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**Equity & COVID 19**



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## Introduction

This report was prepared to shed light on disparities in COVID-19 impacts across gender, age, racial, and other relevant demographic groups. Research has shown that health outcomes are closely related to socioeconomic factors, called social determinants of health. Prior research by The Institute found that this relationship between socioeconomic factors and health outcomes was at least as strong in Northeastern Pennsylvania as it is statewide.<sup>1</sup> As such, there is reason to believe COVID-19 would have disparate impacts across groups, especially as pre-existing health conditions have been widely understood as being associated with higher rates of COVID-19 hospitalizations and deaths. The Centers for Disease Control and Prevention have recognized that these disparities are occurring, and have identified several factors contributing to this increased risk:<sup>2</sup>

1. Discrimination, in systems such as health care, housing, education, criminal justice, and finance
2. Healthcare access and utilization, such as disparities in insurance coverage and barriers to getting care such as transportation, child care, language barriers, or historical or current discrimination
3. Occupation, including some racial and ethnic minority group overrepresentation in certain essential work settings
4. Educational, income, and wealth gaps
5. Housing, including overcrowded living situations and greater risk of eviction and homelessness

This report presents statewide data on COVID-19 cases and deaths by age, gender, race, and Hispanic/Latino ethnicity to understand how these groups vary in burden of COVID-19 infections.

Furthermore, the secondary economic impacts of the pandemic can also be considered for demographic groups. While many past recessions have had disparities in their impact on different populations across racial, educational, or geographic lines, the current economic environment has many complicating factors that could exacerbate these differences. Examples include highly disparate impacts of mitigation efforts on different industries and impact of virtual schooling on workers' childcare needs.

Having an understanding of which groups may be disproportionately impacted by the COVID-19 disease itself or economic impacts of the pandemic will help communities respond appropriately, particularly when historically marginalized or vulnerable populations face worse impacts.

Since the start of the pandemic, there have been signs of disparities in COVID-19 infections across demographic groups.

## COVID-19 Impacts for Demographic Groups

Statewide data is reported for COVID-19 cases and deaths by several demographic indicators. Data presented in this section represents the cumulative statewide totals for cases and deaths from the start of the pandemic through November 16, 2020. Detailed demographic breakdowns for granular geographies were not readily available for this report.

### Gender

Men make up 49 percent of the total statewide population, per 2019 American Community Survey estimates, compared with 51 percent women. Women made up a slightly larger share of known COVID-19 cases, with 54.2 percent compared to 45.8 percent of cases that were men among cases where the sex of the patient was known.

Statewide COVID-19 Cases & Deaths by Gender						
	Cases			Deaths		2019 ACS
	Number	Raw %	% of Reported	Number	% of Reported	% of Population
Female	145,404	53.9%	54.2%	4,723	51.2%	51.0%
Male	122,669	45.5%	45.8%	4,501	48.8%	49.0%
Neither/Other	10	0.0%				
Not Reported/Unknown	1,530	0.6%				

Nonetheless, the share of COVID-19 deaths among men and women very closely reflected the population as a whole.

### Age

Among younger age groups, there is a much lower share of identified cases and deaths. While youth under age 20 make up over 23 percent of the statewide population, they account for only 12 percent of known cases and no known deaths from COVID-19.

For adults aged 20 to 59, the share of cases among each age group is somewhat higher than that age group's share of the total population. However, the share of deaths in these age ranges is low, increasing with age to the 50 to 59 age cohort, which accounts for 13.5 percent of all state residents, 14.7 percent of all COVID-19 cases, and 4.7 percent of all COVID-19 deaths.

Among adults 60 to 79, the reverse is true: these age groups account for a relatively low share of COVID-19 cases relative to their share of the total population but a larger share of deaths. The 60 to 69 age group is 13 percent of the total statewide population, but only 11.4 percent of identified cases and 13.5 percent of deaths. The 70 to 79 age range accounts for eight percent of the total population but only seven percent of all COVID-19 cases and 21.6 percent of deaths.

Statewide COVID-19 Cases & Deaths by Age						
	<u>Cases</u>			<u>Deaths</u>		<u>2019 ACS</u>
	Number	Raw %	% of Reported	Number	% of Reported	% of Population
Age 0-9	7,234	2.7%	2.7%	0	0.0%	11.0%
Age 10-19	24,863	9.2%	9.2%	0	0.0%	12.3%
Age 20-29	51,353	19.0%	19.1%	18	0.2%	12.9%
Age 30-39	39,813	14.8%	14.8%	39	0.4%	12.8%
Age 40-49	35,396	13.1%	13.1%	154	1.7%	11.7%
Age 50-59	39,664	14.7%	14.7%	450	4.9%	13.5%
Age 60-69	30,667	11.4%	11.4%	1,247	13.5%	13.0%
Age 70-79	18,960	7.0%	7.0%	1,987	21.6%	8.0%
Age 80+	21,505	8.0%	8.0%	5,324	57.8%	4.7%
Not Reported/Unknown	158	0.1%				

One explanation for these opposing patterns could be that adults of working age are more likely to be working outside the home or otherwise interacting with others outside their households on a daily basis, leading them to have a higher infection risk, while adults aged 60 to 79 may have a lower risk of transmission if they are retired and/or leave home infrequently. While older adults living at home may have lower risk of exposure, it is widely understood that risk of hospitalization or death from COVID-19 increases rapidly with age and certain chronic health conditions. This is consistent with the rapid spike seen in the ratio of deaths to cases reported across these age ranges: among those aged 50 to 59, there is one reported death for every 88 reported cases, this increases to 1 death per 25 cases among those 60 to 69 and 1 death per 10 cases in the 70 to 79 age group.

Finally, adults aged 80 and older make up 4.7 percent of the total statewide population, but eight percent of COVID-19 infections and nearly 58 percent of deaths. Among this age group, there is approximately one death for every four known cases.

The heightened rate of COVID-19 cases among this group compared to adults aged 60 to 79 could be due to a higher share of adults aged 80 and older living in congregate care settings, which have been the site of significant transmission.

### Race & Ethnicity

The table below shows case and death data for racial groups. White residents statewide account for just under 80 percent of the population, and just under 75 percent of cases and deaths. Black residents account for a disproportionate share of both cases and deaths relative to their share of the population: 20.2 percent of cases where race was reported, and 19 percent of deaths, compared to 11.4 of the population statewide.

A large share of cases, about 43 percent, had no race reported, so these findings should be viewed with caution. It is not known whether cases with an unreported race reflect the same breakdowns of cases with a race reported.

Statewide COVID-19 Cases & Deaths by Race						
	Cases			Deaths		2019 ACS
	Number	Raw %	% of Reported	Number	% of Reported	% of Population
White	114,476	42.5%	74.6%	6,873	74.5%	79.6%
Black	30,954	11.5%	20.2%	1,750	19.0%	11.4%
Asian	5,368	2.0%	3.5%	179	1.9%	3.5%
Other (including Multiple Races)	2,666	1.0%	1.7%	422	4.6%	5.6%
Not Reported/Unknown	116,149	43.1%				

An even larger share of cases, 66 percent, did not report whether the patient was or was not of Hispanic/Latino ethnicity. Non-Hispanic residents of any race account for 92 percent of the statewide population, but 77 percent of statewide cases where Hispanic or Latino identity was reported. While Hispanic/Latino residents of any race make up just under 8 percent of the statewide population, they make up nearly 23 percent of COVID-19 cases where Hispanic or Latino identity was specified. While the large share of cases with unknown Hispanic/Latino ethnicity may obscure the actual size of any disparity, it does appear that there is a higher share of cases among Hispanic and Latino residents relative to their share of the population.

Statewide COVID-19 Cases & Deaths by Hispanic/Latino Ethnicity						
	Cases			Deaths		2019 ACS
	Number	Raw %	% of Reported	Number	% of Reported	% of Population
Non-Hispanic	70,001	26.0%	77.2%	8,708	94.4%	92.2%
Hispanic	20,706	7.7%	22.8%	516	5.6%	7.8%
Not Reported/Unknown	178,906	66.4%				

It also appears that the share of deaths may be lower among Hispanic/Latino residents relative to their share of the population. However, this could be explained by the age differences among demographic groups. The median age of Hispanic/Latino residents in Pennsylvania is 27, compared to 41 overall, 44 for White residents, 35 for Asian residents, and 33 for Black residents. Because hospitalizations and deaths from COVID-19 are closely correlated with age, the younger-skewing age distribution of Hispanic Pennsylvanians is a likely factor in the apparently lower share of COVID-19 deaths among that demographic group relative to both the number of cases and the Hispanic/Latino share of the statewide population as a whole.

## Employment Impacts for Demographic Groups

Analysis of unemployment claims data indicates certain segments, including women, younger workers, and some minority groups have been disproportionately impacted by job losses. There are several factors at play: the pandemic and associated business restrictions have affected industries very differently, so demographic groups that are more represented in the workforces of heavily impacted industries would face a greater burden of employment and income disruption. Further, changes to family needs specific to the pandemic have an impact, such as the need for more parents to stay at home due to virtual education.

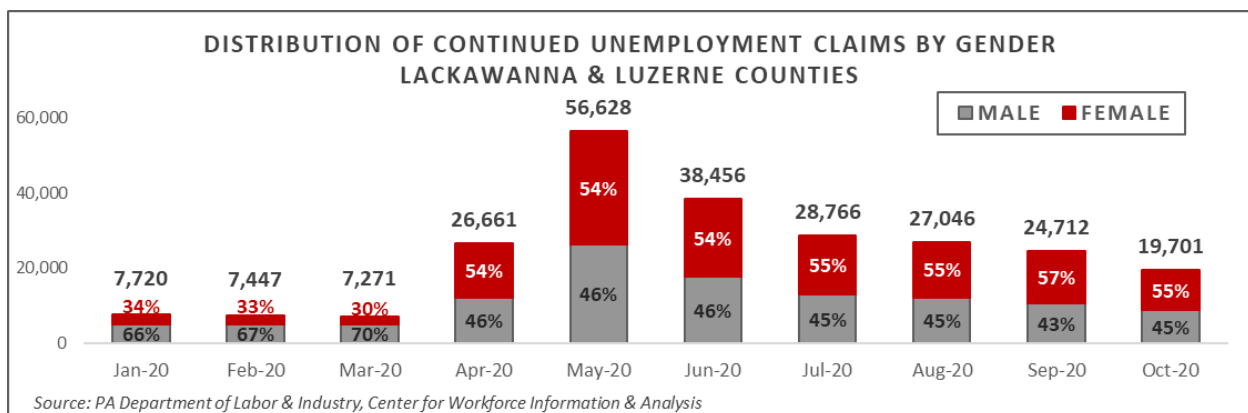
### Gender

Women have been leaving the labor force in much higher numbers than men since the pandemic began. Nationally, there are more than 2.5 million fewer women in the labor force than before the pandemic began, and the labor force participation rate for women, or the share of women working or looking for a job, fell from 57.9 percent in January 2020 to 55.6 percent in September.

Some industries with higher concentrations of female employees, such as Retail Trade, Leisure and Hospitality, Government, and Education Services, were hardest hit with job losses. And a higher percentage of women have dropped out of the labor force, or are no longer looking for work. According to an analysis by the National Women’s Law Center, of the nearly 1.1 million workers ages 20 and up who dropped out of the labor force between August and September, 80 percent were women.<sup>3</sup>

Part of the reason for this is the pandemic has created even greater challenges for working parents, with some struggling to find child care and support their children’s education as schools have increasingly moved to virtual learning environments. Due to the pay gap between men and women, in households where both parents work, it might often make more sense for women to stay home if someone needed to care for children or assist with virtual schooling. For single mothers, these challenges are likely even greater. In addition to taking on increased childcare responsibilities, women have also been assuming the role of caregivers for elderly parents and family members affected by the pandemic. This has contributed, in part, to the high number of women scaling back their workloads or leaving the workforce.

An analysis of regional unemployment claims illustrates how women in the workforce have been disproportionately impacted by the pandemic. In Lackawanna and Luzerne Counties, women accounted for more than half (51 percent) of the nearly 90,000 initial unemployment claims filed since March, compared to 49 percent for men. This represents a dramatic shift from 2019, when women accounted for only 37 percent of initial claims filed, while men represented 63 percent of initial claims.

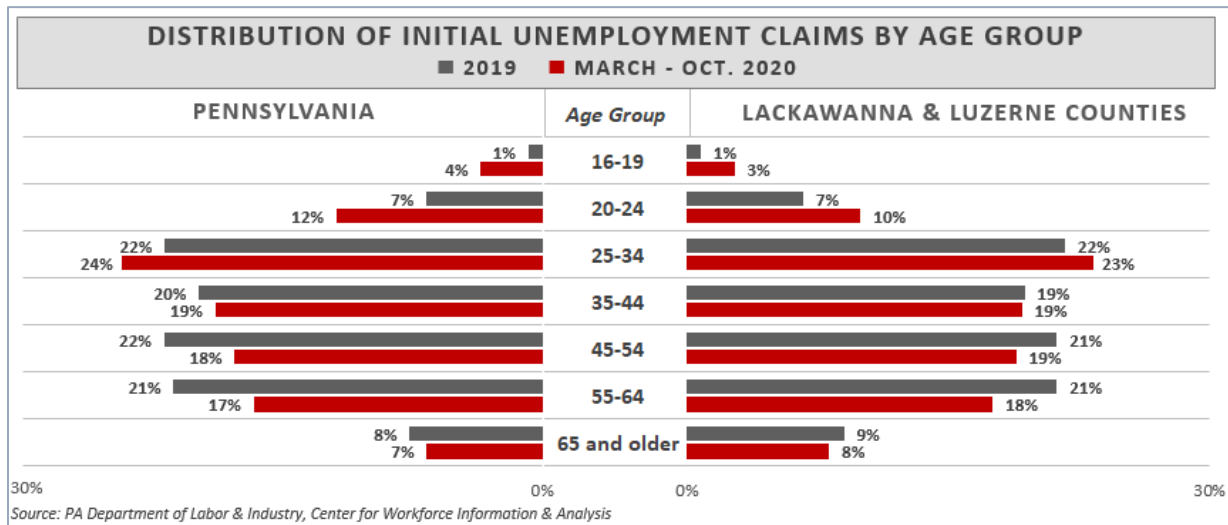


Since April, women have continued to represent the majority of the continued unemployment claims filed in Luzerne and Lackawanna Counties. In early 2019 prior to the pandemic, women represented around one-third or

less of continued unemployment claims filed in the region, while men accounted for the remaining two-thirds or more of continued claims. This shifted in April, when women accounted for the majority (54 percent) of continued unemployment claims. As the volume of continued unemployment claims in the region peaked in May at more than 56,000 claims, and then began tapering off to around 20,000 continued claims in October, women have continued to represent the majority of continued unemployment claim filers in the region. This sharp reversal from the pre-pandemic employment landscape illustrates the impact COVID-19 has had on working women.

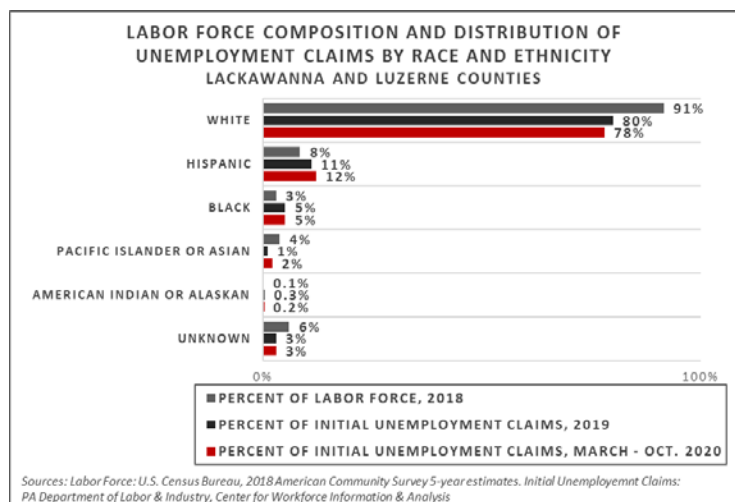
## Age

Pandemic-related job losses have also disproportionately impacted younger workers. Statewide and in Lackawanna and Luzerne Counties, the proportion of initial unemployment claims filed since March for workers ages 16-34 have exceeded their share of claims filed in 2019. The largest shift has been in claims filed by workers ages 20-24. In 2019, this age group accounted for seven percent of initial unemployment claims filed statewide and in Lackawanna and Luzerne Counties. Between March and October of 2020, this increased to 12 percent of claims filed statewide, and 10 percent of claims filed in Lackawanna and Luzerne Counties. While workers under age 35 accounted for a larger share of initial unemployment claims, older workers, particularly those ages 45-64, represent a smaller share of initial claims filed since March.



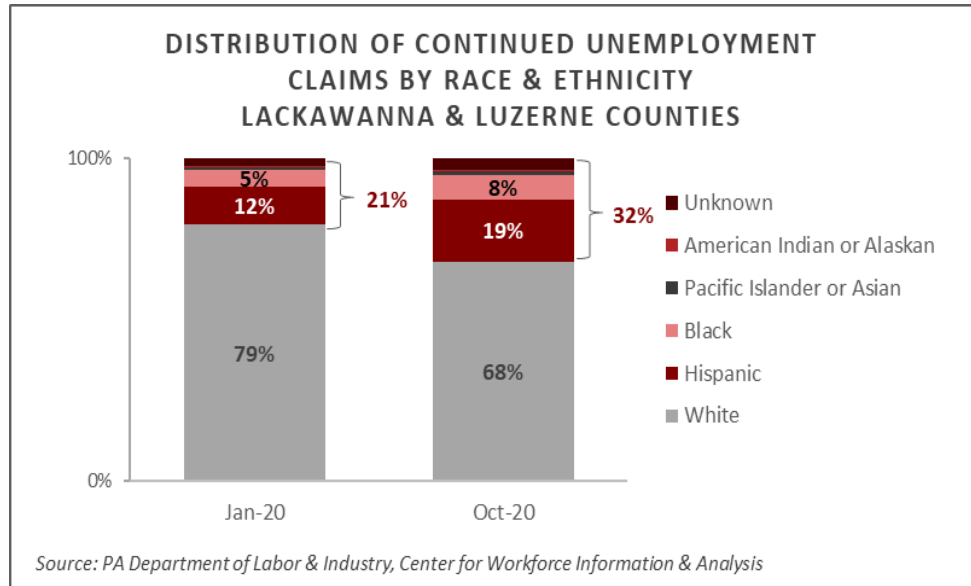
## Race & Ethnicity

The latest available regional data from the U.S. Census Bureau on employment status by race and ethnicity indicates that in 2018, more than 9 in 10 workers age 16 or older in Lackawanna and Luzerne Counties were White/Caucasian. However, white workers represent a smaller share of initial unemployment claims filed both in 2019 and since the pandemic began in March 2020 relative to their share of the total workforce in the region, accounting for around 8 in 10 claims filed. While the Hispanic/Latino population represented eight percent of the region's workforce in 2018, they accounted for a larger share of initial unemployment claims filed



in 2019 (11 percent). This has increased slightly since the pandemic began, with Hispanic/Latino workers accounting for 12 percent of initial unemployment claims filed. Similarly, while Black/African American workers comprised three percent of the region’s workforce in 2018, they accounted for a slightly larger share (5 percent) of the initial unemployment claims filed in both 2019, and since March 2020.

Non-white workers also represent an increasing share of continued unemployment claims in the region. In Lackawanna and Luzerne Counties, non-white workers accounted for 21 percent of continued employment claims in January 2020 prior to the pandemic. As of October 17, this share has increased 32 percent of continued unemployment claims in the two counties combined. The largest shares of continued



claims from non-white workers in both counties comes from Hispanic workers, who account for 19 percent of filers, and Black workers, who account for eight percent of filers. This illustrates that Hispanic and Black workers are more susceptible to job losses in the region, and this has continued during the pandemic.

	Distribution of Total Initial Unemployment Claims by Age, Gender, and Race/Ethnicity 2019 (Pre-COVID Baseline) vs. March-Oct. 2020 (COVID Impact)			
	Pennsylvania		Lackawanna & Luzerne Counties	
	2019	March - Oct. 2020	2019	March - Oct. 2020
<b>Initial Unemployment Claims</b>	<b>800,691</b>	<b>2,301,821</b>	<b>41,670</b>	<b>89,672</b>
<b>By Age Group</b>				
16-19	1%	4%	1%	3%
20-24	7%	12%	7%	10%
25-34	22%	24%	22%	23%
35-44	20%	19%	19%	19%
45-54	22%	18%	21%	19%
55-64	21%	17%	21%	18%
65 and older	8%	7%	9%	8%
Unknown	0.1%	0.3%	0.0%	0.2%
<b>By Gender</b>				
Male	62%	51%	63%	49%
Female	38%	49%	37%	51%
<b>By Race/Ethnicity</b>				
White	75%	72%	80%	78%
Hispanic	7%	8%	11%	12%
Black	14%	13%	5%	5%
Pacific Islander or Asian	1%	3%	1%	2%
American Indian or Alaskan	0%	0%	0%	0%
Unknown	3%	4%	3%	3%



## Income & Remote Work

Another way inequities are present in the workforce is through disparities in remote work opportunities. A study by the National Bureau of Economic Research in April found that nationwide, about 37 percent of jobs can feasibly be done at home. However, these jobs account for 46 percent of all wages earned from employment, indicating that jobs that can be done remotely are, on average, higher paying. In the Scranton/Wilkes-Barre/Hazleton metropolitan statistical area, an estimated 30 percent of jobs can be done remotely. However, these jobs account for 36 percent of all wages earned in the region.

When the authors' nationwide data is broken down by major industry group at the 2-digit NAICS level, this trend is apparent for every industry category except Educational Services and Health Care and Social Assistance.<sup>4</sup>

Estimated Teleworkable Employment and Wages, Nationwide by Industry			
NAICS	Industry	Teleworkable Employment	Teleworkable Wages
11	Agriculture, Forestry, Fishing and Hunting	8%	13%
21	Mining, Quarrying, and Oil and Gas Extraction	25%	37%
22	Utilities	37%	41%
23	Construction	19%	22%
31-33	Manufacturing	22%	36%
42	Wholesale Trade	52%	67%
44-45	Retail Trade	14%	22%
48-49	Transportation and Warehousing	19%	25%
51	Information	72%	80%
52	Finance and Insurance	76%	85%
53	Real Estate and Rental and Leasing	42%	54%
54	Professional, Scientific, and Technical Services	80%	86%
55	Management of Companies and Enterprises	79%	86%
56	Administrative and Support Services	31%	43%
61	Educational Services	83%	71%
62	Health Care and Social Assistance	25%	24%
71	Arts, Entertainment, and Recreation	30%	36%
72	Accommodation and Food Services	4%	7%
81	Other Services (except Public Administration)	31%	43%
99	Federal, State, and Local Government	41%	47%

Source: Jonathan I. Dingel and Brent Neiman, *How Many Jobs Can be Done at Home?* NBER 2020.

While not all jobs with high wages can be done at home, and not all jobs that can be done remotely have high wages or high educational requirements, it is apparent that lower income workers will have less access to remote work, and therefore be more vulnerable to job or income losses due to pandemic business restrictions and have a higher risk of infection in the course of working.

## Conclusions & Recommendations

Both statewide and nationwide data collected on COVID-19 infections and deaths so far have shown significant disparities across racial and ethnic lines. Many of these disparities are related to social determinants of health. A previous study by The Institute has identified on social determinants of health in the region recommended measures such as improved data collection and access, greater emphasis of social determinants in education and training of health practitioners, expanding cultural competency in healthcare settings, untangle healthcare access from employment and income, and considering systemic approaches to healthcare.<sup>5</sup>

Further, the data confirms that women, non-white workers and those in the 20 – 24 age group have been disproportionately affected by COVID itself and in the workplace as a result of COVID.

The pandemic's economic impact has shifted the demographic landscape of the workforce, and has the potential to disrupt the diversity of the workforce for the long-term, particularly for women in the workforce. However, there are steps regional leaders can take to address these challenges and focus workforce development efforts on creating opportunities for these groups that have been adversely impacted. These include creating a human-centered workforce approach that takes in account various stressors that can impact job performance and retention. This has become even more critical as workers deal with the economic, psychological and social impact of the pandemic, and working parents face increased challenges related to childcare and remote schooling of children. Offering flexible schedules, providing resources to help workers address these challenges, and checking in with workers about their workloads and well-being can provide much needed assistance to employees. In addition, childcare initiatives and job placement services that help parents, particularly single female households, find reliable childcare, will be key to helping workers re-enter the workforce.

Expanding access to telework opportunities could also help to bridge workforce disparities. Many jobs that can most easily be done remotely are those with a more educated, higher wage workforce, while workers in essential front-line roles often earn lower wages and disproportionately come from historically marginalized population. Employers should explore innovative ways to expand remote work beyond the managerial or high education workforce; this could create more parity in virus exposure risk on the job. Social service organizations and partners in the workforce development and job training and placement domain can also work to connect existing remote work opportunities to those with concerns such as childcare challenges or high-risk health factors that keep them out of the in-person workforce.

Since the region is home to an increasing Hispanic population and a growing minority workforce that has been disproportionately impacted by job losses, it will also be critical to ensure equity in workforce development efforts. Partnering with community groups and local education institutions to provide further education and professional development targeted at workers from racial or ethnic minority groups can help them develop the skills needed in our region's workforce and connect them to job opportunities.

Finally, it is important that local, state, and federal agencies ensure that detailed demographic data is collected and made widely available to allow for further in-depth study of inequities both during and after the pandemic has ended. Public health data around COVID-19 as well as workforce and economic data must have allow for robust analysis of key indicators across populations to inform health, education, social services, and public policy. This data must be available in a timely manner and geographically granular to have the most impact.

## Endnotes

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<sup>1</sup> The Institute for Public Policy & Economic Development (2018). Social Determinants of Health. Retrieved from [www.institutepa.org](http://www.institutepa.org)

<sup>2</sup> Centers for Disease Control and Prevention (2020, July). Health Equity Considerations and Racial and Ethnic Minority Groups.

<sup>3</sup> Ewing-Nelson, C. (2020, October). Four Times More Women Than Men Dropped Out of the Labor Force in September. *National Women's Law Center*.

<sup>4</sup> Dingel, J. and Neiman, B. (2020, April). How Many Jobs Can be Done at Home?

<sup>5</sup> The Institute for Public Policy & Economic Development (2018). Social Determinants of Health. Retrieved from [www.institutepa.org](http://www.institutepa.org)