UNIVERSITY of HOUSTON

THE INSTITUTE FOR RESEARCH ON WOMEN, GENDER & SEXUALITY

Pandemic Gender Snapshot #4 – July 30, 2020

Update on Houston/Harris County Covid-19 Fatalities by Gender, Race/Ethnicity & Age[1]

As Covid-19 Deaths Rise, Demographic Variations Continue

As the numbers of Covid-19 *infections* have risen since the Texas re-opening in May after the Spring 2020 H/HC Stay Home order, the numbers of Covid *deaths* have also risen.[2] In the past three weeks (July 8-28), **265** new Covid-19 deaths were reported in Houston/Harris County (107 of them in the past week), bringing the total to **670**. Of the 265, **173 were men, 92 were women,** bringing the local reported Covid death totals by gender to **404 men, 265 women, 1 gender unknown,** though testing shows an **infection rate** of roughly **50/50.**[3] This update expands on previous snapshots with current numbers and analyses.

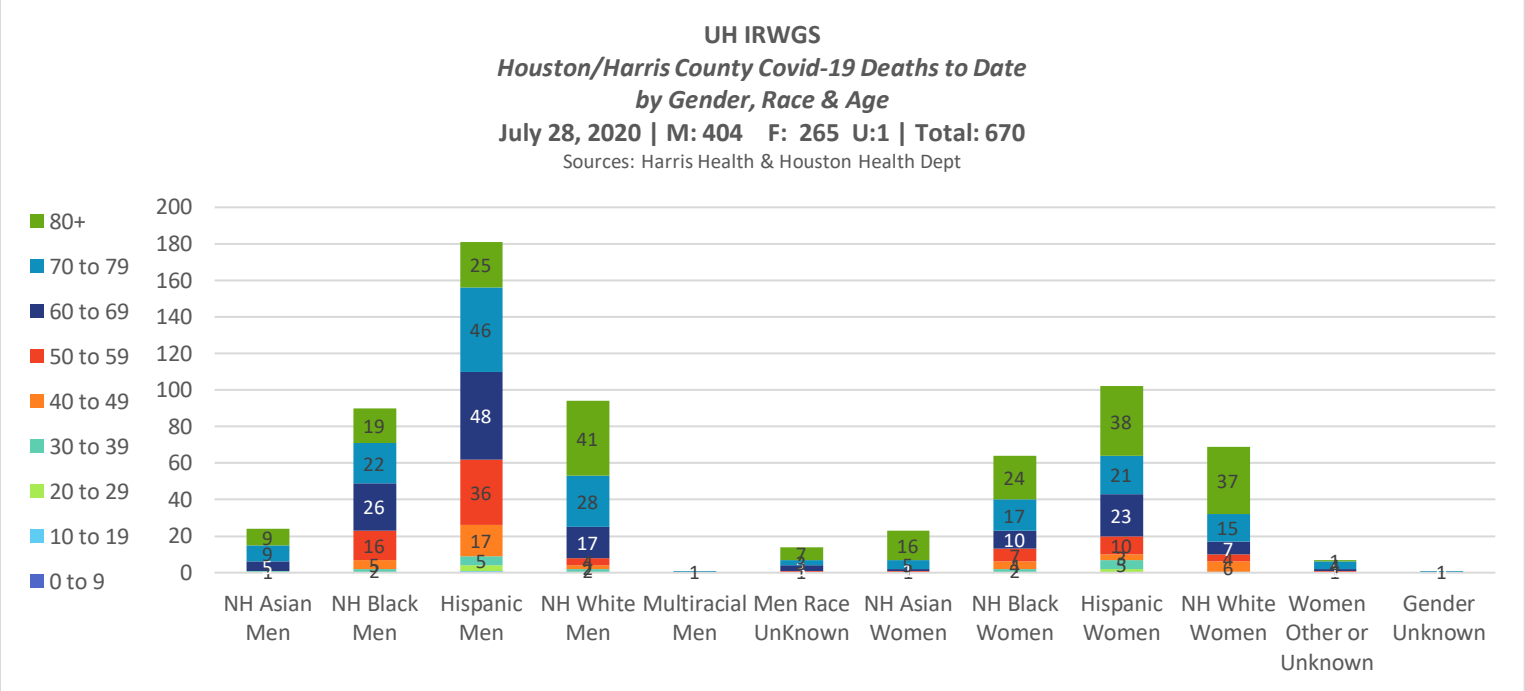

Figure 1. COH – 408 | Harris Health – 262.

Of the total 670 deaths in the two jurisdictions, **40.7% were female, and 59.3% male, consistent with the global pattern of more male deaths**, likely due to a combination of biological and behavioral factors,

[1] This Snapshot updates earlier Snapshots, re reported Covid-19 death data for Houston/Harris County, based on death certificate data from the Houston Health Department and Harris Health (which divide the county's death reports based on decedent's place of residence). The Snapshot combines new analyses with some from previous Snapshots, to provide a current overview. See below for discussion of *excess Covid deaths* not reported as such.

[2] NB: Deaths *reported* on a given day actually occurred a week to two months previous to their report, due to processing time. And some deaths actually due to Covid-19 will not be reported as such if the person was not tested or diagnosed. Figure 2 reflects reported deaths by date of occurrence.

[3] Per Houston/Harris County Covid-19 Dashboard: 51% female, 46% male and 3% unknown, as of July 30, 2020.

with behaviors that lead men to be in worse health than women generally perhaps more influential.[4] But people of all genders/sexes with such co-morbidities as *obesity, diabetes, heart disease, and respiratory ailments* are at greater risk than those without. Of the 408 deaths documented to date in the City of Houston by 7/28, **only 9% (37) were listed as *not* involving an underlying condition**.[5] Interestingly, the gender difference varies locally between the two local health departments, though less now than previously. The **City of Houston** Health Department reported deaths as of July 28 were 264 male / 144 female—**64.7%m/35.3%f**. But Harris Health's reported non-COH deaths as of July 28 were 140 male, 121 female, 1 gender-unknown—**53.4%m/46.2%f**. We're exploring that gender variation in mortality across jurisdictions, which may be linked to who is present in those areas (rural/urban) and/or in frontline jobs, to reporting/diagnosis differences, and/or to other factors. Overall the gender mortality gap seems to be increasing.

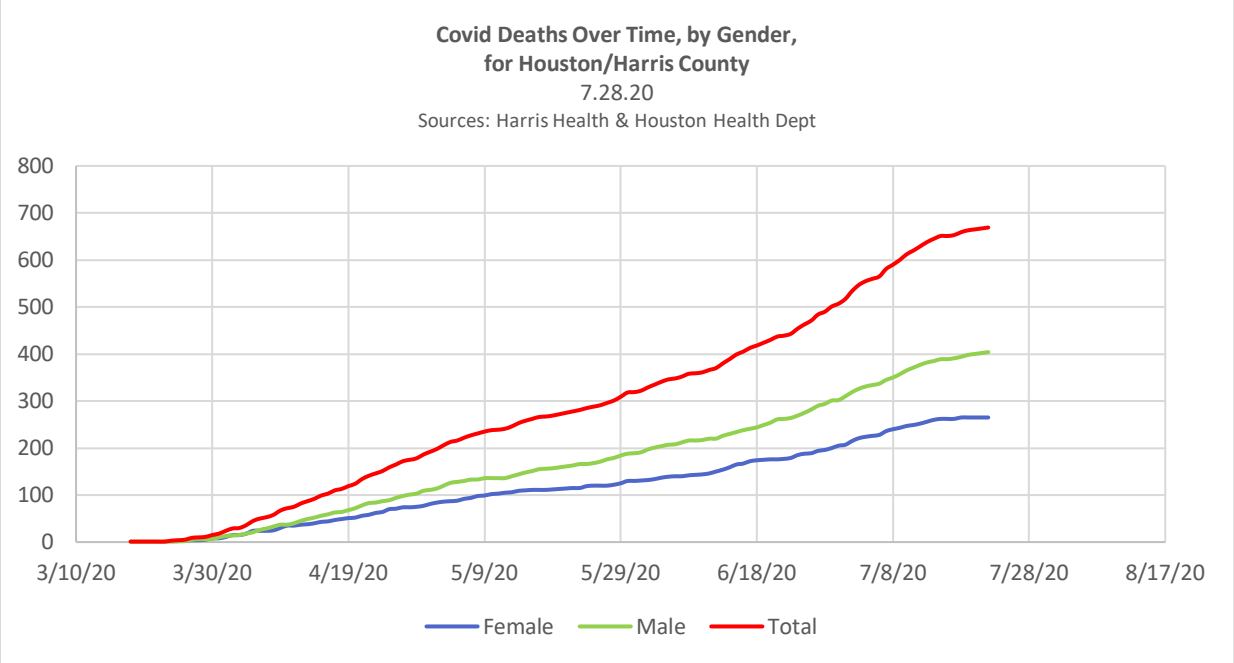

Figure 2.* *Note that the levelling off indicated in the last two weeks in Figure 2 reflects the lag in reporting – and will change going forward. The lag can vary from 1 week to 2 months or more, due to the complexities of state reporting for at-home deaths, etc. The figure is updated by date of death, rather than date of report.

The number of reported deaths does not accurately reflect total local deaths to Covid-19, for several reasons. First, for an extended period of weeks this spring, few people were being tested and therefore quite a few who had the virus were not identified as Covid-19 deaths. This is a national issue, and a recent study in *JAMA* presented the numbers of "excess deaths" due to respiratory ailments in March-

[4] The *Western Journal of Emergency Medicine* reports that in Italy men represent 58% of Covid-19 infections & 70% of Covid-19 deaths, while Wuhan China saw a majority of infections (between 51.0 and 66.7%) among men, with a 1:1.64 female/male ratio of deaths (*WJEM* 2020;21(3): 507-509). Respiratory infections SARS (2003) and MERS (2012) also saw sex-linked differentials. In the US, state death data around sex differentials vary widely, which (along with other factors) brings researchers at the Harvard GenderSci Lab to postulate that behavioral reasons like men's going to the doctor less, eating less healthy foods, and smoking more than women overall may play the biggest role. Nonetheless, some hormonal or genetic protection—from higher rates of estrogen/progesterone or from the double X chromosome—may play in. Differential rates of exposure through work outside the home & differences in over health-affecting behaviors (mask wearing, handwashing, etc.) are also potential factors. Grace Huckins, "Covid Kills More Men Than Women. Experts Still Can't Explain Why, " *Wired* (7.9.2020).

[5] Available Harris County Health Department data does not indicate whether there was a known underlying condition.

May 2020 compared to a running average of the past five years for that period in each state.[6] **They found that in Texas 55% of such excess deaths were not attributed to Covid-19 in March-May though most of them were caused by it.** Deaths in hospital will be tested for Covid, but deaths at home will not necessarily be, so they won't be so registered if not tested previously. If that 55% holds true for Houston/Harris County, the current number of deaths here to date likely surpasses **1300**. The percentage missed might change over time as testing increases, but some misses remain predictable, especially since, although testing has increased, it is not available timely to meet the demand of all who seek it in during spikes.

The death rate is also increased *when Texans without health insurance choose not to not seek help* if they become ill until it's too late, if at all. In 2018, Texas had the highest percentage of uninsured of any state at 17.7%, per the US Census bureau (national average was 8.9%).[7] *That percentage has risen substantially since March 2020, because many of those who lost their jobs in the pandemic also lost their insurance through their employers.* All the factors intertwine.

The undercount of infections and deaths and the actual rate of deaths also increase when people who wish to *avoid challenge on their immigration status are slow to seek assistance*, avoiding testing and/or hospitals. This will most directly affect the Hispanic population, though not solely. In addition, deaths due to other causes may be linked to Covid-19 if people with, for example, heart ailments refrain from getting treatment for fear of the virus.

Like the gender mortality differential, the race/ethnicity differential also continues marked.

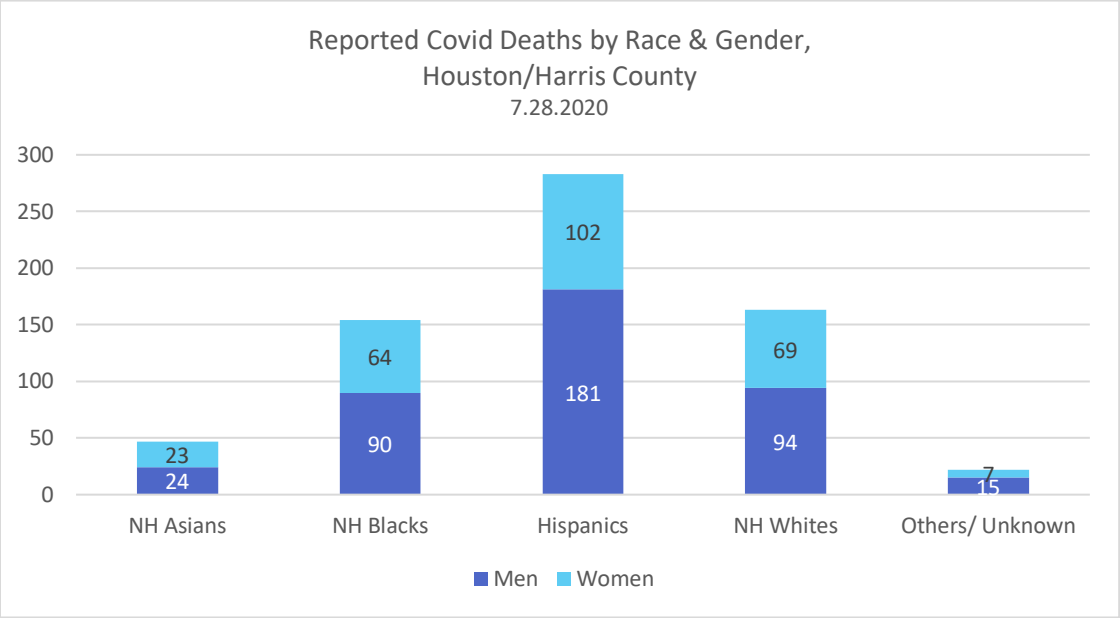

Figure 3.

[6] Weinberger *et al*. Estimation of Excess Deaths Associated with the COVID-19 Pandemic in the United States, March to May 2020. *JAMA Intern Med.* Published online July 1, 2020.
[7] US Census Bureau, *Health Insurance Coverage in the US: 2018*. Released Nov. 8, 2019.

Black men (**17.7%** of the Harris County adult male population / **22.3%** of reported male deaths) and **Black women** (**20.6%** of the county's adult female population / **24.2%** of reported female deaths)[8] continue to be represented among the dead in proportions higher than their proportions in the population, when compared to others of their same gender. These disparities are attributable to longstanding structural social and economic inequalities—including for example limited health care access, exposure in frontline jobs, underlying health conditions linked to stress and income and other racial disparities (obesity, diabetes, respiratory ailments, etc.), and dense housing.

Though the *number* of reported deaths among **Hispanic men** is much higher than among other groups, Hispanics also comprise the biggest sector of the local male population. Their *percentage* of reported deaths is now higher than their proportion in the local population (**41.9% of** the adult male population / **44.8%** of reported male deaths), though previously it was lower. Reported deaths among **Hispanic women** are on par with their proportion in the population and high in numbers (**38.9%** of the adult female population / **38.5%** of reported female deaths). Among the 173 male deaths reported in the past three weeks, 92 were Hispanic (at 53.2%, that's higher than the overall Hispanic average, suggesting that the proportion of Hispanic reported deaths may be increasing), and among the 92 female deaths reported in the same period, 45 were Hispanic (48.9%, also substantially higher than the overall average). The higher rates may reflect a higher infection rate than previously, a higher diagnosis/reporting rate, or some of both.

The actual numbers of Hispanic deaths to Covid-19 seem especially likely to be substantially higher than reported (linked to under-diagnosis/reporting and the "excess death" phenomenon described above). But all groups are affected by diagnosis inconsistencies, due to lack of testing capacity/access over time and other factors.

The percentage of male deaths represented by **White men** (**32.8%** of the adult male population / **23.3%** of reported male deaths) is lower than their relative presence overall and may be linked to more limited presence in frontline jobs and better healthcare access. The percentage of female deaths represented by **White women** (**32.3%** of the adult female population / **26.0%** of reported female deaths) is closer to (though also lower than) their relative presence. **Asian women** (**8.2%** of the adult female population / **8.7%** of reported female deaths) have died in numbers slightly higher than their relative presence and at higher rates than **Asian men** (**7.6%** of the adult male population / **5.9%** of reported male deaths), but the overall numbers are low, and the pattern may shift. Because the total when working with percentages must be 100%, if numbers of deaths in one group rise, the proportion of the others will fall; all the numbers are interactive.

Age also significantly intersects Covid-19 deaths, as Figure 4 indicates**.** The majority of Covid-19 deaths globally occur among people over seventy, and that is the case here as well. Overall, the old, those with underlying conditions and the poor/socially vulnerable, or those with some combination of those factors, seem most at risk.

[8] Harris County population analysis by race/ethnicity by UH IRWGS, based on the US Census's American Community Survey for 2018.

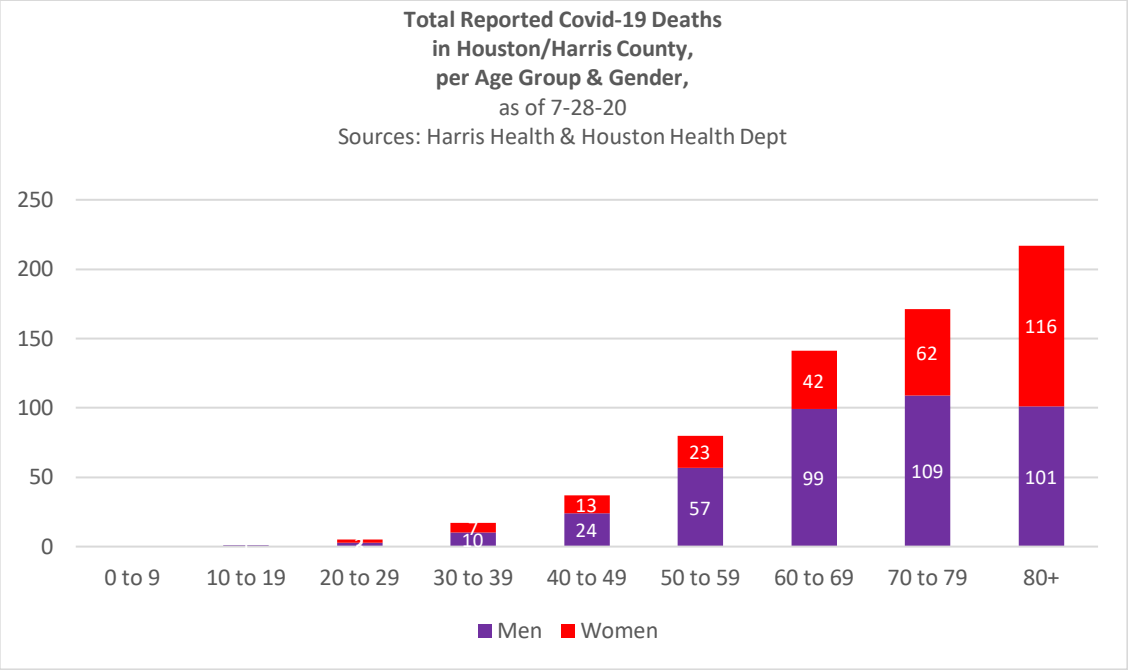

Figure 4.

While women have died in lower numbers than men in most age bands through 70-79, the dynamic reverses in the 80+ band (116 women / 101 men), likely because **men represent only 37% of the population of people 80 and over in Harris County.** Given that roughly twice as many women as men survive into their 80s and beyond (due to men's overall worse health outcomes), older women's higher Covid-19 fatalities actually are lower than their representation in the population. The same resiliency that allows women to live longer in general plays in with Covid-19.

Age also intersects with gender and race/ethnicity outcomes. All six reported deaths among people under 30 have been among Hispanics, and the 17 deaths reported among people in their 30s here to date break down as 10 Hispanic, 4 Black, 2 White, 1 Asian; of them 10 were male and 7 female. Deaths among the young are few across the board, but we will see ongoingly whether recent reports of higher transmission rates among younger people are followed by an increased death rate in that group, or not.

Expanding to a wider definition of relative youth**, reported deaths among men under 60** (94 total; 23.3% of male deaths**) have occurred to date in larger numbers among Blacks and Hispanics** (23/62, respectively) **than among Asians and Whites** (1/8, respectively). White men have died in higher numbers than men in other groups relative to overall racial presence only among men in their 80s or above (see Figure 5).

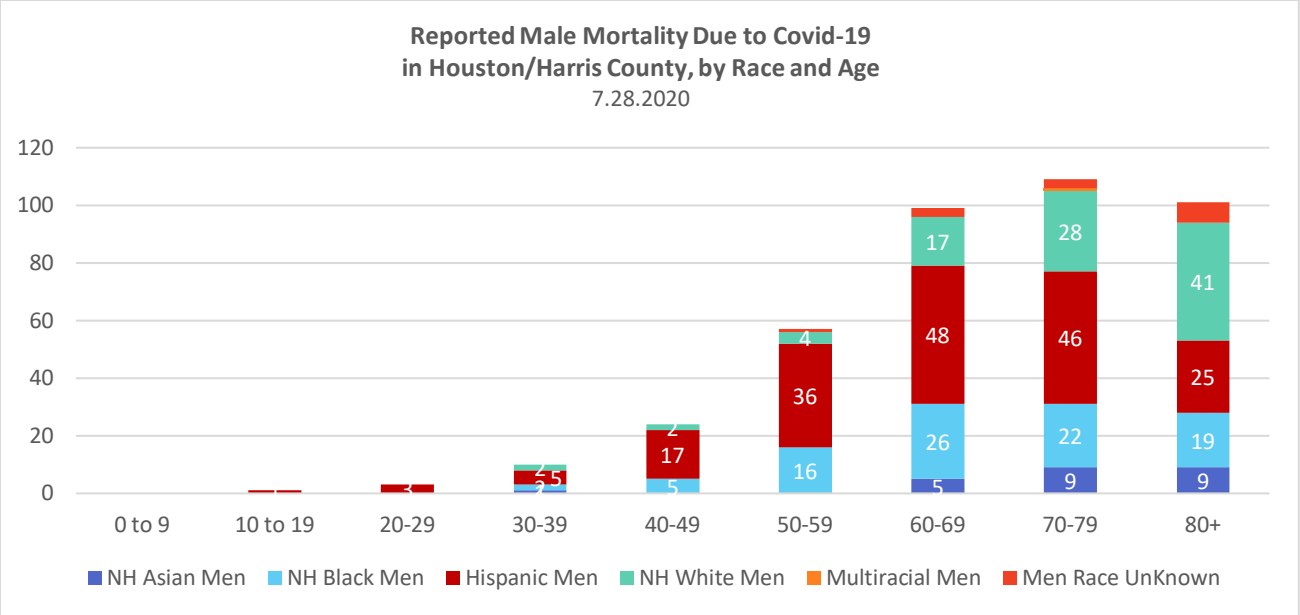

Figure 5.

Fewer younger women are dying than younger men overall (the 45 reported deaths to women below 60 [17.0% of female deaths] by race currently are: Asian 1, Black 13, Hispanic 20, White 10, Arab 1), see Figure 6.

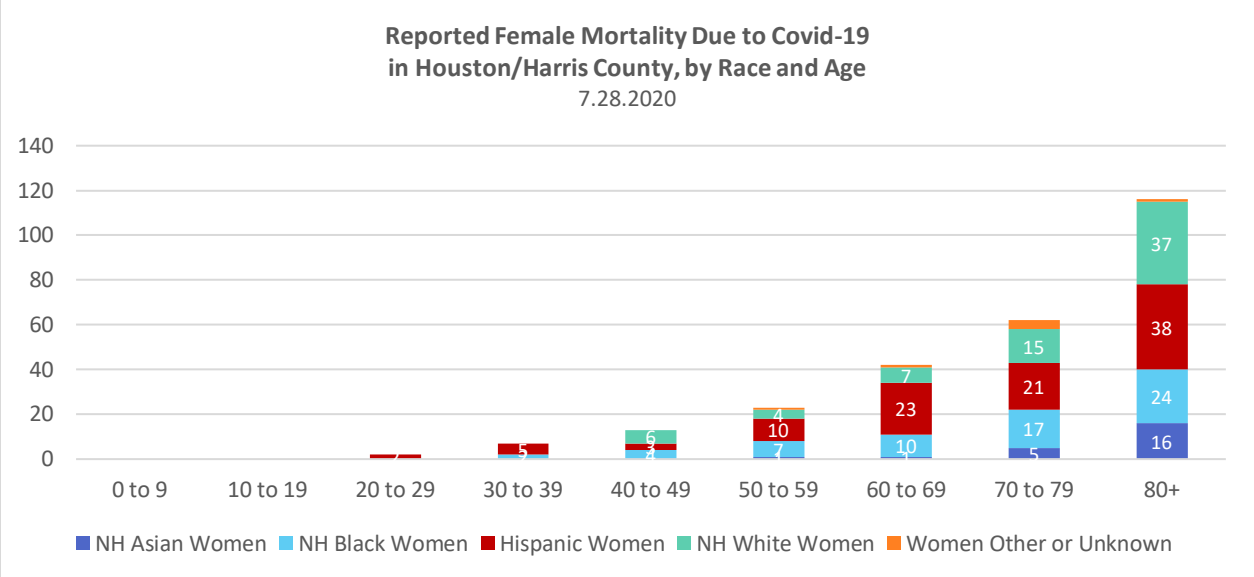

Figure 6.

While susceptibility to Covid-19 is greater among the elderly, the numbers of deaths in each age/race-ethnicity group will also relate to which racial/ethnic groups include more elderly people. A UT Southwestern Medical Center study, summarizes Texas average life expectancies across gender and racial groups:

- Hispanic women – 83.9 years; Hispanic men – 78.28
- White women – 80.6; White men – 75.6

- Black women – 78.0; Black men – 72.4

Lower life expectancies are directly linked to poverty and can be tracked to zip code level via the UTS website.[9] The "Hispanic Health Paradox," that Hispanics have longer lives in spite of high poverty rates, seems linked to high rates of immigration – and healthier food access / eating patterns in youth (and thus lower blood pressure and obesity), lower smoking rates and a tendency of healthier people to migrate. US-born Hispanics have similar obesity and other lifetime health issues linked to eating patterns as other Americans, in various class positions.[10]

Covid-19 has highlighted pre-existent disparities in American society linked to poverty and to the stresses of poverty and of racism, including health differences, and it has also emphasized gendered health differences—which may be in part biological and/or linked to socialized gender behaviors. Just as workplace exposure may be an issue for younger people, place and context of residence may also be a factor in whether a person contracts Covid-19: the virus has spread quickly in some nursing homes, for example (44% of Texas's Covid-19 deaths up to late June occurred in such places),[11] while elders in multi-generational families may also be at risk if younger frontline workers bring contagion home. Nursing home infection rates have ballooned in July.[12]

While Covid-19 has demonstrated some predictable socio-economic patterns, it also seems to behave in distinctive ways as a disease, around factors like gender, age, and post-infection immunity. In the coming weeks, we'll see whether the rising infection rate in Texas, said to involve a larger segment of younger people than was the case in prior hotspots like New York City and Northern Italy, leads to a similar or different pattern and rate of fatalities.[13]

As noted in previous Snapshots, the lower level of female Covid-19 deaths contrasts to a number of other gender differentials around the virus, both national and local. These include women's higher rates of workplace exposure in frontline jobs (in Harris County, women make up 74% of health workers, 59% of fast food workers, 73% of pharmacists, and 69% of cashiers); expanded responsibilities for childcare and homeschooling given the shutdowns; higher levels of domestic violence; and continued lower levels of pay (see UH IRWGS Initial Report on H/HC Gender & Sexuality Data, 2020). Efforts to reduce access to birth control and abortion during the pandemic may also affect women's long-term status.

Researchers on workplace equity predict that women overall and single mothers in particular[14] will see long-term career setbacks if they have to step away from jobs due to their greater responsibility for childcare and homeschooling due to pandemic school closures.[15] To address this likelihood,

---

[9] UTSouthwestern Medical Center, "New interactive map first to show life expectancy of Texans by ZIP code, race, and gender" (Feb. 27, 2019): https://www.utsouthwestern.edu/newsroom/articles/year-2019/life-expectancy-texas-zipcode.html

[10] Population Reference Bureau (prb.org), Paola Scommegna, "New Studies Link U.S. Hispanics' Longer Life Expectancy to Migration Patterns, Less Smoking" (Sept. 12, 2017): https://www.prb.org/hispanics-life-expectancy-migration-patterns/

[11] As of the end of June, 44% of Texas's total Covid-19 deaths (more than 1000) had occurred in nursing homes, very close to the US average. "43% of US Deaths Are Linked to Nursing Homes," *New York Times* (June 27, 2020).

[12] Sarah R. Champagne, "Coronavirus cases in Texas nursing homes more than doubled in July." *Texas Tribune* (July 28, 2020). Texastribune.org.

[13] For discussion of the many issues in play, see Whet Moser's June 26, 2020, article "Why Changing COVID-19 Demographics in the US Make Death Trends Harder to Understand," at The Covid-Tracking Project blog: https://covidtracking.com/blog/why-changing-covid-19-demographics-in-the-us-make-death-trends-harder-to

[14] Single mothers made up 30% of women living with children under 18 in Harris County in 2018 (ACS).

[15] Patricia Cohen and Tiffany Hsu, "Pandemic Could Scar a Generation of Working Mothers," *New York Times,* (June 3, 2020).

countermeasures must be adopted to guarantee that women will not see workplace penalties. Some parenting payment, for the service of raising the next generation in a time of crisis might also be considered.

On the many concatenating Covid-intensified fronts documented in this Snapshot, both equity and economic stability demand thoughtful innovation and transformative action by business and civic leaders, both nationally and locally.