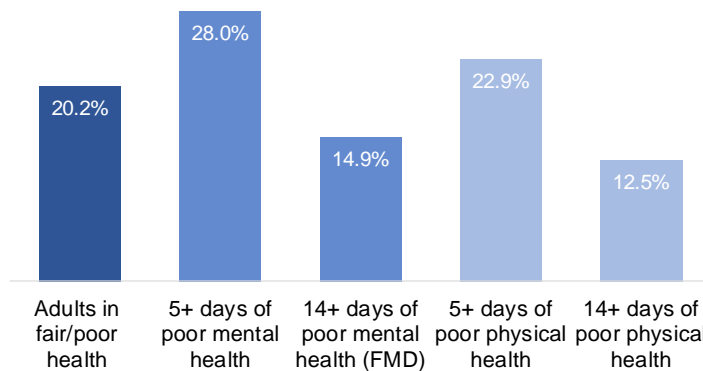


December 2019

## Self-reported Health Status in the Houston Area

Health is a combination of physical, mental and social wellbeing and is usually measured both subjectively, through self-reporting of health status, or objectively through medical tests and examinations. Measuring health status in a large population is a more daunting task due to the high costs associated with the medical assessment of health and, at the same time, the difficulty of measuring objectively all facets of such a complex and multidimensional concept. Self-reported health may vary based on how people understand the question(s) and assess their health which has been shown to depend on their socioeconomic status, age-related attitudes and cultural factors. Notwithstanding these difficulties, there is consensus (Idler 1997, Quesnel–Vallée 2007) that a simple question on how the respondent rates their health can provide useful information on their state of health and is highly-correlated with mortality and morbidity.

Figure 1. Fair and Poor Health and Quality of Life Indicators in Houston Area



Source: Health of Houston Survey 2018

the respondents had in the last 30 days, 28% of adults reported they had five or more days of bad mental health and 14.9% reported they had 14 or more days of bad mental health, otherwise being referred to as ‘*Frequent Mental Distress*’ (FMD), in the last month.

Regarding poor physical health in the last month, 22.9% residents reported they had five or more days, and 12.5% reported they had 14 or more days of bad physical health. Houston area residents reported an average of 4.2 days of poor physical health and 4.7 days of poor mental health, which amounted to a total of 7.7 days in average of unhealthy days in a month.

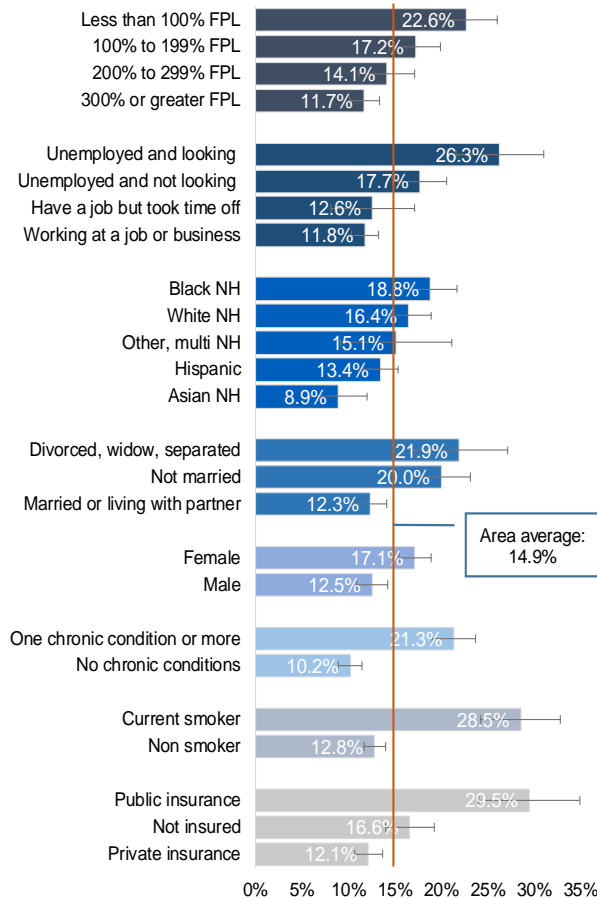
Data used in this factsheet are from the 2018 Health of Houston Survey (HHS) of 5,656 randomly selected adult residents in Harris County and the City of Houston who were interviewed by phone, and weighted to represent the non-institutionalized adult population of the area. In 2018, 20.2% of residents reported their health was poor and fair (Figure 1), compared to the national estimate of 18.4% and Texas rate of 20.8% in 2017 (KFF 2017). To the question about the ‘*days of poor mental health*’,

- Would you say your *health in general* is excellent, very good, good, fair or poor?
- Now, thinking about your *physical health*, which includes physical illness and injury, how many days during the past 30 days was your physical health not good?
- Now thinking about your *mental health*, which includes stress, depression, and problems with emotions, how many days during the past 30 days was your mental health not good?

Figure 2 depicts a breakdown of frequent mental distress (14 or more days of bad mental health in the last month), adjusted for age groups, across socio-demographics, chronic conditions and behavioral risk factors. Frequent mental distress seems to be worse among poor adults, especially among those with household income below federal poverty line (FPL) (22.6%), compared to 11.7% of adults with higher income, at 300% or higher FPL. The difference of mental distress among unemployed residents who were looking for work and the ones who were employed was even starker, 26.3% versus 11.8%. It is worth noting that FMD is less frequent among people married or living with a partner, compared to adults who are not married or who live alone, supporting previous evidence, which has suggested that sharing life responsibilities with a partner has a positive effect on health.

- Frequent mental distress affects **1 in 6** residents with household income below federal poverty line, compared to **1 in 10** with income at 300% or higher FPL.
- African American residents are almost **2 times** as likely as Asian residents and **1.5 times** as likely as Hispanic residents to report frequent mental distress.

Figure 2. Frequent Mental Distress\* across Chronic Conditions, Sociodemographic, Economic, and Behavioral Risk Factors



The FMD rate among females is greater than males, which is also seen in rates of serious psychological distress measured by the Kessler Scale (Kessler, 2010). Cigarette smokers were more than twice as likely to report mental distress (28.5%) as non-smokers (12.8%). The same picture is seen for residents suffering from one or more chronic condition, 21.3% versus 10.2% among residents who did not suffer from any chronic conditions. Respondents were categorized as having at least one chronic condition if they had been diagnosed with one or more of the following conditions: diabetes, heart attack, heart disease, stroke, high blood pressure, chronic obstructive pulmonary disease (COPD), or asthma.

Table 1 presents rates of fair or poor health, and the area-wide means of three other measures of health-related quality of life indicators: days of poor physical health, days of poor mental health and unhealthy days, across various groupings.

Note: \*Adjusted for age groups.  
Source: Health of Houston Survey 2018

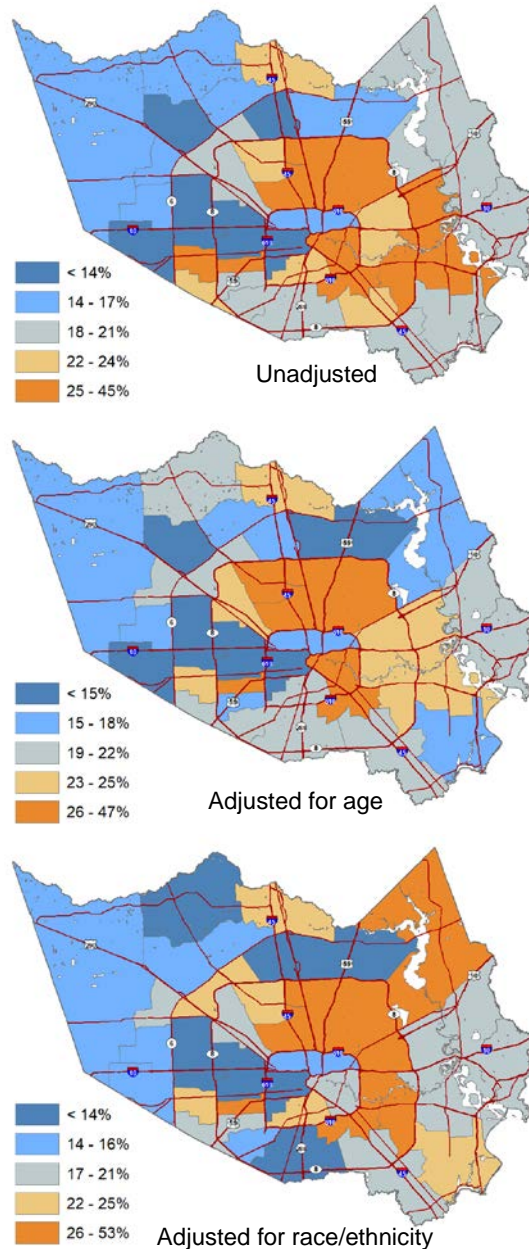
**Table 1. Fair and Poor Health and Days of Poor Health**

	Fair/poor health (%) <sup>1</sup>	Days physical health poor (Mean) <sup>1</sup>	Days mental health poor (Mean) <sup>1</sup>	Total unhealthy days (Mean) <sup>1</sup>
<b>Gender</b>				
Male	18.6	3.6	4.1	6.7
Female	21.6	4.7	5.4	8.6
<b>Education</b>				
HS or more	16.7	3.6	4.7 <sup>NS</sup>	7.2
Less than HS	36.1	6.7	5.1	9.8
<b>Marital status</b>				
Married or living with partner	18.0	3.7	3.9 <sup>#</sup>	6.7
Divorced, widow, separated	24.0	6.5	7.3	11.3
Not married	26.0	5.0	6.3	9.5
<b>Race/ethnicity</b>				
Hispanic	27.8	4.7	4.3	7.7
White NH	14.4	3.8	5.3	7.9
Black NH	23.9	4.9	5.8	8.8
Asian NH	9.7	2.2	3.3	5.2
Other, multi NH	17.4	4.6	5.4	8.5
<b>English proficiency</b>				
Very well	16.3	3.5 <sup>#</sup>	4.8 <sup>NS</sup>	7.0 <sup>NS</sup>
Well	23.3	4.4	4.3	7.2
Not well/not at all	33.3	6.1	3.5	8.1
<b>One or more chronic conditions</b>				
Yes	30.4	5.9	6.5	10.5
No	11.0	2.5	3.4	5.3
<b>Obesity</b>				
Yes	28.3	5.1	5.3	8.8
No	16.2	3.7	4.6	7.2
<b>Insurance</b>				
Not insured	25.6	4.8	5.3	8.3
Private insurance	14.4	3.2	4.1	6.4
Public insurance	39.5	7.6	8.6	12.9
<b>Frequency of social interactions</b>				
Rarely or never	27.3	4.8	5.1 <sup>NS</sup>	8.5 <sup>#</sup>
Sometimes within a month	17.1	3.6	4.3	7.0
Several times a week	17.3	4.1	4.7	7.5
<b>Federal Poverty Level</b>				
<100% FPL	35.7	7.0	6.6 <sup>#</sup>	10.9
100% to 199% FPL	26.7	4.7	5.3	8.5
200% to 299% FPL	21.7	4.2	4.7	7.8
>299% FPL	11.7	3.0	4.0	6.3
<b>Employment</b>				
Working at a job or business	13.8	2.8 <sup>#</sup>	4.0	6.1 <sup>#</sup>
Have a job but took time	15.7	4.9	4.1	7.8
Unemployed & looking	27.4	6.0	7.6	10.6
Unemployed & not looking <sup>2</sup>	31.1	6.0	5.4	9.4
<b>Physical Activity</b>				
Does Not Meet				
Aerobic Recommendations	31.6	6.2	6.7 <sup>#</sup>	10.5
Some Activity	23.2	4.6	4.5	7.9
Meets Recommendations	15.2	3.3	4.3	6.6
<b>Binge Drinking</b>				
No binge drinking last year	21.0	4.3 <sup>NS</sup>	4.6 <sup>NS</sup>	7.6 <sup>NS</sup>
Binge drinking at least once	17.2	3.7	5.1	7.5
<b>Cigarette Smoking</b>				
Yes	29.4	5.5	8.1	11.3
No	18.6	3.9	4.2	7.1

Note: HS=High school, NH=Non Hispanic, <sup>1</sup> Adjusted by age groups, <sup>2</sup> Includes retired residents with those with disability, <sup>NS</sup> Difference in estimates between the groups is not statistically significant (Pearson for percentages and Adjusted Wald for means). <sup>#</sup> Not all differences between categories are statistically significant (Adjusted Wald test). Source: Health of Houston Survey 2018

Disparities remain -- for fair/poor health status and days when physical and mental health was not good -- across groups defined by gender, education, marital status, existing conditions, obesity, insurance type, poverty level, employment, physical activity and cigarette smoking as depicted in Table 1. Female residents, those with less than high school education, and unmarried (or not living with a partner) adults report in higher numbers being in poor health and having more days of bad physical health compared to their counterparts. Hispanic and African American adults fair worse than White or Asian adults, with respect to unhealthy days and physical health in particular. African American adults report a higher average of days in poor mental health compared to all other groups. Residents who currently smoke, and those who are not physically active also are more likely to report poor physical and mental health compared to those who do not smoke and those who are physically active, regardless of the magnitude and frequency of activity.

**Figure 3. Distribution of Adults in Fair or Poor Health across Houston Area**

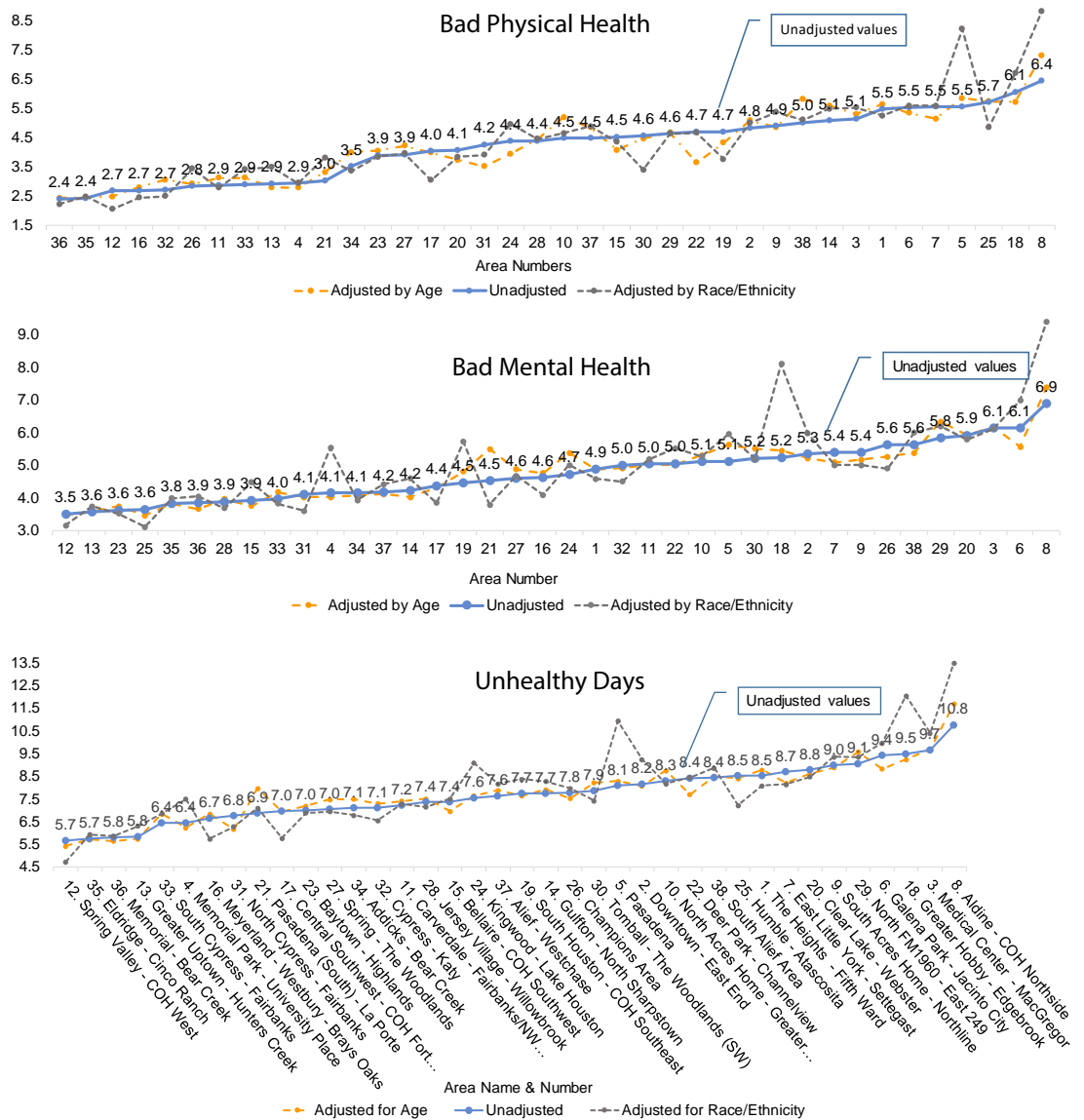


Note: Areas in the map follow delineation of American Community Survey Public Use Microdata (PUMA) areas. Map categories are quintiles. Source: Health of Houston Survey 2018

Geographical disparities for poor or fair health were also seen across Harris County areas. The crude rates varied, from 9.6% in the Memorial Park area to 45.3% in the Aldine area. Because demographic composition of the population varies across areas, we present in Figure 3, separately, the adjusted rates for age groups and race/ethnicity, using their distribution in the population of Houston area from our survey.

This adjustment (standardization) provides for a fairer comparison across areas that vary widely in their socio-demographics. As illustrated in Figure 3, some areas (e.g., Deer Park area) improve, exiting the top quintile of rates of poor/fair health when adjusted for age groups or for race, while others join the top quintile when adjusted for age groups (North Acres Home area) or for race/ethnicity (Kingwood, Galena Park and Pasadena areas). Nonetheless, areas such as South Acres Home, Gulfton, Edgebrook, Settegast and Aldine remain in the top eight areas even after adjusting for age or for race and ethnicity.

Figure 4. Average Unhealthy Days, Days of Poor Physical and Mental Health across PUMAs



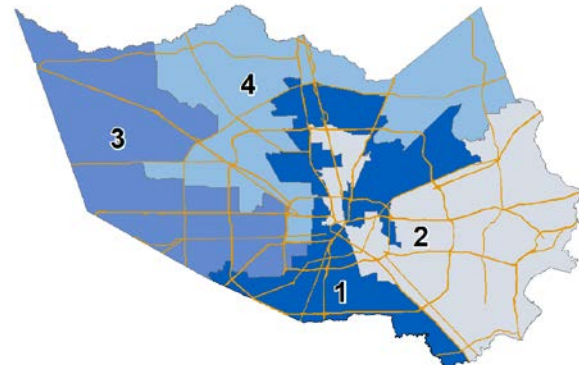
Rankings of areas in the county based on monthly average days of poor physical health, poor mental health and unhealthy days are presented in Figure 4. The line in the graphs shows the unadjusted rates, sorted from the lowest to the highest value, while the dots represent the adjusted rates for age and for race/ethnicity. Aldine, Medical Center and Galena Park have some of the highest crude number of days of bad mental health and total unhealthy days in a month, compared to other areas, and Aldine has the highest number of days of bad physical and mental health based on crude, age-adjusted and race/ethnicity-adjusted estimates. Spring Valley, Eldridge and Memorial areas have the lowest number of monthly unhealthy days in the county.

Aldine has the highest number of days of **poor physical and mental health** based on crude, age-adjusted and race/ethnicity-adjusted estimates.



A comparison of the quality of life indicators among the Harris County Commissioner’s Precincts also reveals disparities. Residents in Precinct 1 were more likely to have had five or more days of bad mental health in the last month (32.7%) compared to those residing in the other precincts. While in general fewer residents reported 14 days of bad mental health or frequent mental distress, more adults did so in Precinct 1 (17.9%), compared to other precincts or to the County average of 14.8%.

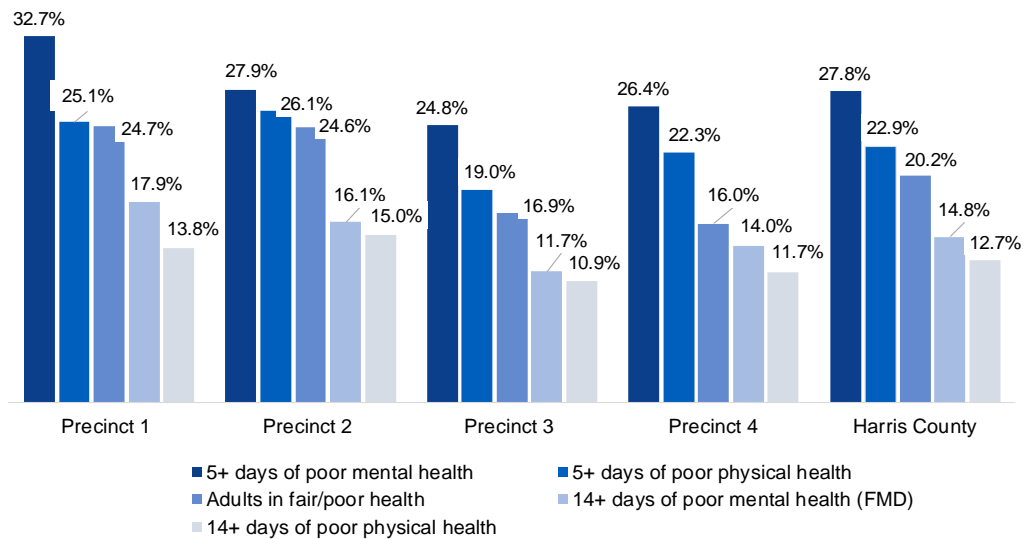
Harris County Commissioner’s Precinct Boundaries



Precinct 1 and 2 residents had in average 8.8 and 8.3 unhealthy days in the last month versus 7.3 days in Precinct 4 and 6.7 days in Precinct 3.

Precinct 2, followed by Precinct 1, has the highest rates of residents reporting five or more days of bad physical health, 26.1% and 25.1% respectively, compared to 19% in Precinct 3 and 22.3% in Precinct 4, which are below the County average of 22.9%. The same disparity was seen for residents reporting 14 days or more of bad physical health, where Precinct 2 (15%), followed by Precinct 1 (13.8%), had the highest rate compared to Precinct 3 (10.9%) and Precinct 4 (11.7%). Rates of poor/fair health were also higher among adults in Precinct 1 (24.7%) and 2 (24.6%) than among adults in Precinct 3 (16.9%) and Precinct 4 (16.0%).

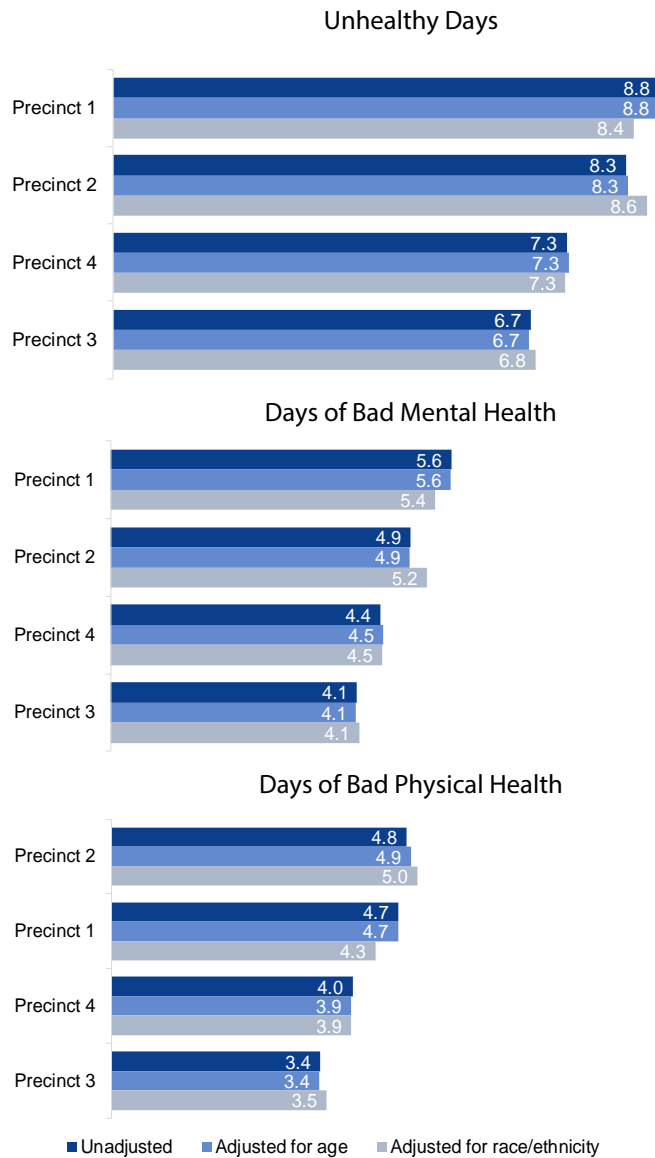
Figure 5. Fair and Poor Health and Quality of Life Indicators in Harris County and Commissioner’s Precincts



Note: All differences between groups were statistically significant at 95% confidence level. Source: Health of Houston Survey 2018

The average number of unhealthy days in the last month was the highest among residents living in Precinct 1 and 2, 8.8 days and 8.3 days respectively, compared to 7.3 days in Precinct 4 and 6.7 days in Precinct 3. The Harris County average was 7.7 days. Adjusting for age groups did not modify the ranking, but adjusting for race/ethnicity reduced the difference between Precinct 1 and 2 considerably. Regarding number of days of bad mental health, the highest average was seen in Precinct 1 (5.6 days), which was also higher than the county average of 4.7 days. Adjustment for race and ethnicity erased the difference in averages between Precinct 1 and Precinct 2. The average of days of bad physical health was the highest in Precinct 1 (4.8 days) and Precinct 2 (4.7 days). The differences in averages among Precincts 1, 4 and 3 are diminished when adjusted for race and ethnicity, while the differences increase between days Precinct 2 and others, bringing Precinct 2 in the lead with 5 days in average, which is still higher than the county average of 4.2.

Figure 6. Days of Poor Physical and Mental Health across Harris County Commissioner’s Precincts



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For more information on HHS 2018 methods please visit [www.healthofhouston.org](http://www.healthofhouston.org).

## Harris County PUMAs Names

