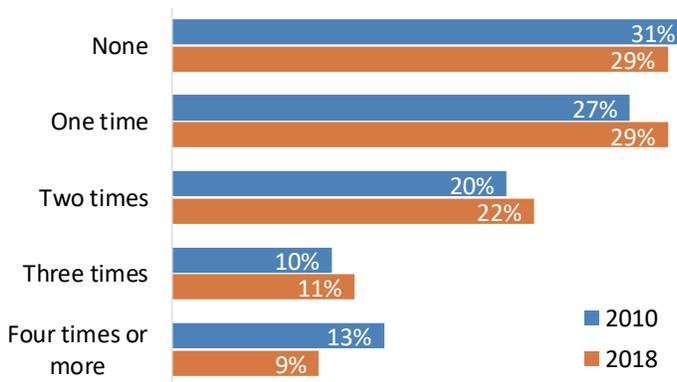
HHS also asked adults responding for children 6-17 years about the amount of time they spend watching TV or videos, are on electronic devices, or playing video games, as a proxy for sedentary time. Time spent in front of a screen can be time children could spend being physically active, such as riding bikes and playing outdoors. Half of Houston’s children, 6-17 years, had two or more hours of daily screen time, and more than 1 in 10 had 5 or more hours per day.

The map below shows the geographic distribution of unhealthy weight (overweight and obese) in children, aged 12-17, across our 15 PUMA aggregations. Areas with the highest percentage of 12-17 year-olds at an unhealthy weight (43% to 46%) included Gulfton, Bellaire and South Alief, North FM1960, Champions, Katy, and Tomball. The average for the whole county was 32.8%, in other words, one-third of our teens at are at an unhealthy weight.

PERCENT OF CHILDREN AT UNHEALTHY WEIGHT (12-17 YEARS)



NUMBER OF TIMES CHILD HAD FAST FOOD LAST WEEK (0-17 YEARS)

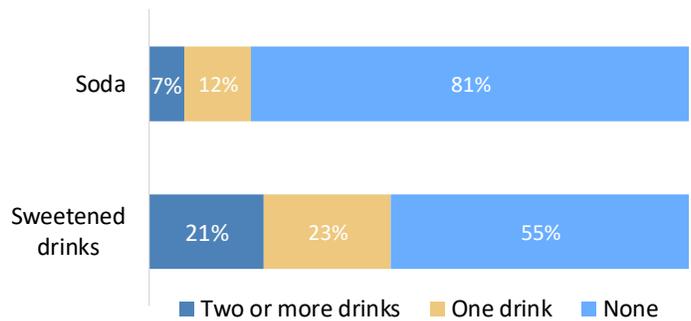


days per week.”

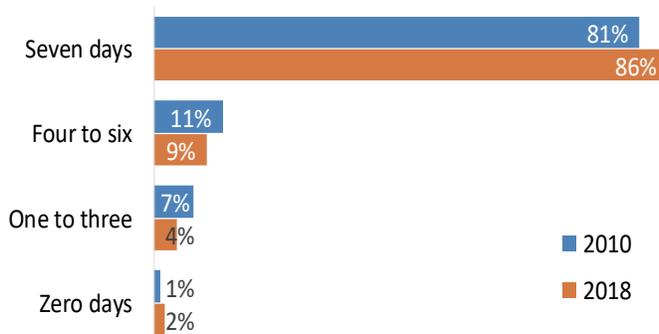
We also enquired about the child’s consumption of drinks that have been associated with risk of obesity. A majority of children, 8 in 10, did not drink any sodas within 24 hours of the interview, but only 5 children in 10 had no sugary drinks. Among all children, 0 to 17 years, 26% consumed two or more sodas or sugar-sweetened drinks the day before. Forty-six percent of all children had no soda or sugary drinks.

HHS does not ask in detail about the specific foods children consume on a daily basis, but we did enquire about the frequency of eating fast food as a proxy for a diet that lacks the balanced and healthy nutrition necessary for normal development and growth. The county-wide percentage of children, 0 to 17 years, who ate fast food, four or more times per week, decreased from 13% in 2010 to 9% in 2018. Data suggests that more children eat fast food only one-to-three times a week, now than in 2010. This increase in the “mid” categories appears to draw from two categories from 2010, “those who ate no fast food” and “those who had fast food four or more

NUMBER OF SODA OR SWEETENED DRINKS CHILD HAD THE DAY BEFORE (0-17 YEARS)



NUMBER OF DAYS CHILD HAD BREAKFAST LAST WEEK (0-17 YEARS)



Breakfast is the most important meal of the day for children, especially since their learning and cognitive demands are more intensive and concentrated in the first part of the day. Skipping a meal per day adversely affects not only growth and development, but also learning abilities and academic performance. HHS found that 86 percent of the children, 0 to 17 years, had breakfast every day in the last week, an improvement of 5 percentage points over 2010. Still, 15% did not eat breakfast every day, and 2% had no breakfast over the entire week.

PERCENT OF TEENS RECEIVING TWO OR MORE DOSES OF HUMAN PAPILLOMAVIRUS VACCINE (13-15 YEARS)



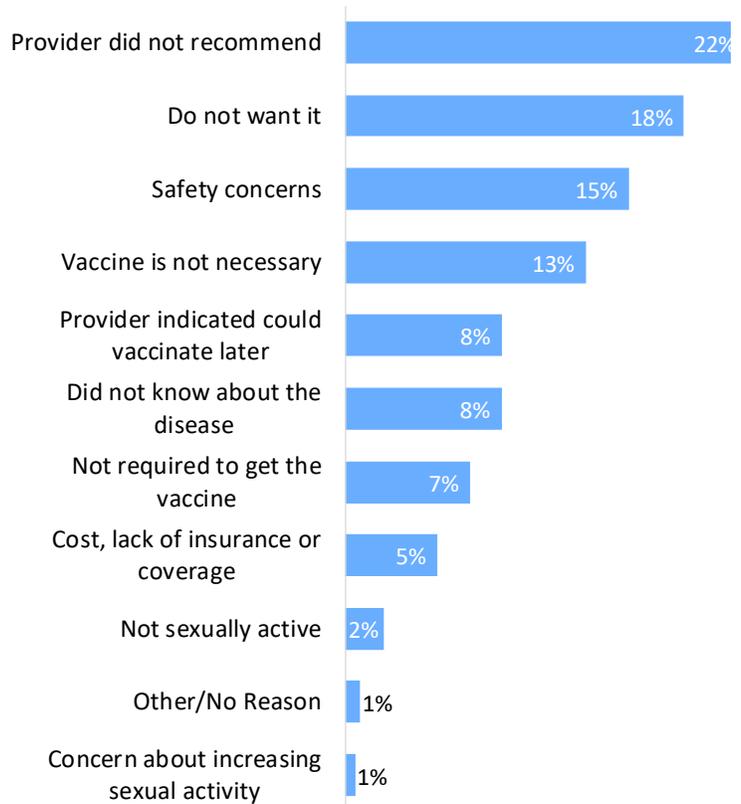
Our findings show that 41% of teens, ages 13-15 had received two or more vaccine shots, but there were differences across gender. Females had a higher rate of having received two doses or more (47%) compared to 35% of males. Because we were not able to establish the time span between the two doses of vaccine or the time the first dose was given, our rates do not represent rates of immunization.

When asked about the reasons children (13-15 years) had not received any dose of HPV vaccine (46% of kids, 13-15 years old), respondents provided the list shown in the figure on the right. Respondents could mention more than one reason, if desired. The top reason, mentioned by 22% of those whose child had not received any vaccine doses, was “provider did not recommend it,” followed in second place by 18% saying they “did not want it,” and in the third place, reported by 15% “had safety concerns.” The figure on the right provides a better picture of the challenges and controversies that surround vaccine administration and will help identify areas for future targeted action, interventions and education campaigns.

The widely publicized concern among those opposed to the vaccine that it would prompt sexual activity was mentioned by fewer than 1% of our respondents.

The HHS 2018 introduced questions about human papillomavirus (HPV) vaccination in teens, which protects against HPV infection, which in turn is associated with cervical, mouth, throat, anal and genital cancers later in life. CDC recommends that all teens, starting at ages 11 to 12, receive two shots of HPV vaccine, administered six to twelve months apart. A third shot might be needed if the time between the first two is less than five months (NCI, 2018).

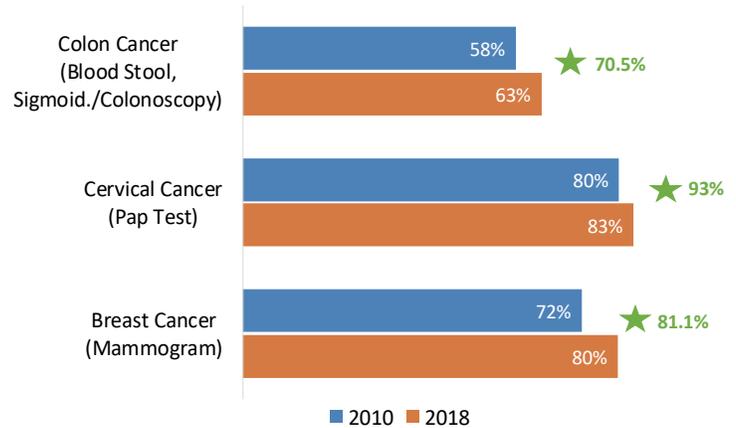
PARENT-REPORTED REASONS FOR NO HPV VACCINE DOSES AMONG TEENS (13-15 YEARS)



Adult Cancer-related Screenings

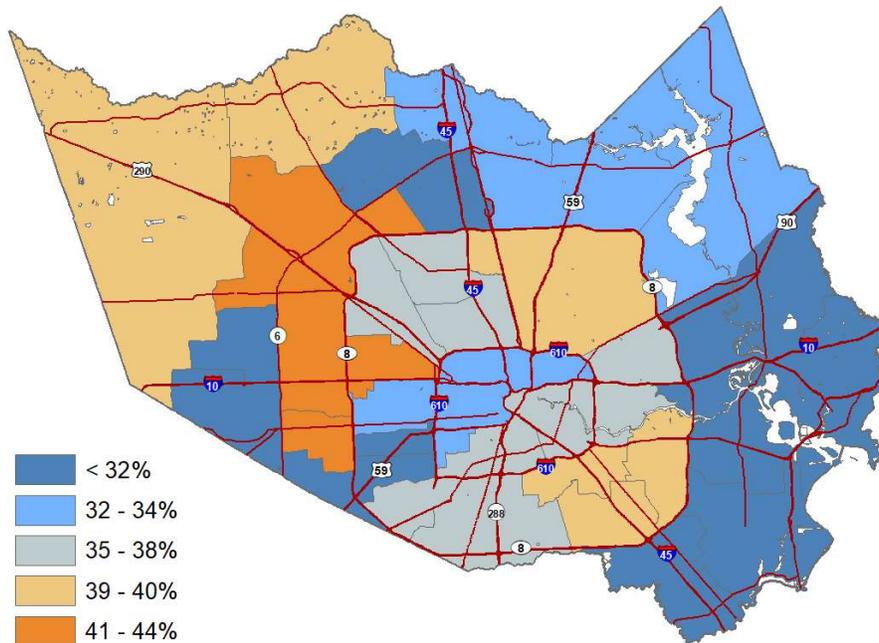
In 2018, we found that Houston area residents have increased their use of cancer preventive services since 2010. Close to 63% of adult residents, aged 50-75, were screened for colon cancer, undergoing a blood stool test, sigmoidoscopy or colonoscopy, within the timeframe recommended by the CDC (CDC, 2019). The 2018 rate is still almost eight percentage points away from the HP2020 goal. More women, aged 21-65, were screened for cervical cancer, increasing the area average to 83% compared to 80% in 2010. The Houston area has almost reached the HP2020 target for breast cancer screening, with 80% of women of ages 50-75 receiving a mammogram biennially.

HOUSTON RESIDENTS' CANCER SCREENING COMPARED TO HP2020 TARGETS



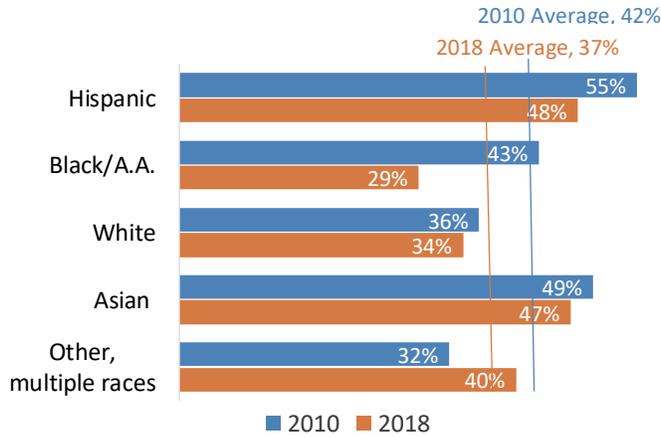
The percent of adults unscreened for colon cancers varied across our 15 PUMA aggregations from the low, 26% in the Pasadena-La Porte and West Clear Lake area, to the high of 44% in Spring Valley, Bear Creek and Alief area. Top areas with the highest percentage of unscreened adults included also North and South Cypress, and Jersey Village.

PERCENT OF ADULTS UNSCREENED FOR COLON CANCER ACROSS 15 PUMA AGGREGATIONS

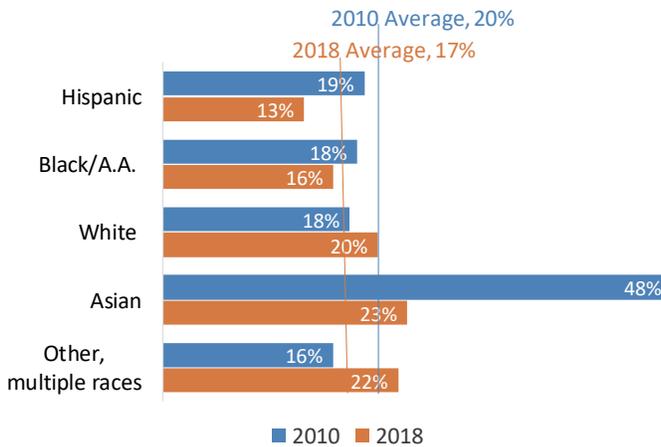


CANCER SCREENING DISPARITIES ACROSS RACIAL AND ETHNIC GROUPS

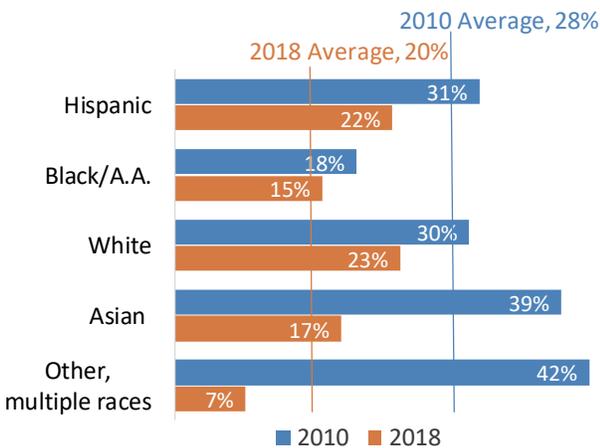
Unscreened for Colon Cancer



Unscreened for Cervical Cancer



Unscreened for Breast Cancer



Although the area average for adults, unscreened for colon, cervical and breast cancers, dropped since 2010, not all groups of residents are accessing preventive cancer services at the same rate. While the percentage of adults unscreened for colon cancer has decreased across most racial and ethnic groups since 2010, it increased among residents identified as “Other or multiple races.”

Hispanic adults, 50-75 years, have the highest rate of being unscreened for colon cancer: 48%, followed by 47% of Asian residents, 34% of White residents, and 29% of African American residents, the lowest rate across groups. Nationally, rates of adults unscreened for colon cancer screening have been decreasing according to the National Health Interview Survey (NHIS), from 47.9 in 2008 to 37.6% in 2015 (DHHS, 2019).

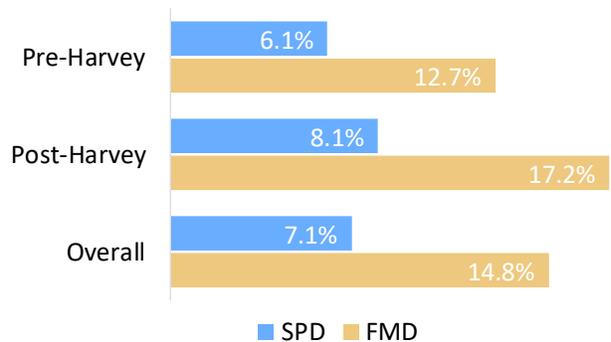
The most recent national data from the NHIS show 81.2% of eligible women were screened for cervical cancer in 2015 (DHHS, 2019) compared to 83% in Houston area. Hispanic, African American, and Asian women of ages 21-65, reported higher rates of cervical cancer screening in 2018 compared to 2010. More white women residents in this age group reported being unscreened in 2018 than in 2010 (20% and 18% respectively). Asian women remained as the group with the highest rate of women lacking cervical screening (23%), compared to other groups.

In 2010, the HHS area average of 72% matched the national NHIS rate for breast cancer screening. However, in 2018, respondents reported mammograms more often than reported in the NHIS from 2015 (80% vs. 72%). Across all race and ethnic groups, more women ages 50-74, reported breast cancer screening in 2018 than in 2010. The percentage of unscreened women dropped several points for each group, with residents identified as “Other or multiple races,” reporting the lowest rates of those lacking screening (7%). Hispanic and White women are the groups with the highest rates of being unscreened (22% and 23%).

Mental Health

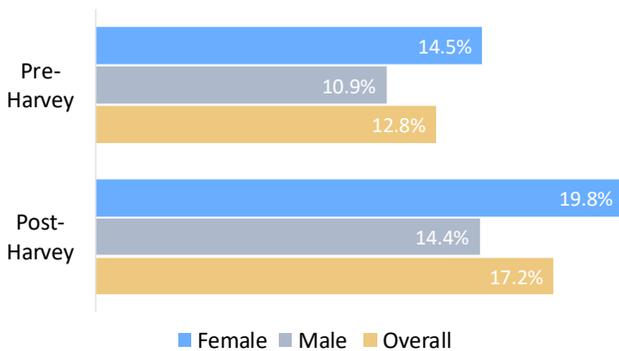
Serious Psychological Distress (SPD) in the past 30 days was measured by the 6-item Kessler scale, which is used as a screening tool in large populations for detecting mental health disorders, such as depression and anxiety. The overall rate of SPD in 2018 was 7%, the same as in 2010. A closer look at rates from pre-to-post Harvey, showed an increase from 6.1% to 8.1%. Our post-Harvey SPD estimate is based on interviews conducted 6-9 months after Harvey. In an earlier study reported separately, we found a higher SPD rate 4 months after.

SERIOUS PSYCHOLOGICAL DISTRESS AND FREQUENT MENTAL DISTRESS IN THE LAST MONTH



The figure above shows a comparison between SPD and frequent mental distress (FMD), the latter being defined as 14 or more reported days of poor mental health over the last 30 days. Fifteen out of every 100 Houston residents reported FMD that included stress, anxiety, and problems with emotions. Post-Harvey, the FMD rate increased to 17.2%, which is nearly 5 percentage points higher than the average FMD for the area before Harvey.

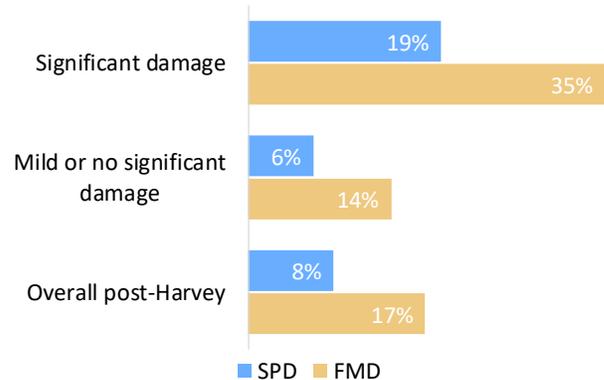
FREQUENT MENTAL DISTRESS IN THE LAST MONTH BEFORE AND AFTER HARVEY BY GENDER



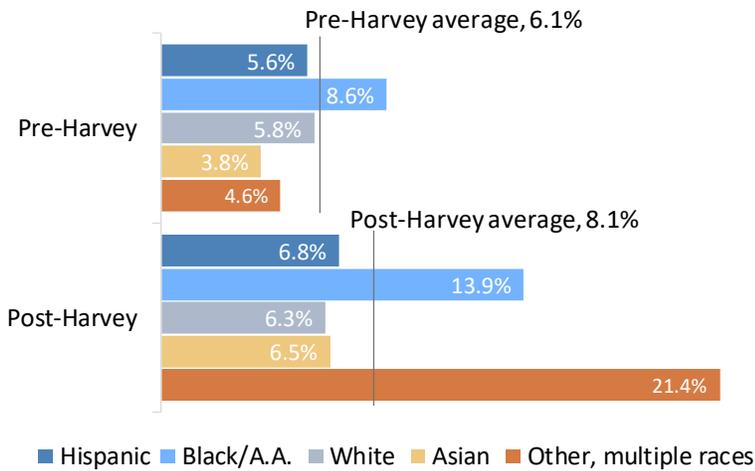
The figure above shows that Pre-Harvey FMD was not only higher in females (14.5%) compared to males (10.9%), but the increase from pre- to post-Harvey among women (from 14.5% to 19.8%) is slightly greater than the increase observed among men (from 10.9% to 14.4%).

The figure on the right indicates that residents who experienced significant damage to their houses or vehicles due to Harvey were 3 times more likely to show signs of SPD (19%) than residents who had mild or no damage to their property (6%). Frequent mental distress (FMD) was also higher among those with damage from Harvey (35%) compared to those with mild or no damage (14%).

SERIOUS PSYCHOLOGICAL DISTRESS AND FREQUENT MENTAL DISTRESS, SIX TO NINE MONTHS AFTER HARVEY, ACROSS DAMAGE TO PROPERTY



SERIOUS PSYCHOLOGICAL DISTRESS ACROSS RACIAL AND ETHNIC GROUPS, BEFORE AND SIX TO NINE MONTHS AFTER HARVEY

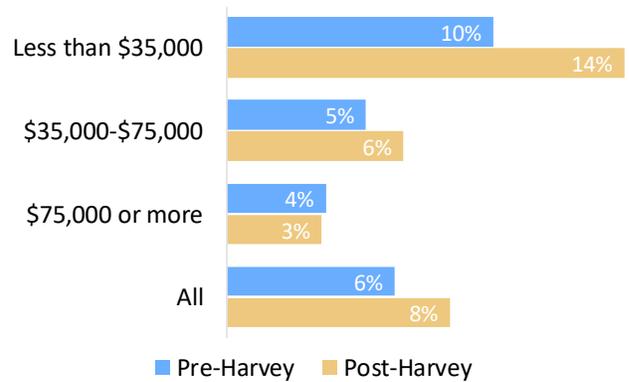


We observed an increase in SPD rate, 6-9 months after Harvey, compared to pre-Harvey rates, across all racial and ethnic groups. The smallest difference was among White adult residents. The group experiencing the highest increase was residents of “Other or multiple races,” who were the most affected psychologically by the storm. The SPD rate in this group increased from 4.6% before Harvey to 21.4%, 6-9 months after Harvey.

Coming next, after the category of “Other race or multiple races,” African American adult residents had the highest levels of SPD before and months after Harvey (8.6% and 13.9% respectively).

Residents with lower household income experienced the highest levels of SPD, compared to their counterparts with higher income, before and months after the storm. Among residents with less than \$35,000 household income, the SPD rate was 10%, compared to 4% among residents with income at \$75,000 or higher before Harvey. Residents with less than \$35,000 household income were four to five times more likely to present signs of SPD (14%), compared to residents with the highest income (3%). The highest income group had almost the same rate of SPD before and months after Harvey (3-4%). The figure on the right shows how the SPD rate increases, as household income decreases, both before and months after Harvey.

SERIOUS PSYCHOLOGICAL DISTRESS ACROSS HOUSEHOLD INCOME LEVEL, BEFORE AND SIX TO NINE MONTHS AFTER HARVEY

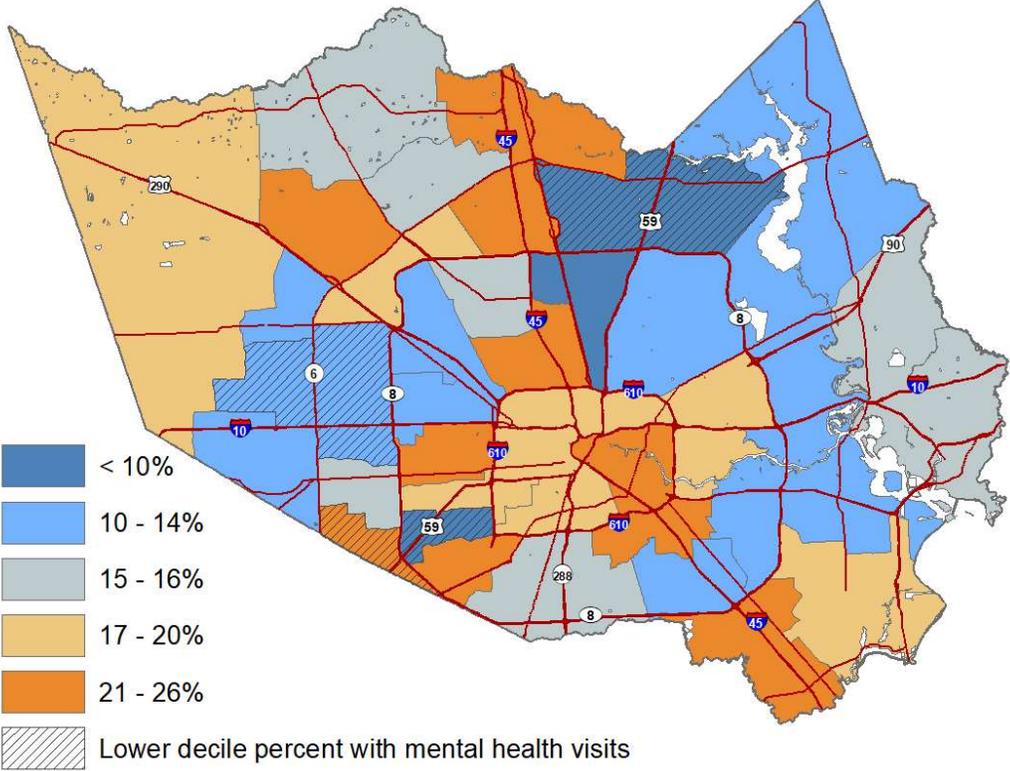


Close to 10% of residents in the Houston area had mental health visits in the last year, while 17% of residents reported that they needed mental health care. Only 44% of residents expressing the need to see a health professional for mental health problems, received these services in the last year.

17%
needed to see a mental health professional.
44% of those, actually did.

The map below presents the geographic distribution of needs for mental health services in the Houston area and overlays the areas with the lowest rates of mental health visits. Areas with the highest percent of adults needing mental health services in the county were South Acres Home, Edgebrook, South Alief, Greater Uptown, Spring and Champions. The South Alief area (along the county border to the Southwest) had one of the highest rates of residents needing mental health services (23%), but one of the lowest rates of mental health visits in the last year (6%).

PERCENT ADULTS WITH MENTAL HEALTH NEEDS AND PERCENT THAT HAD MENTAL HEALTH VISITS

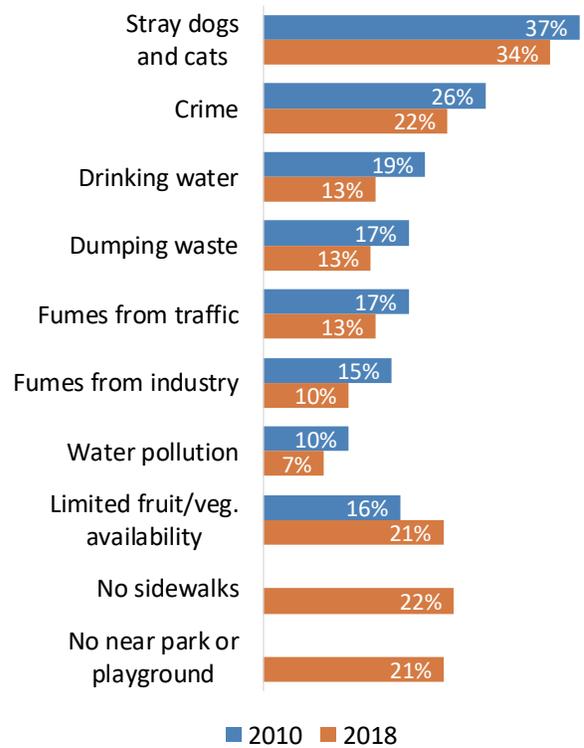


Neighborhood Conditions and Concerns

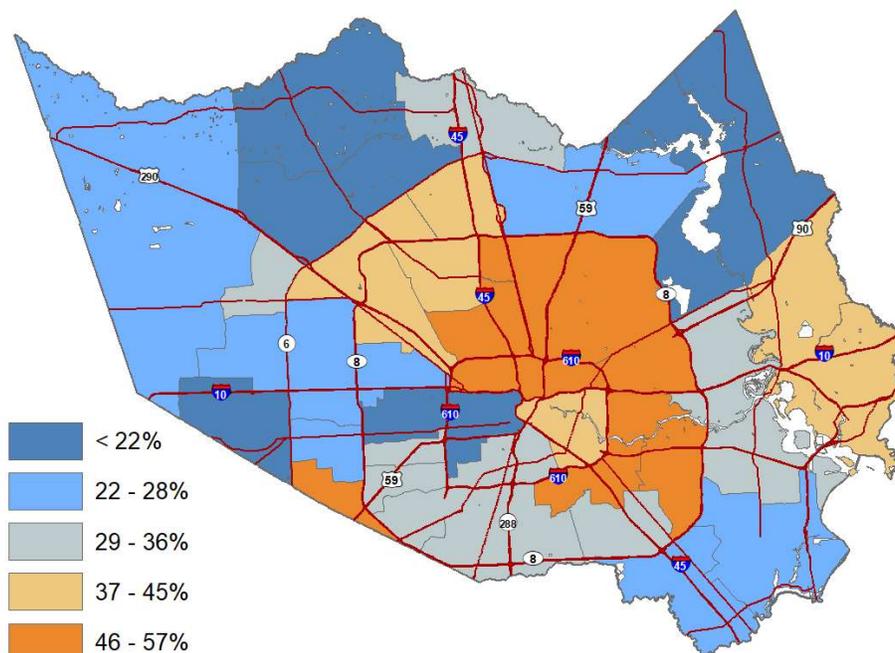
Where you live influences greatly your health and quality of life. In 2018, we noticed a drop in the percentage of Houston area residents who reported neighborhood and environmental concerns, as compared to 2010. The percentage of residents reporting stray animals as a neighborhood problem dropped from 37% in 2010 to 34% in 2018, and yet, continued to be the number-one concern that most residents reported as a problem in their neighborhood. It was followed by 22% of residents mentioning crime as a problem. While efforts are underway to address food deserts, 21% of residents reported that there was limited availability of fresh fruits and vegetables in their neighborhood. In addition, 22% reported there were no sidewalks, and 21% said there was no park or playground near where they lived.

The map below shows the geographic distribution of residents considering stray animals as the main problem in their neighborhood. The top areas were Aldine, Edgebrook, Settegast, South Acres Home and Galena Park.

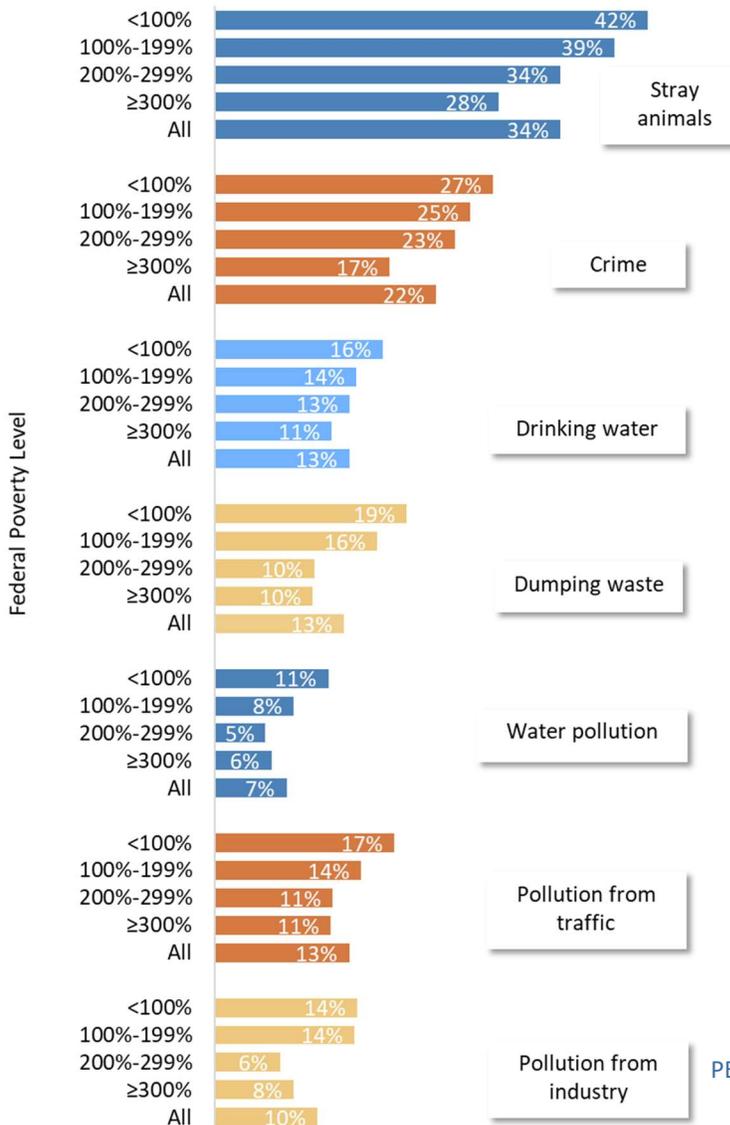
PERCENT ADULTS REPORTING CONCERNS OVER NEIGHBORHOOD CONDITIONS



PERCENT ADULTS REPORTING STRAY ANIMALS AS A PROBLEM IN THEIR NEIGHBORHOOD



PERCENT ADULTS REPORTING CONCERNS OVER NEIGHBORHOOD CONDITIONS ACROSS FEDERAL POVERTY LEVELS

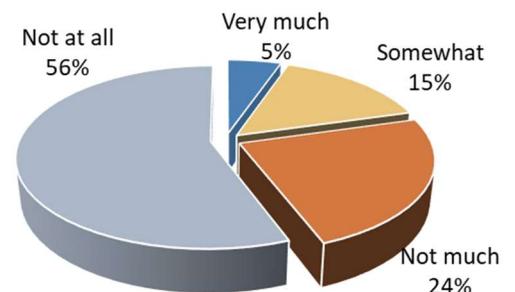


Although, overall, fewer residents reported neighborhood concerns in 2018 as compared to 2010, disparities based on level of household income continue to be present for most of the neighborhood indicators included in the HHS.

More residents, among those with household income less than 100% of the Federal Poverty Level (FPL), reported neighborhood concerns, such as stray animals, crime, problems with drinking water, dumping waste or water pollution, as compared to residents with income at or above 300% FPL. The existing disparities across income levels apply to all neighborhood indicators displayed in the figure on the left. A pattern of fewer and fewer residents reporting problems with neighborhood conditions, as one moves from low to high household income levels, is visible across all indicators. Note that the two indicators regarding pollution from traffic or industry, at the bottom of the figure, were asked only prior to Harvey.

When asked if residents were bothered by outdoor noise near their home over the last 12 months, 20% reported that they were. As shown below, 5 percent reported that they were bothered very much by outdoor noise.

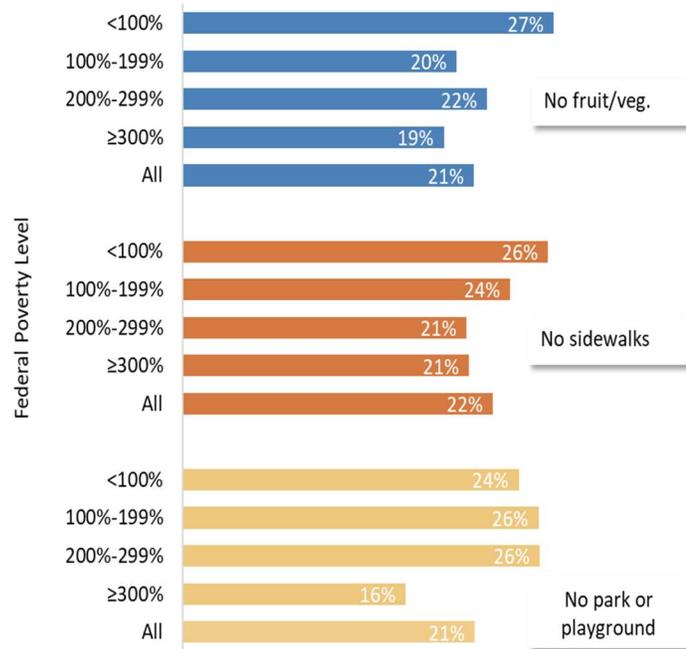
PERCENT ADULTS BOTHERED BY OUTDOOR NOISE



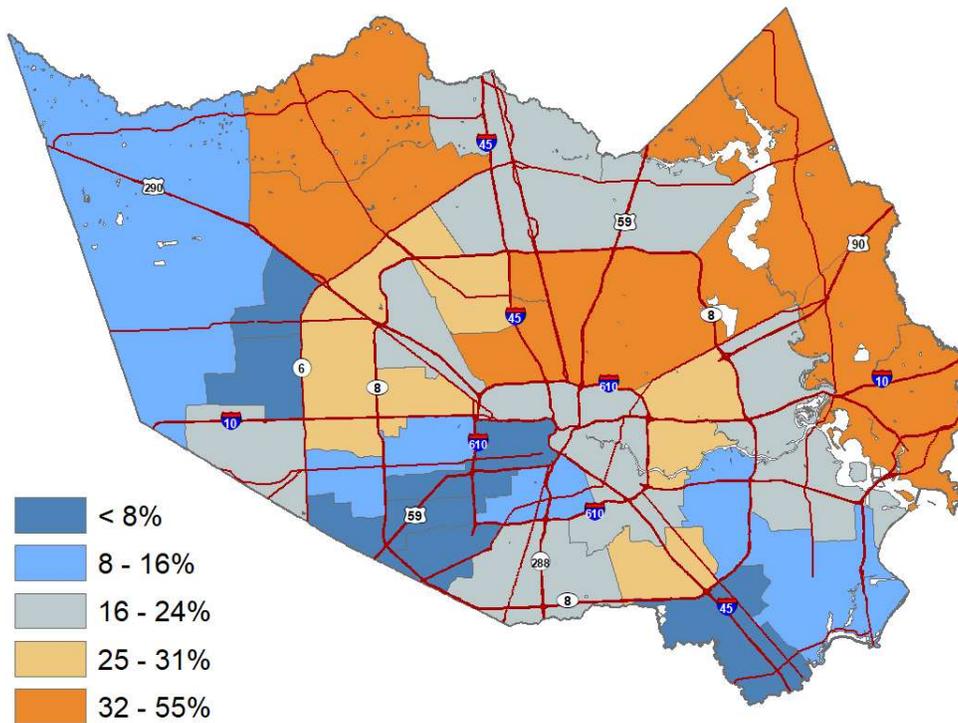
The figure on the right depicts the distribution of residents, reporting no availability of fresh produce, a lack of sidewalks around their homes, and a lack of parks and playgrounds in their vicinity, across income levels. Residents with household income below the poverty level reported these conditions at higher rates than those at higher levels of household income. The exception was with the “no park or playground” response, where middle income levels reported the highest rates.

The map below shows the distribution of residents who reported an absence of sidewalks in their neighborhood. The top areas included Kingwood, Aldine, Baytown, North FM1960 and Tomball.

PERCENT ADULTS REPORTING FRESH PRODUCE UNAVAILABLE, LACK OF SIDEWALKS, PARKS OR PLAYGROUNDS IN THE NEIGHBORHOOD



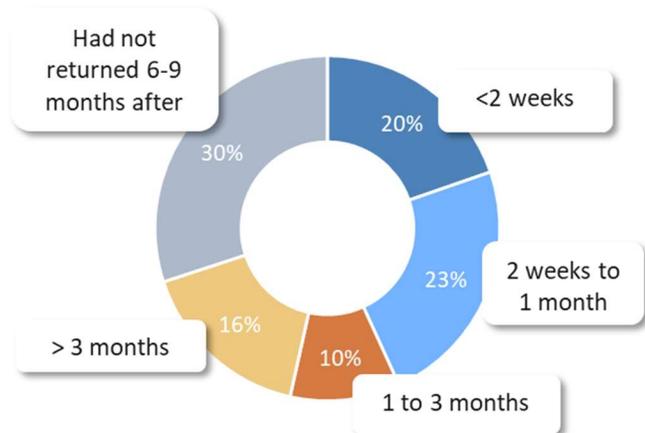
PERCENT ADULTS REPORTING AN ABSENCE OF SIDEWALKS IN THEIR NEIGHBORHOOD



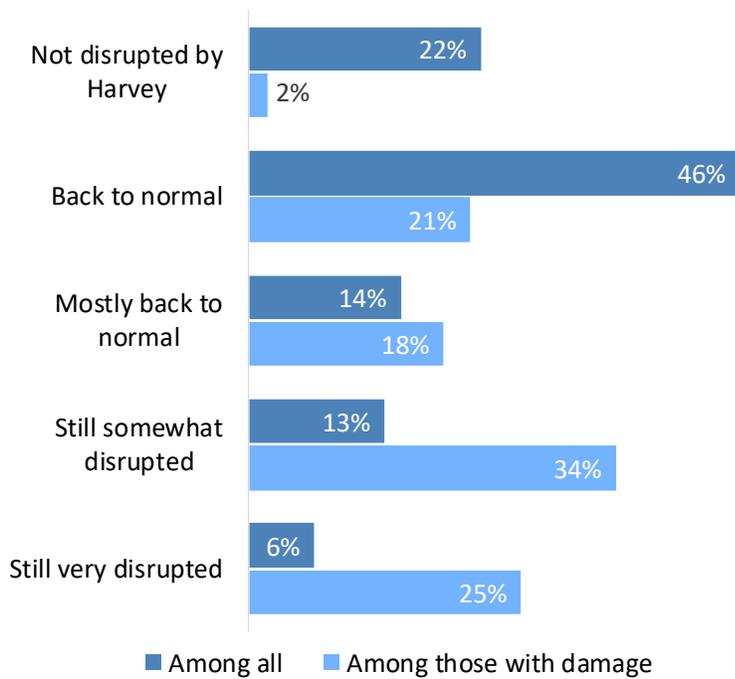
Harvey-related Recovery and Needs Assessment

The flooding from Hurricane Harvey caused considerable physical damage in our area and, as we noted earlier, inflicted a lot of emotional distress among residents. When interviewed between 6 and 9 months after the storm, 30% of residents who evacuated (20%) had not yet returned to their homes. While the majority of people who evacuated were able to return in a matter of weeks, 26% of them took a month or longer.

TIME RESIDENTS WERE AWAY FROM THEIR HOMES POST EVACUATION DUE TO HARVEY

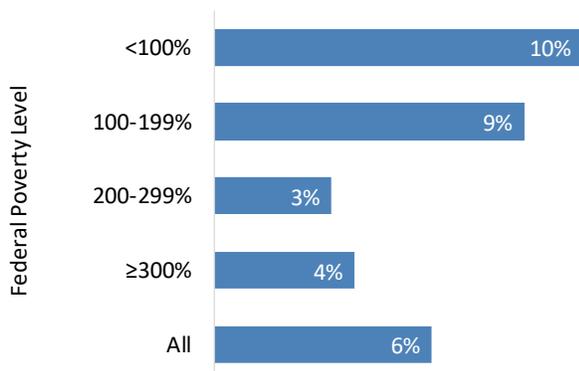


RECOVERY STATUS SIX TO NINE MONTHS AFTER HARVEY



Recovery of those with significant damage to their home or vehicle has been slower than for residents who incurred less damage. Among residents with significant damage, 34% reported that their lives were still somewhat disrupted, 6 to 9 months after Harvey, as compared to 13% across all residents. Additionally, 25% reported that their life was still very disrupted, as compared to only 6 percent among all residents. Sixty-eight percent of Houston area residents reported that their lives either were not disrupted by Harvey or were back to normal. Among those who experienced damage to their homes or vehicles, this figure was only 23%.

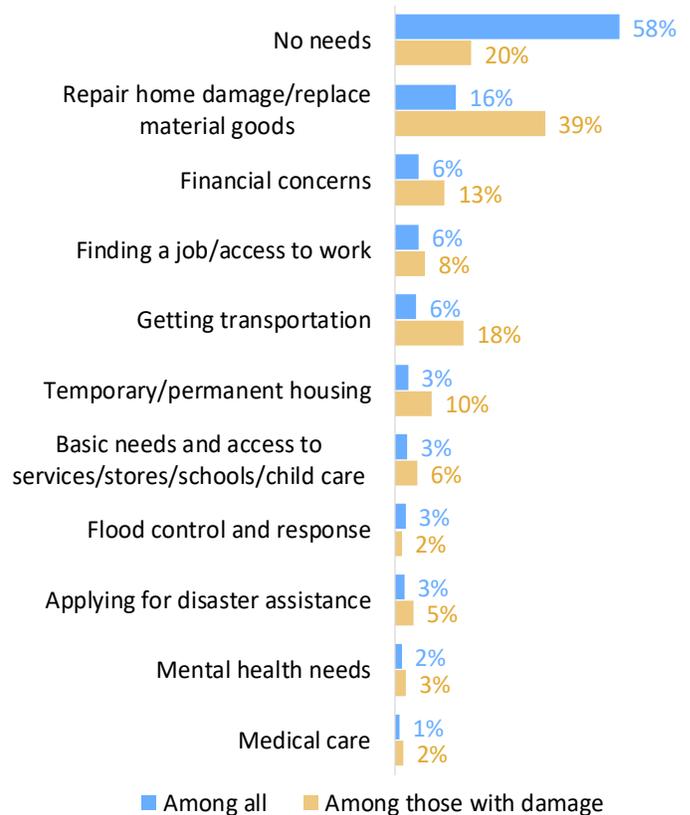
PERCENT RESIDENTS REPORTING “LIFE IS STILL VERY DISRUPTED” ACROSS FEDERAL POVERTY LEVEL



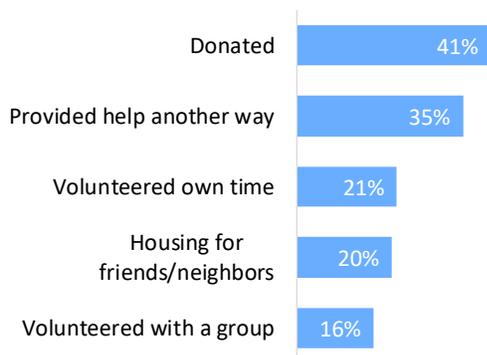
As shown in the figure to the left, residents who had household incomes less than 200% FPL were more likely to report that their lives were still very disrupted. Ten percent of all residents with household income below the poverty level reported that their life was still disrupted versus a 6 percent average, countywide, and 4 percent among residents with household income at or above 300% Federal Poverty Level.

Among the 78% of the area’s residents who had their lives impacted by Harvey, 58% expressed “no current needs,” 6 to 9 months after the hurricane. When we consider those with significant damage to their home or vehicle reporting “no current needs,” the percentage drops to 20%. Four in ten of those with damage reported a need to repair their home or replace material goods. Almost 2 in 10 needed transportation, and a little over 1 in 10 had financial concerns. Finding housing, either temporary or permanent, is still one of the pressing needs for 1 in 10 people who had severe damage. Notwithstanding the ongoing needs, almost half of those impacted by Harvey reported normalcy in their lives. This type of resiliency is made possible through help and social support, which appear in many forms.

NEEDS OF RESIDENTS, WHOSE LIFE WAS IMPACTED BY HARVEY, SIX TO NINE MONTHS AFTER HARVEY



WAYS PEOPLE HELPED OUT OTHERS AFTER HARVEY

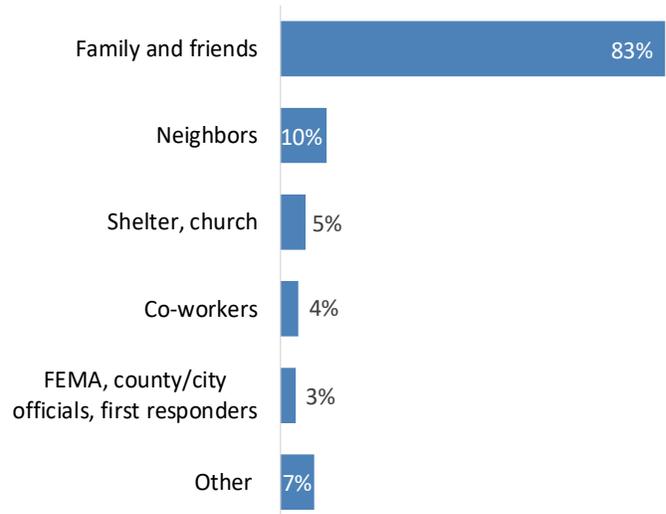


Among Houston area residents, 63% helped other people affected by the Hurricane. Out of those, 41% donated either financially or materially, 37% volunteered their time alone or with a group, 20% provided housing, and 35% provided help in some other way.

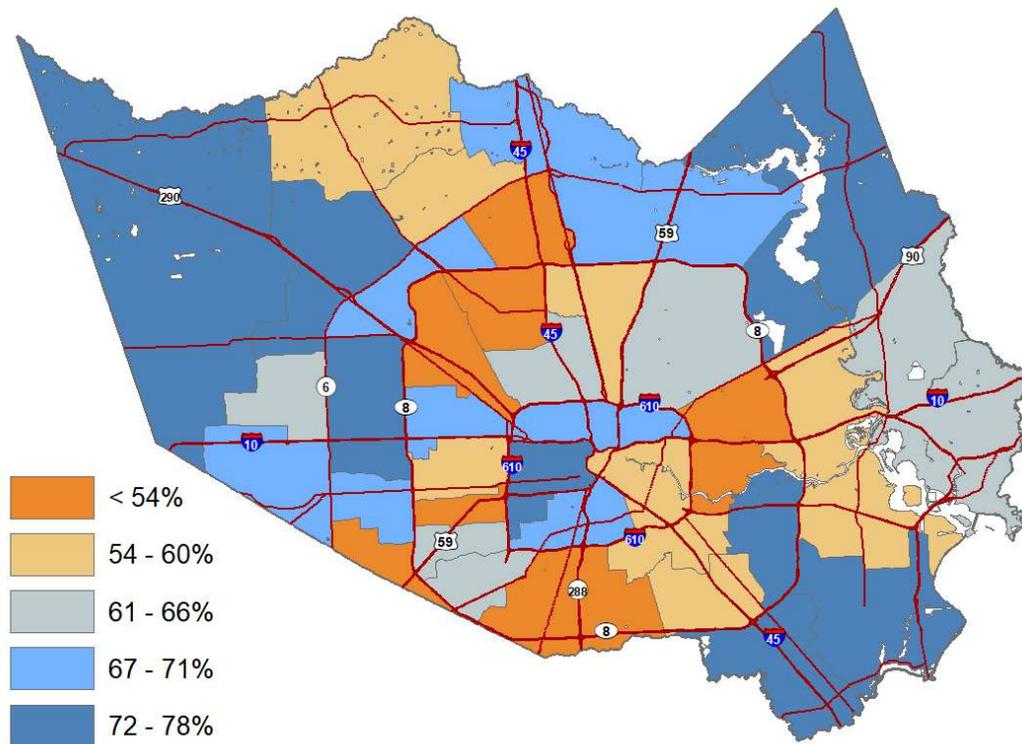
Thirty-four percent of residents reported that they received help to either prepare for the Hurricane or cope with its effects. Among residents who received help, 83% reported that friends and family helped them, 10% reported they were helped by neighbors, 5% by organizations that provided shelter and organizations of faith, 4% by their coworkers, and 3% by FEMA and local government representatives.

Our final map shows that residents all across the county extended help, in their own way, to their neighbors and communities to recover and rebuild their lives after the storm.

WHO HELPED AFTER HARVEY



PERCENT RESIDENTS HELPING OTHER PEOPLE AFFECTED BY HURRICANE HARVEY



References

- AHA (2014). *Healthy living: Frequently asked questions about sugar*. Retrieved from American Heart Association: http://www.heart.org/HEARTORG/HealthyLiving/HealthyEating/Nutrition/Frequently-Asked-Questions-About-Sugar_UCM_306725_Article.jsp#.XMS-ykhKhPY
- BRFSS (2017). *Texas Health Data, Center for Health Statistics, Texas Behavioral Risk Factor Surveillance System*. Retrieved from Texas Department of State Health Services: <http://healthdata.dshs.texas.gov/CommunitySurveys/BRFSS>
- BRFSS (2017). *Texas Health Data, Center for Health Statistics, Texas Behavioral Risk Factor Surveillance System*. Retrieved from Texas Department of State Health Services: <http://healthdata.dshs.texas.gov/CommunitySurveys/BRFSS>
- Buettgens, M., Blumberg L.J., and Pan C. (2018). *The uninsured in Texas. Statewide and local area views*. Retrieved from Urban Institute: https://www.episcopalhealth.org/files/2715/4447/0560/201812.10_Uninsured_in_Texas_FINAL.pdf
- CDC (2017). *Get the Facts: Sugar-Sweetened Beverages and Consumption*. Retrieved from Centers for Disease Control and Prevention: <https://www.cdc.gov/nutrition/data-statistics/sugar-sweetened-beverages-intake.html>
- CDC (2017). *Prevalence of obesity among adults and youth; United States, 2015-2016*. Retrieved from U.S. Department of Health and Human Services. Centers for Disease Control and Prevention. National Center for Health Statistics. NCHS data Brief, No.288: <https://www.cdc.gov/nchs/data/databriefs/db288.pdf>
- CDC (2019). *BRFSS Prevalence & Trends Data*. Retrieved from National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health: https://nccd.cdc.gov/BRFSSPrevalence/rdPage.aspx?rdReport=DPH_BRFSS.ExploreByTopic&irbLocationType=StatesAndMMSA&isIClass=CLASS19&isITopic=TOPIC67&isIYear=2016&rdRnd=16050
- CDC (2019). *Centers for Disease Control and Prevention. Chronic Diseases in America*. Retrieved from <https://www.cdc.gov/chronicdisease/resources/infographic/chronic-diseases.htm>
- CDC (2019). *Colorectal Cancer*. Retrieved from Centers for Disease Control and Prevention: https://www.cdc.gov/cancer/colorectal/basic_info/screening/tests.htm
- CDC. (2019). *Physical Activity Guidelines for Americans. 2nd Edition*. Retrieved from Office of Disease Prevention and Health Promotion: https://health.gov/paguidelines/second-edition/pdf/PAG_ExecutiveSummary.pdf
- DHHS (2019). *Healthy People 2020. Cancer*. Retrieved from the Office of Disease Prevention and Health Promotion. Healthy People 2020, Maternal, Infant, and Child Health: <https://www.healthypeople.gov/2020/data-search/Search-the-Data#objid=4054>;
- DHHS (2019). *Healthy People 2020. Cancer*. Retrieved from Office of Disease Prevention and Health Promotion: <https://www.healthypeople.gov/2020/data-search/Search-the-Data#objid=4053>;
- Health of Houston Survey. (2010). *Health topics proposed for 2010 questionnaire*. Retrieved from https://sph.uth.edu/content/uploads/2011/12/General-Fact-Sheet_100409.pdf

- HHS (2018). *Health of Houston Survey: Methodology Report*. Retrieved from Institute for Health Policy, School of Public Health, University of Texas Health Science Center at Houston: www.healthofhouston.org
- Marks, E., Ho V., and Sim S.(2016). *The Impact of the Affordable Care Act on Adult Hispanics in Texas*. Issue Brief 22. Houston: Episcopal Health Foundation. Retrieved from:
http://www.episcopalhealth.org/files/5714/6844/7140/Issue_Brief_22_FINAL.pdf
- NCI (2018). *Cancer causes and prevention. Human Papillomavirus (HPV) Vaccines*. Retrieved from Department of Health and Human Services, National Cancer Institute: <https://www.cancer.gov/about-cancer/causes-prevention/risk/infectious-agents/hpv-vaccine-fact-sheet>
- RWJF (2008). *Robert Wood Johnson Foundation. Overcoming obstacles to health. Report from the Robert Wood Johnson Foundation to the Commission to Build a Healthier America*. Retrieved from
<http://www.commissiononhealth.org/PDF/ObstaclesToHealth-Report.pdf>
- TDSHS (2019). *Electronic nicotine delivery systems (E-cigarette) report*. Retrieved from Texas Department of State Health Services: <https://www.dshs.texas.gov/tobacco/pdf/2017-Electronic-Nicotine-Delivery-Systems-Legislative-Report.pdf>
- U.S. DHHS. (2019). *Office of Disease Prevention and Health Promotion. Healthy People 2020, Maternal, Infant, and Child Health*. Retrieved from <https://www.healthypeople.gov/2020/data-search/Search-the-Data#topic-area=3492>;
- WHO (2014). *World Health Organization. Basic Documents, Forty-eighth edition*. Retrieved from
<http://apps.who.int/gb/bd/PDF/bd48/basic-documents-48th-edition-en.pdf#page=1>

Questionnaire Topics

Health Status	Adult	Child
General health status	■	■
Quality of life	■	
Disabilities		■
Health Conditions		
Asthma	■	■
COPD	■	
Diabetes	■	
Cardiovascular disease	■	
Hypertension		
Dental health	■	■
Mental Health		
Mental health status	■	■
Perceived need, use of mental health services	■	■
Treatment completion	■	
Health Behaviors		
Meat intake, fast food, carbonated and high sugar drinks	■	■
Physical activity and exercise	■	■
Screen time		■
Alcohol use	■	
Tobacco, electronic cigarette, snuff/chewing tobacco use	■	
Environmental smoking	■	■
HIV testing	■	
Women's Health		
Pap test screening	■	
Mammography screening	■	
Pregnancy status	■	
Prenatal Care/Breastfeeding		
Entry into prenatal care	■	
Current and future barriers to prenatal care	■	
Breastfeeding	■	
Cancer History and Prevention		
Cancer diagnosis and type	■	
Colorectal cancer screening	■	

	Adult	Child
Skin cancer prevention	■	
Vaccines		
Flu vaccine	■	
Human Papillomavirus (HPV) vaccine		■
Reasons for no HPV vaccination		■
Neighborhood and Housing		
Homeownership, length of time at current residence	■	
Sidewalks	■	
Safety	■	
Environmental pollution/noise pollution	■	
Availability of fruits and vegetables, ability to purchase	■	
Social isolation	■	
Health Care Access and Utilization		
Usual source of care	■	■
Delays in getting care (prescriptions, medical care, dental care, mental health)	■	■
Health Insurance		
Current insurance coverage type	■	■
Coverage over past 12 months, reasons for lack of insurance	■	■
Economic hardship due to medical expenses	■	
“My Harris Health” card	■	■
Insurance through marketplace, reason for not purchasing	■	
Dental health coverage	■	■
Public Program Eligibility		
Program participation (TANF, Food Stamps, SSI, SSDI, WIC)	■	
Social security, pension	■	
Income		
Household income, number of persons supported by household income	■	■
Household poverty level	■	■
Economic hardship	■	■
Food insecurity	■	■
Employment		
Employment status last week	■	
Hours worked at all jobs	■	
Employment status last year	■	
Time of unemployment last year	■	

	Adult	Child
Occupation	■	
Hurricane Harvey - Related		
Property damage	■	
Recovery and needs	■	
Health conditions post-Harvey	■	
Evacuation due to Harvey	■	
Time away from home	■	
Change in employment	■	
Change in income	■	
Assistance post-Harvey	■	
Caregiving		
Time spend in caregiving	■	
Disaster Preparedness		
Emergency supplies, plan	■	
Respondent Characteristics		
Race/ethnicity, age, gender, BMI	■	■
Education	■	
Marital status	■	
Sexual orientation	■	
Citizenship, immigration status, country of birth, length of time in U.S.	■	
Parents' country of birth	■	
Languages spoken at home, English language proficiency	■	

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