

IRWGS Pandemic Gender Snapshot #10 – November 29, 2021
Update on Houston/Harris County Covid-19 Fatalities by Sex, Race/Ethnicity & Age¹
 Based on deaths confirmed as of 11/3-8, 2021.

With 69.7% of Harris County residents 12+ vaccinated, we still see infections and fatalities (95%+ of recent deaths here are unvaxd),² and new variants – which mutate in places with low vaccine access (currently Omicron).³ Since the PGS #9 (on deaths through May), **an additional 1007** Covid-19 new deaths were confirmed to have occurred in Houston/Harris County **between June & October 2021**, with higher numbers in the Delta wave (August & September – October data is partial). **491** previously undocumented Covid-19 deaths have also been confirmed for 4/2020 through 5/2021. This brings our total confirmed deaths to **6,249—2536 women, 3708 men, 5 sex unknown—40.6%F/59.3%M**. (All data are provisional & don't include undiagnosed Covid-19 deaths, or deaths not yet certified.)

This snapshot is based on death certificates confirmed by the Houston Health Department and Harris County Public Health. The process lags so these **undercount** actual deaths to date, especially recent deaths. The state of Texas reports 9,503 Harris County Covid-19 deaths as of 11/24/21, but provides no county-specific breakdown on demographics, with varying criteria for assigning location.⁴ **The smaller local dataset utilized here is of interest because it includes demographics and other data**, which suggest overall trends, and can assist analysis in the shorter term. In H/HC, **gender, race/ethnicity & age differentials in Covid-19 mortality in H/HC have been significant**. Figure 1 provides a H/HC Covid-19 mortality rate calculation by gender and race/ethnicity.

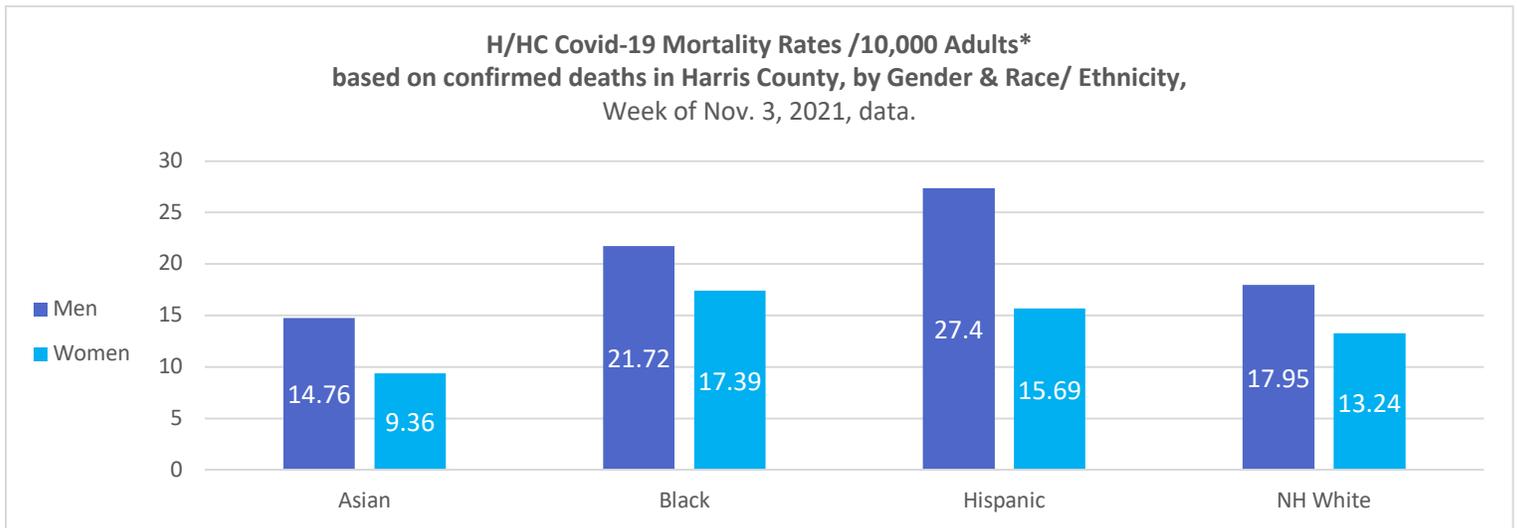


Figure 1 *Adults = 20 and over in the Harris County population (per 2019 ACS). Mortality Data per HHD & HCPH, as of Nov. 3, 2021.

¹ This Snapshot uses current Covid-19 death data based on Houston and Harris County Health Departments' death certificate data (agency based on decedent's residence). **This is provisional, dynamic data.** Gender/Sex & Race/Ethnicity as reported may not reflect preferred identities. HHD and HCPH deaths are confirmed as of 11/3/2021 & 11/8/21, respectively; the most recent occurred in October.

² The TX Dept. of State Health Services [reports \(11/8/21\)](#) that unvaccinated people were 20 times more likely to die of Covid-19 than unvaxd in Texas in September 2021, with fewer than 5% of deaths occurring among the vaccinated.

³ This is an effect of global vaccine inequity. The test positivity rate is 4.1% (UTSPH), and the County is 57.2% fully vaccinated, while 66.5% have at least one dose. (HC/H Covid-19 Data Hub : <https://covid-harriscounty.hub.arcgis.com/pages/vaccine-info>) accessed 11/29/2021. The site reports a 2-3 week lag, so rates are now higher, given the recent opening to children 5 to 11 years old. 69.4% of those over 12 are fully vaccinated, and 80.6% have received at least one dose.

⁴ Texas Dept. of State Health Services dashboard: <https://dshs.texas.gov/coronavirus/AdditionalData.aspx>, accessed 11/24/2021.

These rates are based on confirmed deaths to date compared to the adult population breakdown of Harris County.⁵ People of color, particularly men of color, have borne the brunt of the losses, both in absolute numbers and in relative mortality rates.

Figure 2 presents specific numbers of confirmed H/HC Covid-19 deaths by gender, race/ethnicity and age.

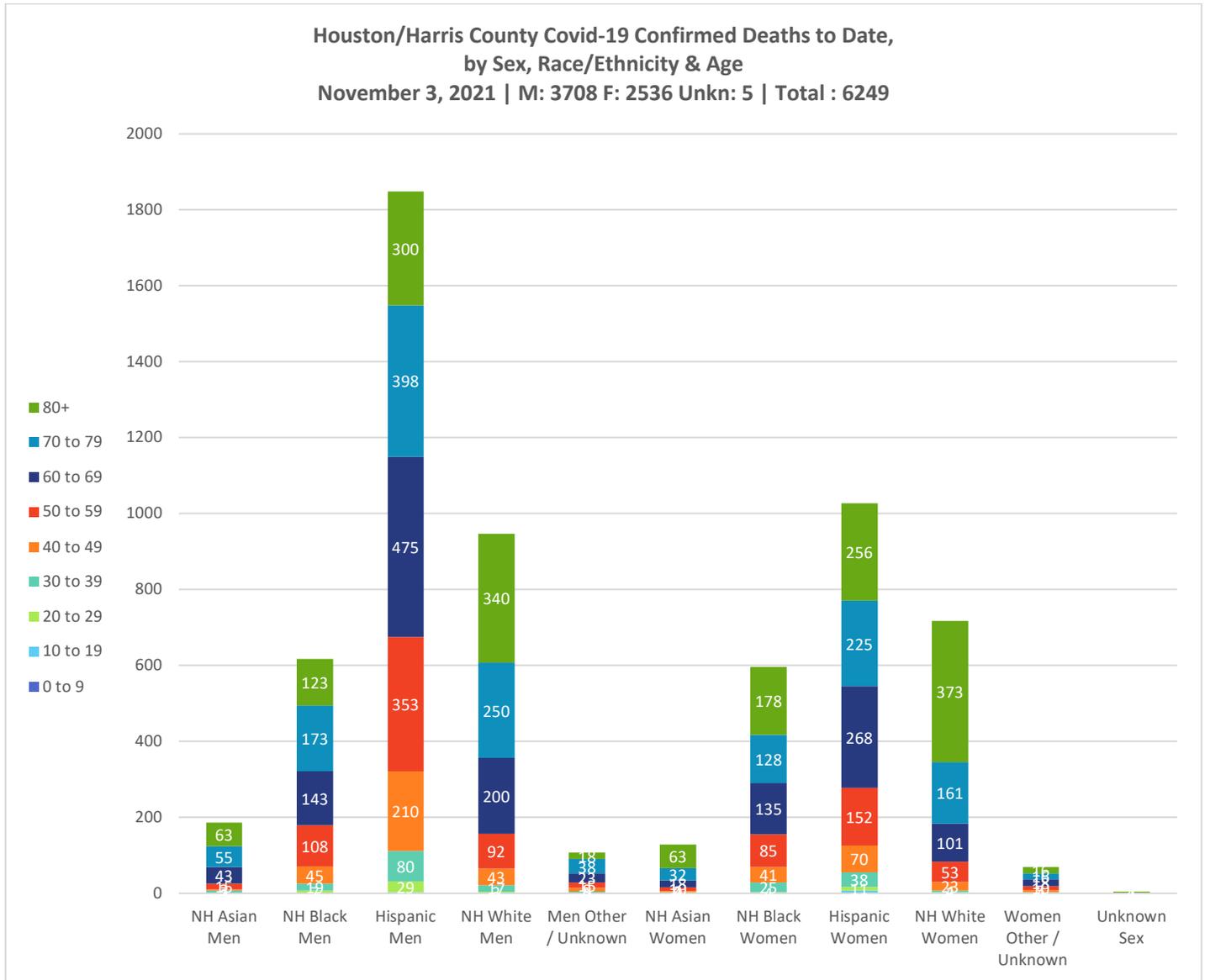


Figure 2 HHD – 3659 | HCPH– 2590 Mortality Data per HHD & HCPH, as of Nov. 3, 2021.

As of Nov. 3, confirmed deaths by race/ethnicity included: Asian **316** (187m; 129f); Black **1214** (618m; 596f); Hispanic **2872** (1848m; 1024f); NH White **1665** (947m; 718f); Other/Unknown **182** (108m; 69f; 5 unknown sex). Older people are most susceptible, but others may also die. As of November 2021, only **4.7% did not have an underlying condition** that increased their risk for death by Covid-19 (these include obesity,⁶ diabetes, respiratory illnesses, dementia, heart

⁵ Adult only because there have been few deaths in the younger population here (7 between 10 and 19 years old).

⁶ Even mild overweight can be a risk factor. Roni C. Rabin, [“Extra Pounds May Raise Risk of Severe Covid-19,” NY Times](#) (10/10/2020).

conditions and [other](#) ailments). The divisions revealed here in health outcomes along lines of race/ethnicity (often linked to income-status/class) indicate the need for a more equitable state and national health system.

The **adult population of Houston/Harris County (20+)** breaks out by Gender & Race/Ethnicity thus:

Male: 7.9% NH Asian; **17.6% NH Black**; 41.8% Hispanic; **32.7% NH White**

Female: 8.2% NH Asian; **20.5% NH Black**; 38.9% Hispanic; **32.4% NH White** (ACS 2019)

Though the documentation of infections does not reliably report race/ethnicity⁷ (so we cannot track infection equity or correlate infection with death rates here), death certificates do document race/ethnicity. (However, HCPH lists race/ethnicity as Unknown, Other or Multiracial at much higher rates than HHD [6.3% HCPH vs 0.14% COH, as of 11/3/21].⁸ Designations as Unknown Race were found by a *Washington Post* [Special Report](#) to more often involve people of color than whites.)

Figure 3 shows the adult (20+) Covid-19 mortality rate relative to the presence of each group in the full H/HC population, regardless of gender.⁹ Since gender is a major determiner of Covid-19 outcomes, Figure 1 gives a fuller portrait of the effects here.

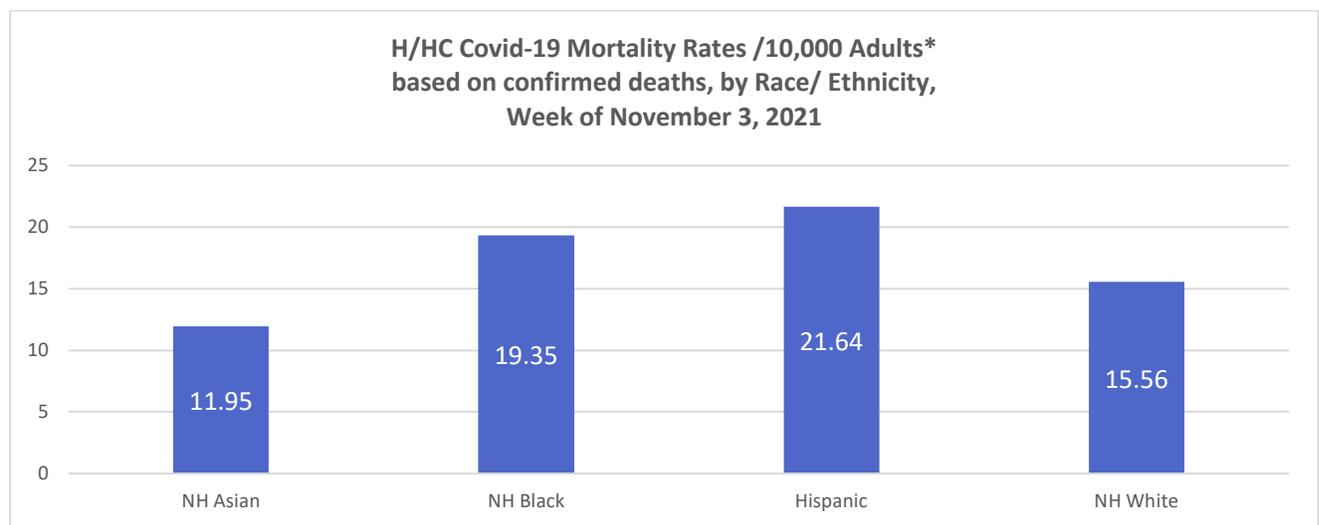


Figure 3 *Adults = 20 and over in the Harris County population (per 2019 ACS).Mortality Data per HHD & HCPH.

Effects Over Time

Figure 4 charts Covid-19 deaths over months by race/ethnicity, indicating the waves, with their disproportionate effects. The death toll was reduced in the Delta wave from the higher toll in previous waves by the uptake of vaccines, demonstrating both vaccine effectiveness and the effects of the prior waves, which have already wiped out some of the most vulnerable. Since more than 95% of Covid-19 fatalities occur among unvaxed members of the community, direct outreach to overcome hesitancy and other structural barriers is key to controlling the pandemic going forward.

⁷ Per the Houston/Harris County Covid-19 Dashboard, 117,000 out of the total 212,686 cases (more than half) reported as of December 17, 2020, were “Race Unknown.” The revised dashboard currently reports only weekly data, broken out by race/ethnicity for “those cases for which race/ethnicity is known,” but there is no account of what proportion of cases that is.

⁸ HCPH = 105 Unknown race; 41 Other; 17 Multiracial, as of 11/8/2021. HHD = 4 Unknown race; 1 Other; 2 Native Hawaiian/Pacific Islander; 2 American Indian/Alaska Native, as of 11/3/21.

⁹ H/HC race/ethnicity prevalence rate not divided by gender, per 2019 ACS: 8.0% NH Asian; 19.1% NH Black; 40.4% Hispanic; 32.5% NH White.

H/HC Reported Numbers of Covid-19 Deaths by Race/Ethnicity, by month, March 2020 - October 2021. Data as of Nov. 3, 2021.

NB: Numbers for recent months are incomplete & will rise somewhat as the data lag catches up.

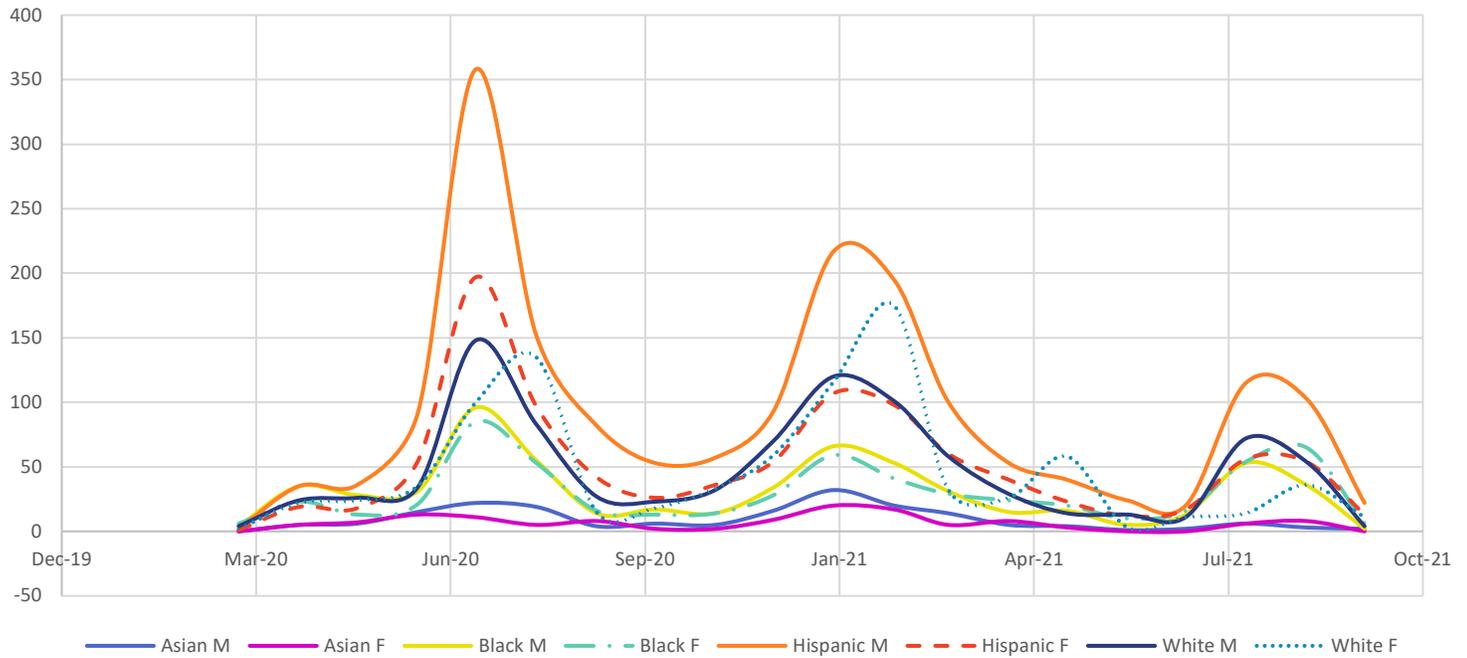


Figure 4 *Data per Houston Health Department & Harris County Public Health data, as of November 3, 2021..

GENDER ANALYSES

Figure 5 charts Houston/Harris County Covid-19 deaths over months by gender and overall. To date, men here have been dying at a rate consistently 50% higher than women (roughly 60% of deaths have been to men and 40% to women since the start of the pandemic).¹⁰ This parallels the global pattern of more male deaths, though testing shows an infection rate of roughly 50/50.¹¹ The global difference is likely due to a combination of biological and behavioral factors, **with behaviors that lead men to be in worse health than women generally more influential.**¹² A report in Nature on August 26, 2020, found that older men produce a weaker immune response to the virus than older women, but those findings have been disputed by the Harvard GenderSci Lab. Either way, men are much more likely than women to become severely ill and to die of the virus, and should be especially careful to avoid infection—via vaccination, masking and social distancing. People of all genders/sexes with such co-morbidities as *obesity, diabetes, heart disease, and respiratory ailments* are at greater risk than others.

The **gender difference varies a bit between the two local health departments.** The **City of Houston Health Department’s confirmed 3659 deaths** as of November 3, 2021, were **2235 male / 1424 female—61.1%**m**/38.9%**f****. But **Harris County Health Department’s confirmed 2590 deaths** in the unincorporated sectors of Harris County as of Nov. 8 were **1473 male, 1112 female—56.8%**m**/43%**f** (& 5 sex unknown)**. That gender variation in mortality across

¹⁰ This is a wider gap than the CDC’s national data indicate, which is 55% male / 45% female (11/28/21).

¹¹ See, for instance, this study from UK Research and Innovation (April 2020).

¹² One study found that in Italy in Spring 2020 men had 58% of Covid-19 infections & 70% of Covid-19 deaths, while Wuhan China saw most 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, suggesting that behavioral reasons like **men’s going to the doctor less, eating less healthy foods, and smoking more than women overall play the biggest role** (Harvard GenderSciLab). 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).

jurisdictions may be linked to who is present in frontline jobs, the ages of the population present by race, and/or other factors.

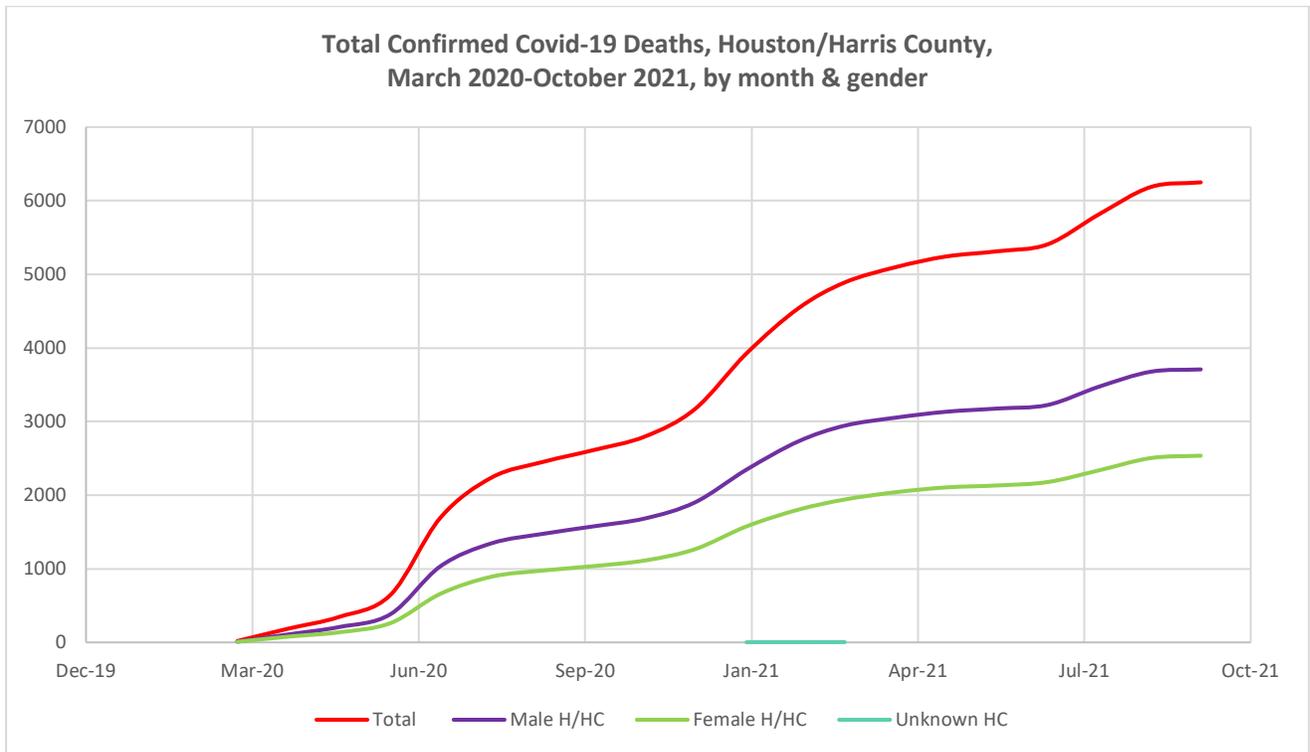


Figure 5 * Data per Houston Health Department & Harris County Public Health data, accessed 11/3 & 11/8/21.

There is also a big difference in the gender variation within racial/ethnic groups here (see Figure 1): **Hispanic Men** have a confirmed death rate **42.8% higher than Hispanic women**; **Asian men** a rate **36.6% higher than Asian women**; **White men** a rate **26% higher than White women**; and **Black men** a rate **20% higher than Black women**. These gaps may be linked to Hispanic and Black men being in some frontline jobs in greater numbers than women, to their having limited health care access, and/or to those men being in worse health than women and/or taking fewer health precautions, including fewer vaccines.

RACE/ETHNICITY ANALYSES

All the analyses indicate significant differences by race/ethnicity, intersectional with sex and age. Figure 1 (above) indicates that Hispanic men have died of Covid-19 at a rate 34% higher than that of White men, almost double that of Asian men (46% higher), and 21% higher than that of Black men; while Black men have died at a rate 17% higher than White men and 32% higher than Asian men, per reports to date.

Women in each race/ethnicity group have died at rates lower than the men in the same group, but women's rates also vary widely by race/ethnicity, and Black women have died at a rate almost equal to that of White men, and greater than that of Asian men.



Differences among race/ethnicity mortality rates are in part attributable to the combination of historical bias creating unequal access to health care and doctors when accessed treating people of color less aggressively; these have led to a higher incidence of underlying conditions among communities of color. In addition, those with higher rates of frontline employment and dense living situations have faced elevated infection rates. Since Spring 2021, vaccine hesitancy has also affected infection and mortality rates, the patterns of which will be better understood later, when full data is available.

Along with contagion in frontline jobs, economic repercussions of the pandemic (including evictions) increase the likelihood that people will be packed into shared apartments with no room for sick people to isolate. Immigration fears also impact the Hispanic community as well as other immigrant communities here, relative to deportation and to the Feb. 2020 federal ruling (enacted right before the pandemic) that blocked green card access for those who utilized food stamps and some health and housing assistance. Though that rule is no longer in effect, some may remain hesitant to seek aid, even in illness.

Age outcomes also vary by race/ethnicity. Apparently as a result of frontline employment, **relatively large numbers of young people were included in the Hispanic and Black death tolls, both pre- and post-vax, whereas that has not been the case among Whites and Asians.** Those able to work at home were not as likely to be infected.

Where **36.5% of Hispanic and 28.9% of Black male deaths have been to men 59 and under**, this has been true for only **16.5% of White and 13.9% of Asian** male deaths. Likewise, where **27.1% of Hispanic and 26% of Black female deaths** have been to women 59 and under, this has been true for only **11.5% of White and 12.4% of Asian female deaths.** These data indicate that younger people should take the same precautions as their elders. In addition to fatalities, avoiding infection will also mean avoiding the effects of [long Covid-19](#) on some who have been infected and recovered, of all ages, which are recognized to occur but not yet understood.

Fifty of the 74 confirmed deaths to date among **people between 10 and 29** (none confirmed here so far to children 9 or under) have occurred **among Hispanics** (3 teen boys and 29 men in their 20s; 7 teen girls and 11 women in their 20s), along with 1 Asian man, 2 White teen boys, 3 White men, and 7 Black men; 4 Asian women, 4 Black women, and 3 White women). The 199 deaths reported among **people in their 30s** here to date break down as: 118 Hispanic, 44 Black, 21 White, 7 Asian, 9 Unknown Race; of them, 128 were male and 71 female.

Figure 6 documents fatalities over time, by gender and race/ethnicity (end-of-line plateaus will rise as data lags catch up). Rising lines indicate continuing fatalities and indicate the need for further progress in vaccination across groups, especially among Hispanic, White and Black populations.

H/HC Cumulative Numbers of Covid-19 Deaths by Race/Ethnicity,
by months, March 2020 - October 2021, Nov. 3, 2021 data

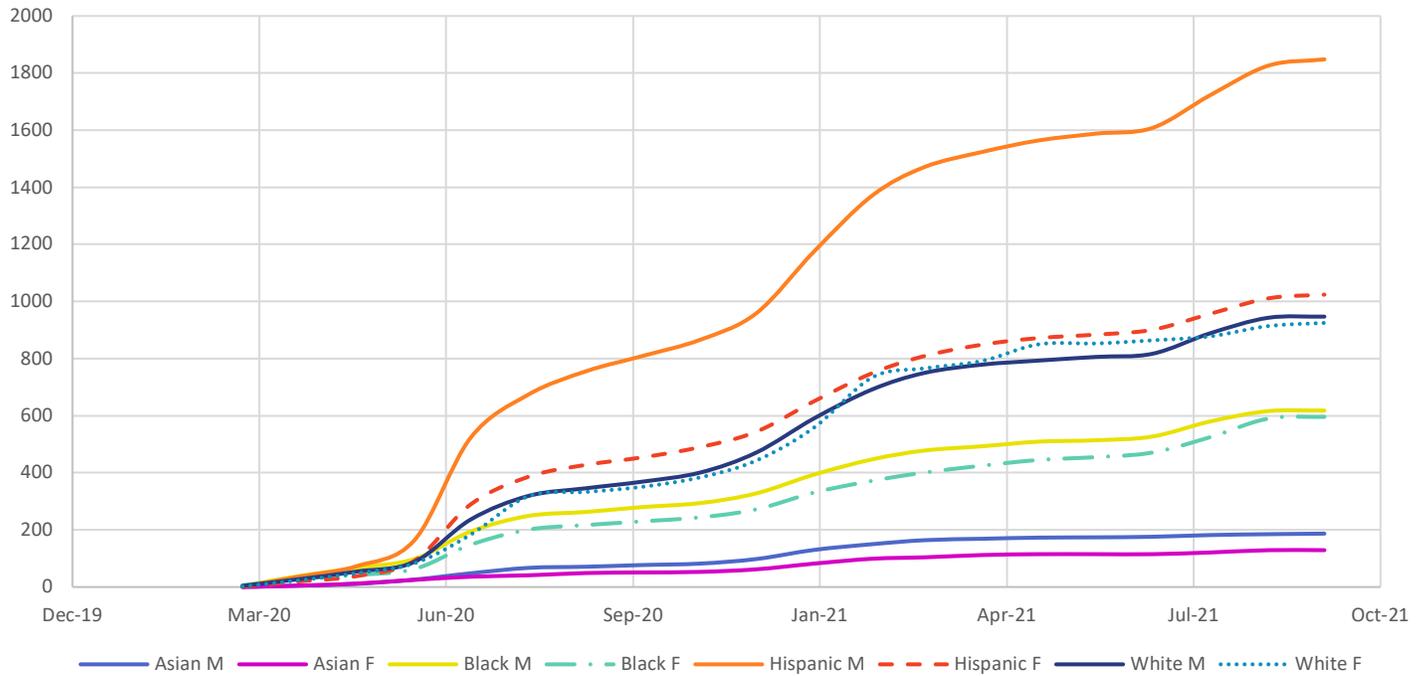


Figure 6 *Data per Houston Health Department & Harris County Public Health data, accessed 11/3 & 11/8/21.

AGE ANALYSES

Old age also significantly intersects Covid-19 deaths. The majority of Covid-19 deaths globally occur among people over seventy, and that is the case here as well (deaths to people over 70 made up 3206 out of the total 6249- confirmed Covid-19 deaths here - 51.3%). Overall, the old, those with underlying conditions, frontline workers and the poor/socially vulnerable, or those with some combination of those factors, have proven most at risk. However, as noted above, the numbers of deaths here among people in their 40s, 50s and 60s are significant, and vary by race/ ethnicity. Figures 7 breaks out the deaths by decade of age, gender and race/ethnicity.

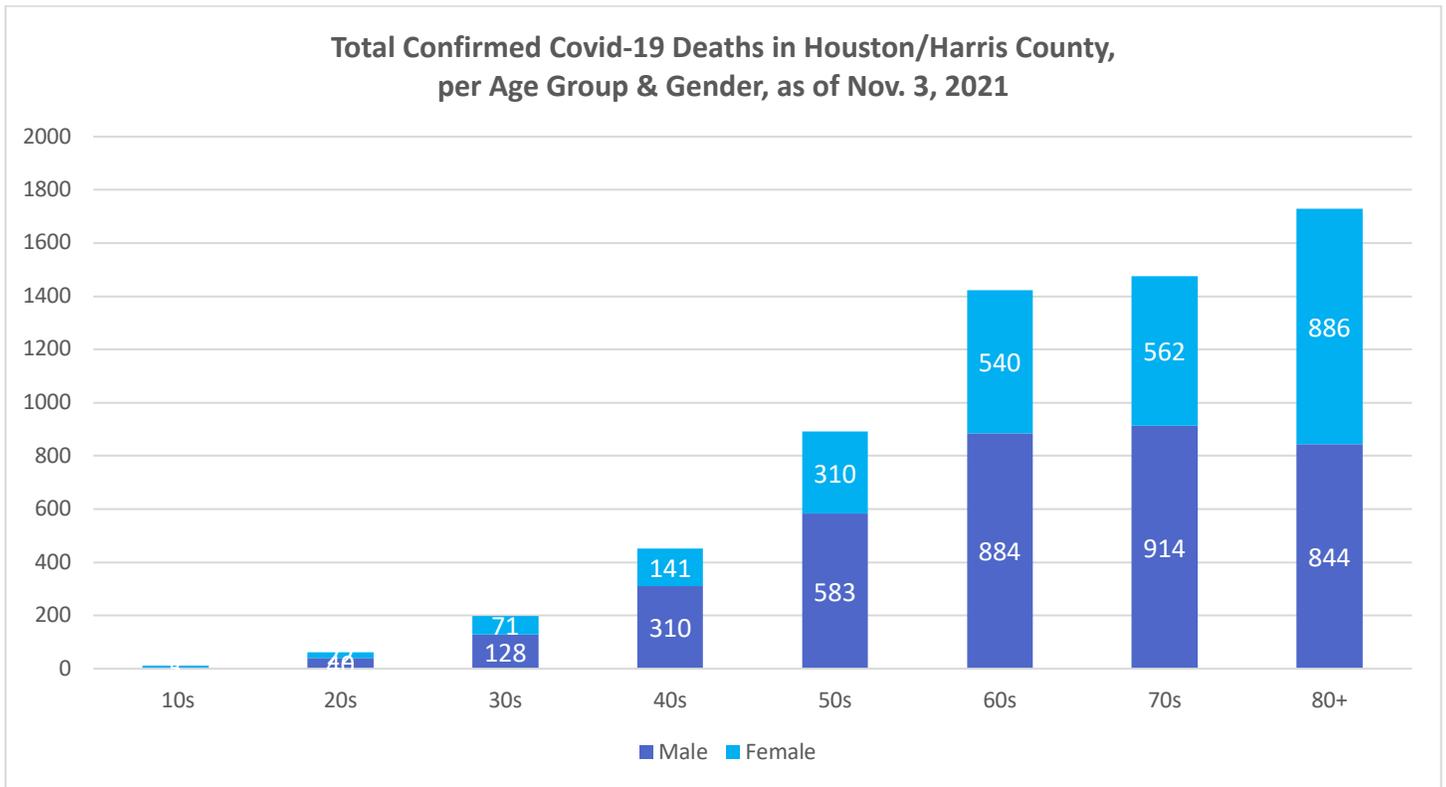


Figure 7

Overall, Covid-19 has diminished the community of elders across the United States – and even more so in the Hispanic and Black communities, which already had low survival rates into their later decades due to lower health care access, etc. This cuts connections to history, life wisdom and knowledge, and family bonds. Harris County has lost at least 2.2% of its men of all race/ethnicities in their 80s and above to Covid-19 and 1.4% of its women in that age band. That includes 3.78% of Hispanic men, 2.85% of black men, 1.58% of white men and 1.48% of Asian men in their 80s; 2.1% of Hispanic women, 1.48% of black women, 1.3% of Asian women, and 1.1% of white women in their 80s. Along with their individual families, the nation is much the poorer for these losses.

While women have died in lower numbers than men in all age bands between 20s and 70s, the relation reverses in the 80+ band (886 women / 844 men), in large part because **men represent only 37% of the population of people 80 and over in Harris County**. Given that more than twice as many women as men survive into their 80s and beyond (due to men’s overall worse health outcomes), older women’s Covid-19 fatalities have occurred at much lower rate than those 80+ compared to men (see Figure 9). The same resiliency that allows women to live longer in general plays in with Covid-19.

This evidence draws attention to the pre-existent inequities in health by gender and suggests the need for a men’s health outreach campaign across race/ethnicities, as well as studies of the gendered inequities in our culture that negatively affect men’s health, including gendered stereotypes and disparities of opportunity.

Figures 8 and 9 break out the deaths by decade of age, gender and race/ethnicity.

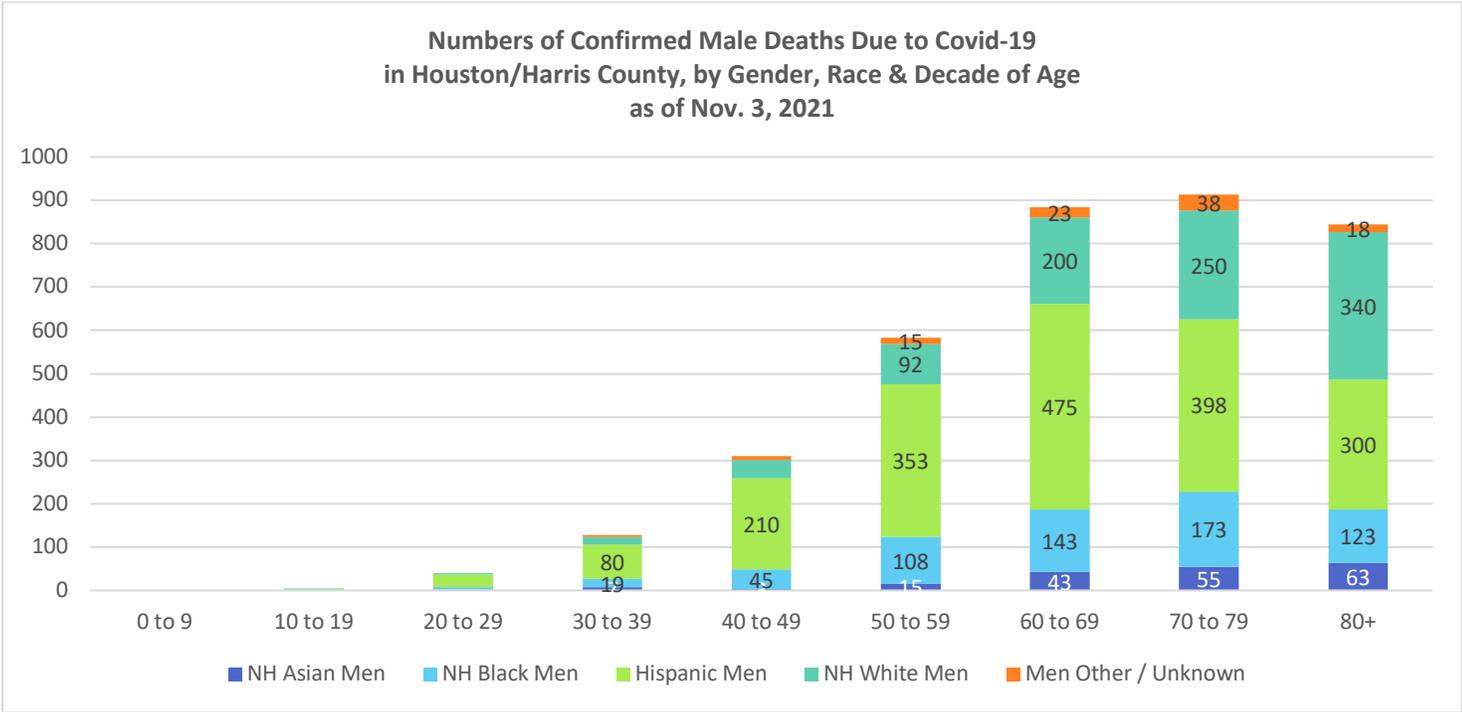


Figure 8 Mortality Data Sources: Houston Health Department and Harris County Public Health.

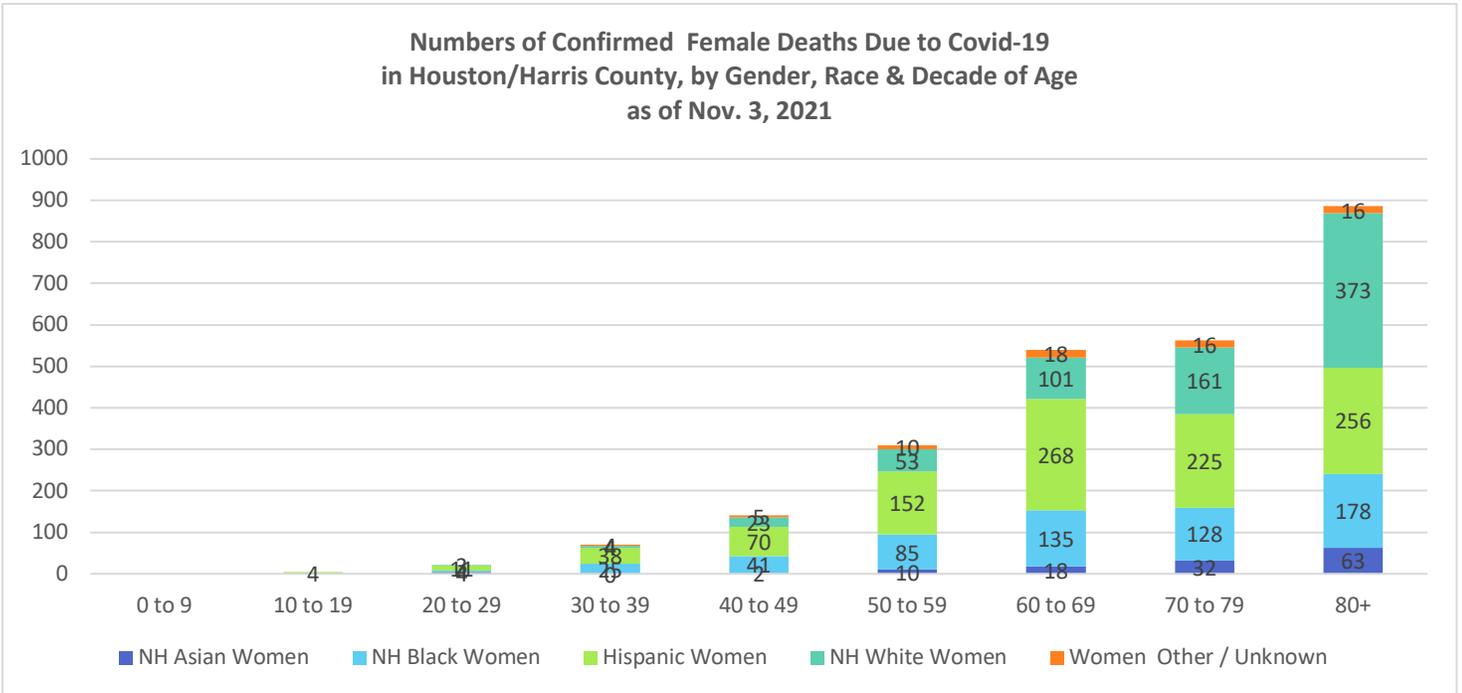


Figure 9 Mortality Data Sources: Houston Health Department and Harris County Public Health.

Figure 10 charts mortality rate per thousand based on confirmed deaths to date by decade per gender and racial/ethnic group – indicating that mortality rates among both Blacks and Hispanics by decade were substantially greater than those of Whites and Asians in all age groups, with variation by gender.

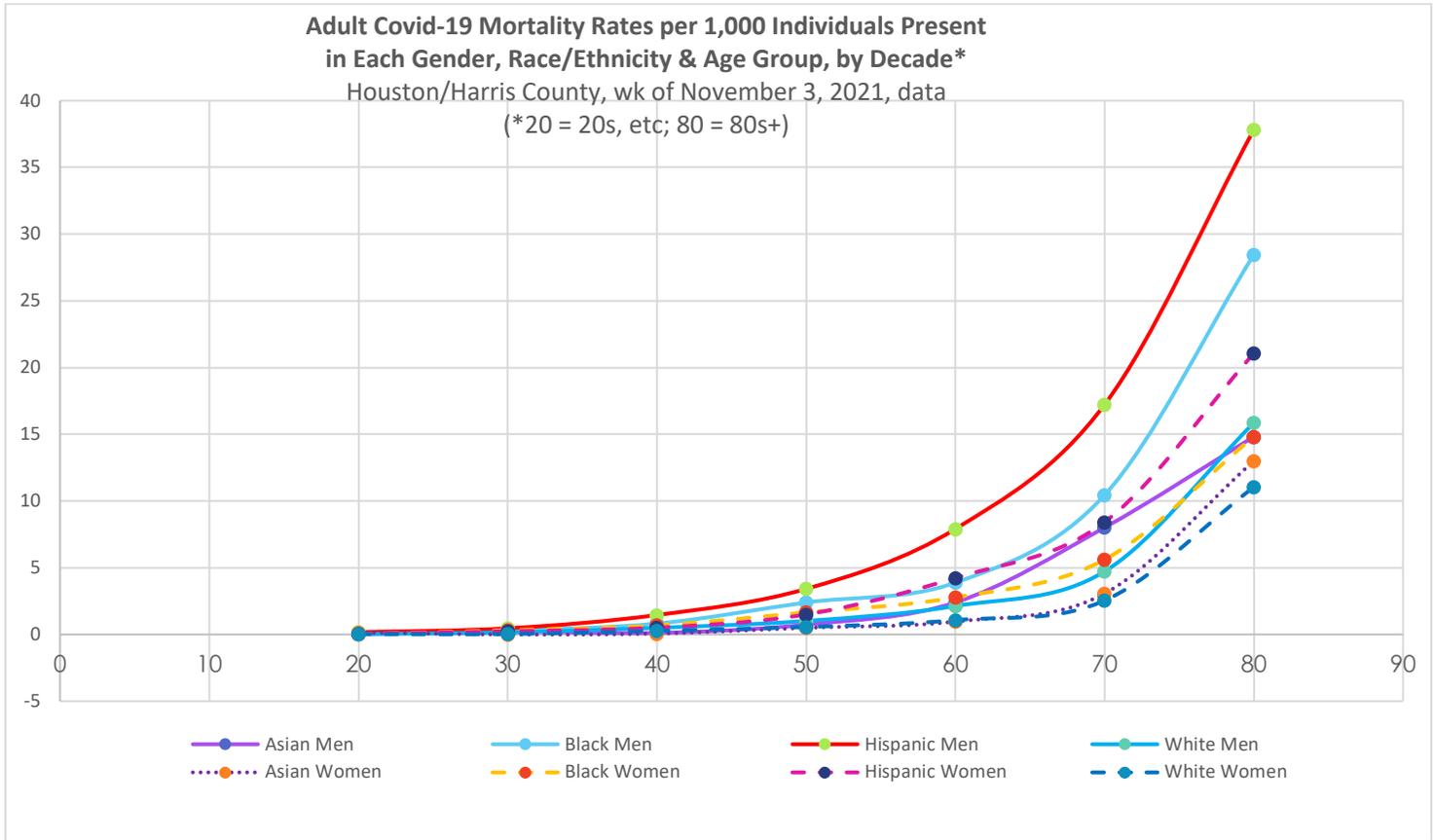


Figure 10 *Adults = Those 20+ in the Harris County population (per 2019 ACS). Mortality calculated per Houston Health Department & Harris County Public Health confirmed deaths.

While Covid-19 has highlighted pre-existent disparities in American society and demonstrated some predictable socio-economic patterns, it has affected and continues to affect all groups negatively. It also seems to behave in distinctive ways as a disease, around factors like gender, age, and post-infection immunity. We are watching an evolving disease, with evolving effects on various sectors.

2020/2021 COMPARISON – with and without vaccine access

Figures 11 and 12 below visualize the effects of the vaccines on the mortality rate over the two periods June-October 2020 (2267 confirmed deaths to date) and June-October 2021 (1007 confirmed to date). Although the 2021 data ends in mid-October, the relative scale of the numbers and the distribution among race/ethnicity groups and ages may indicate overall trends.

Figure 11 tracks the number of deaths by gender, race/ethnicity and age for the period June-October 2020, when no one had access to vaccines. In that period Hispanic men in particular were affected at much higher rates than other groups. Figure 12 does the same for the same period in 2021. Among the **notable differences** between the two figures is the **lack of reduction in the deaths to White men in their 60s in 2021 compared to 2020**, possibly due to vaccine hesitancy, as compared to the major reduction from 2020 in deaths in that age group to Hispanic men. The **high number of deaths to Black women relative to other groups in the 2021 period** is also notable.

**Houston/Harris County Confirmed Deaths
by Gender, Age Group & Race/Ethnicity,
June-October, 2020, as of 11/3/2021**

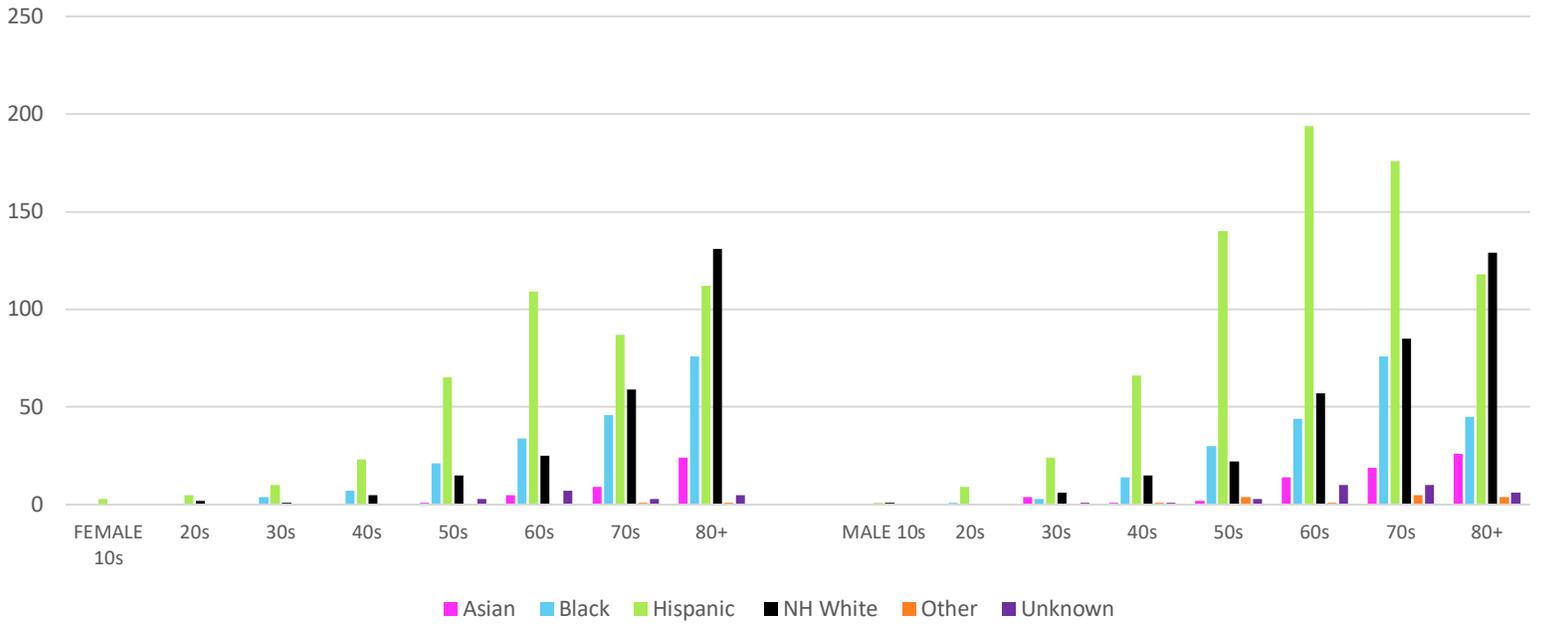


Figure 11

**Houston/Harris County Confirmed Deaths
by Gender, Age Group & Race/Ethnicity,
June-October, 2021, as of 11/3/2021**

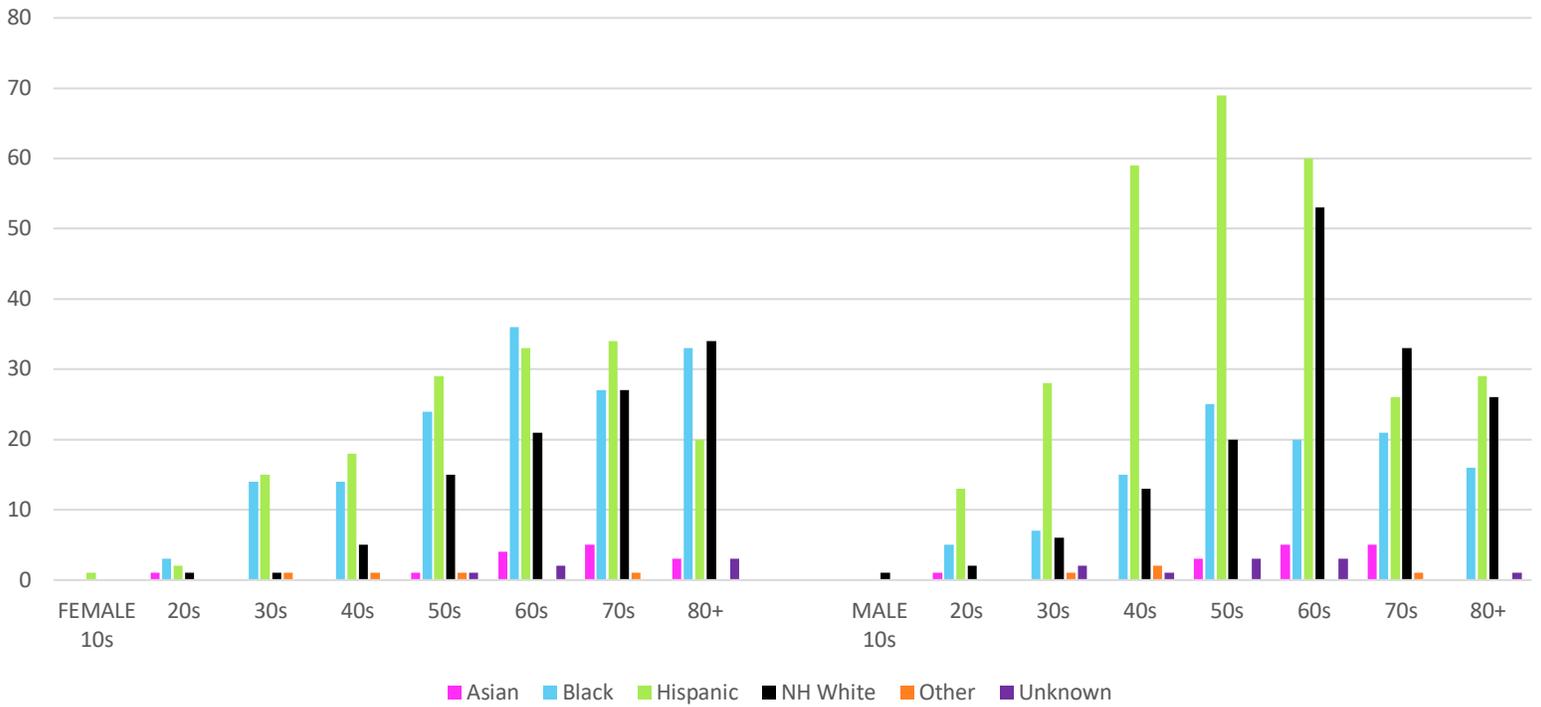


Figure 12

CONTROLLING THE SPREAD

Currently the vaccine is rolling out to 5 to 11 year olds. Per the [CDC](#) as of 11/28/21 the US population as a whole is 69.7% vaccinated, those 5+ are 74.1% vaccinated, and the population 12+ is 80.3% vaccinated, with variation in level across communities. If new variants require updates to the vaccines, though these can be done quickly at the production level, the vaccination process will be ongoing for at least months to come.

[Vaccine mandates](#) at the federal level have resulted in more than the 92% uptake called for by the president well in advance of the January 18, 2022, deadline. Some employers are likewise mandating, and others are charging the unvaccinated extra dollars /month in health care fees (at Delta Airlines, it's \$200). While many vaccines have been required for the population for decades without issue (polio, smallpox, measles, etc), misinformation about the Covid-19 vaccine has been spread for political purposes. Those who choose not to be vaccinated put others at risk, including their own networks of family, friends and work contacts.

EXCESS DEATHS (Unreported COVID-19 Deaths)

The number of confirmed deaths does not accurately reflect total local deaths to Covid-19, due to **undiagnosed Covid-19 deaths**. In the initial phases of the pandemic, few people were being tested and therefore quite a few who had the virus were not identified as Covid-19 deaths. A study in *JAMA* presented the numbers of “excess deaths” due to respiratory ailments in March-May 2020 compared to a running average of the past five years for that period in each state.¹³ **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, meaning that more than double the number of reported Covid-19 deaths at the time were likely.** The percentage missed has changed as testing has increased, but some misses remain predictable.

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 or have no health insurance (Texas has the highest uninsured rate at 17.7% [national average is 8.9%]¹⁴) are slow to seek aid. In addition, deaths due to other causes may be linked to Covid-19 if people refrain from getting treatment for fear of the virus.

ADDITIONAL PANDEMIC GENDER EFFECTS – Homeschooling, Domestic Violence, etc.

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 some frontline jobs** (in Harris County, women make up 74% of health workers, 59% of fast food workers, 73% of pharmacists, and 69% of cashiers), which connects to **women’s lower levels of pay** (see UH IRWGS [Report on H/HC Gender & Sexuality Data](#), May 2021);
- **Women’s expanded responsibilities for childcare & homeschooling** with school shutdowns (see below);
- **Higher levels of domestic violence**—global [reports document a rise](#) due to increased numbers locked in with their abusers, greater economic stress, children at home 24/7, and fear of Covid-19;
- **Reduction of access to birth control and abortion** will also affect women’s long-term status.

Researchers on workplace equity predict that women overall and single mothers in particular¹⁵ 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.¹⁶ **However, the Build Back Better Act promises expanded access to childcare and preschool for all families, if passed, and could be transformative.**

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

¹³ Weinberger et al. [Estimation of Excess Deaths Associated with the COVID-19 Pandemic](#) in the US, March to May 2020. *JAMA Intern Med*. Published online July 1, 2020.

¹⁴ US Census Bureau, [Health Insurance Coverage in the US: 2018](#). Released Nov. 8, 2019.

¹⁵ Single mothers made up 28.9% of women living with children under 18 in Harris County in 2019 (ACS).

¹⁶ Patricia Cohen and Tiffany Hsu, [“Pandemic Could Scar a Generation of Working Mothers,”](#) *New York Times*, (June 3, 2020).