

Hidden Threat: California COVID-19 Surges and Worker Distress

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EXECUTIVE SUMMARY

Low-wage work is associated with the spread of COVID-19, and to mitigate COVID-19 spread it is not enough to simply regulate business openings and public gatherings—policymakers must also innovate health and safety reforms focused on the workplace and provide a greater safety net for workers.

Our analysis examines the relationship between low-wage work (“worker distress”) and recent county-level COVID-19 positive test rates. We find a strong relationship between low-wage work and COVID-19 positivity, and identify those industries with the greatest prevalence of low-wage work. Lastly, we estimate the number of private sector workers in firms exempted from the Families First Coronavirus Response Act’s (FFCRA) paid leave provisions, by industry.

We recommend reporting COVID-19 positivity by industry; improved workplace health and safety standards mitigating the spread of COVID-19; and a greater safety net for low-wage workers unable to access traditional unemployment benefits, paid sick or family leave, or health insurance.

KEY FINDINGS

1. Eighteen of California’s fifty-eight counties had COVID-19 positive test rates above 8%, as of July 12, 2020.²
2. **Most counties (93%) with high worker distress were on the state’s COVID-19 watchlist with positivity rates above 8%.** These counties were: Imperial, Stanislaus, Merced, Tulare, Riverside, San Bernardino, San Joaquin, Madera, Kings, Fresno, Los Angeles, Santa Barbara, Yuba and Sutter.
3. **Most counties (95%) with low worker distress were marked by low COVID-19 positivity.** Only 2 of 37 counties with low worker distress had rates above 8%.
4. The relationship between worker distress and COVID-19 positivity was constant across rural, suburban, and urban regions.
5. Worker distress was highest in agriculture, accommodations and food services, administrative and support and waste management, transportation and warehousing, and retail. Additionally, most workers lack federal emergency paid leave.

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² Last updated July 12, 2020

RECOMMENDATIONS

1. Reporting COVID-19 test results by industry. Understanding industry trends in COVID-19 transmission will play a critical role in developing appropriate workplace health and safety standards.

2. Improved workplace health and safety standards. While much of the public debate on COVID-19 safety has centered on the regulation of large public gatherings, our analysis suggests a widespread, potent association between COVID-19 and low-wage work that affects the broader public requires meaningful reform.

3. A greater safety net for workers in essential jobs. Millions of workers lack access to unemployment benefits, guaranteed emergency paid leave, or affordable health coverage. For essential workers who do not have the option to telework, a safety net may enhance policy efforts to reform workplace health and safety standards.

INTRODUCTION

Four months after the nation's first COVID-19 stay-at-home orders, US public officials continue to debate the most appropriate way to mitigate the spread of COVID-19. The efforts have been largely unsuccessful, however. More than 2.9 million persons have been infected and 130,000 have died (Centers for Disease Control 2020). More than 20.5 million jobs have been lost (Bureau of Labor Statistics 2020). And the impact has been unevenly felt. Undocumented immigrants—with no access to unemployment benefits—have lost jobs at

the highest rates (Flores and Padilla 2020), while Blacks and Latinos have suffered the highest infection and death rates across large swaths of urban, suburban and rural areas (Oppel et al. 2020).

As public officials and experts have grappled with closing businesses and regulating public gatherings, several consistent trends have suggested patterns in surges unaccounted for. While the dominant narrative of the failure to stem COVID-19 has typically centered on density and gatherings, such a narrative fails to explain why rates fell for all groups except for Latinos during the period of stay-at-home orders, or how COVID-19 transmission in suburban and rural regions often outstrips those in densely-populated urban cores (e.g. Oppel et al. 2020).

The recent outbreaks of COVID-19 among California's farmworkers, in counties such as Imperial, Oxnard and Hanford, illuminate the central role of the workplace in COVID-19 transmission.³ COVID-19 may travel through tightly congested work environments or overcrowded housing. In turn, the lack of options available to low-wage, essential workers to cope with the pandemic—as many lack access to unemployment benefits, emergency paid sick or family leave, or health insurance—place low-wage workers and their communities at higher risk of COVID-19 infection and transmission.

In this brief we examine the relationship between low-wage work and COVID-19 infection rates. **We ask, are counties with high rates of low-wage worker households and large households associated with higher rates of COVID-19?** In addition, we

³ See Rodriguez (2020), Sturgill (2020) and Solis (2020).

Table 1. California counties with high worker distress

<i>County</i>	<i>% of Households Below Living Wage</i>	<i>Average Household Size</i>
Tulare	41.5%	2.9
Kern	37.3%	3.0
Imperial	35.8%	3.0
Kings	35.4%	3.1
Fresno	34.4%	2.9
Madera	32.6%	3.1
Merced	32.6%	3.2
San Joaquin	32.0%	3.0
Los Angeles	31.4%	2.7
San Bernardino	31.2%	3.1
Santa Barbara	33.1%	2.8
Riverside	28.1%	2.9
Stanislaus	30.2%	2.8
Sutter	30.2%	2.8
Yuba	30.2%	2.8
California average	27.4%	2.7

Source: UC Merced Community and Labor Center analysis of IPUMS-USA American Community Survey 2018 PUMS data

also examine the relative risk of COVID-19 transmission among California workplaces. We ask, in which California industries do workers have the highest rates of low-wage workers and large households? Lastly, we estimate access to FFCRA emergency paid sick or family leave by industry.

Our findings indicate that low-wage work is associated with the spread of COVID-19, and that to mitigate COVID-19 spread it is not enough to simply regulate business openings and public gatherings—policymakers must also innovate health and safety reforms focused on the workplace and provide a greater safety net for workers.

DATA AND METHODS

This brief utilizes US Census Bureau American Community Survey (ACS) Public Use Microdata Series (PUMS) 2018 data, as well as Current Population Survey (CPS)-Annual Social and Economic Supplement

(ASEC) 2018 data. The ACS is drawn from an annual sample of 3.5 million American households, and its data represents one percent of American households, whereas the CPS-ASEC is a smaller survey drawn from a sample of 94,000 households.

This brief focuses its analysis on fifty-two of California’s fifty-eight counties—either on individual counties or through Census Public Use Microdata Areas (PUMAs) for small counties with a population of less than 150,000. (We omitted from the full analysis the Glenn/Colusa/Tehama/Trinity PUMA and the Monterey/San Benito PUMA. Glenn, Colusa and Monterey reported positivity rates above 8%, but no data was available for analyzing county-level worker distress.)

We also utilized the Massachusetts Institute of Technology (2020) Living Wage Calculator, which provided county-level estimates for a household “living wage” income—the household income necessary

Figure 1. California counties with high COVID-19 positivity rates (>8%)



Source: California Department of Public Health, County Data Monitoring, July 12, 2020

to “avoid consistent and severe housing and food insecurity” (Nadeau 2018, 2). The calculator provided estimates for households with twelve different combinations of working adults, non-working adults, and children. We applied the 2019 county-level and household-level thresholds to every household sampled in the 2018 ACS, adjusting for inflation.

We defined *worker distress* through two measures: percent of households living below a living wage, and average household size.

In 2018, California’s average household size was 2.7, third-highest in the nation; twenty-one California counties had higher household sizes. In addition, 27.4% of California households reported a household income that fell below the “living wage” threshold; thirty counties had higher rates.

We coded counties that surpassed the state average on *both* of these measures (low-wage worker households, and household size) as being characterized by *high worker distress*. These consisted of Tulare, Kern,

Imperial, Kings, Fresno, Madera, Merced, San Joaquin, Los Angeles, San Bernardino, Santa Barbara, Riverside, Stanislaus, Sutter and Yuba (see table 1). Counties that did not surpass the state average on both measures were coded as *low worker distress*.

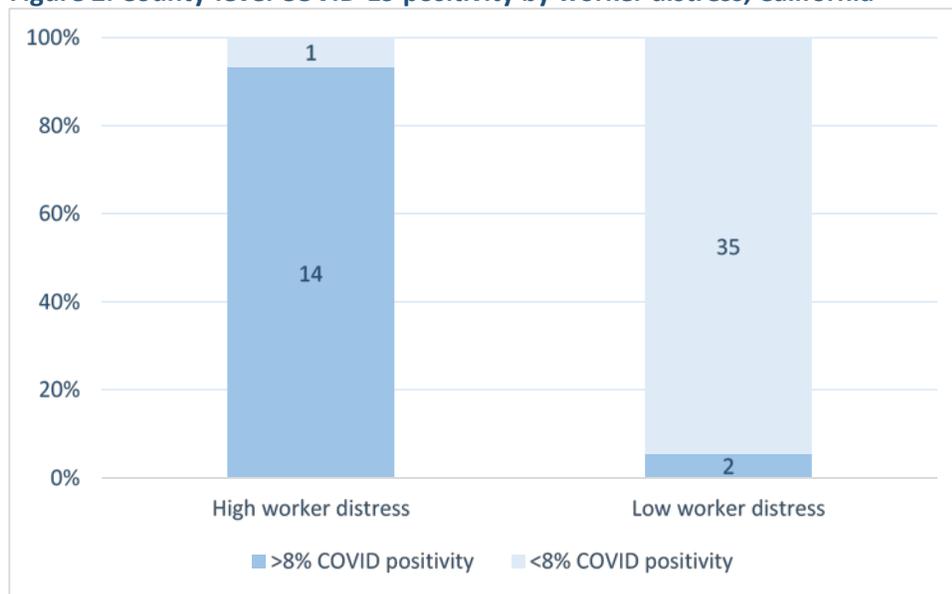
Lastly, we drew from California Department of Public Health (2020) data for county-level positivity rates.

FINDINGS

Four months in to the COVID-19 pandemic, COVID-19 spread has made deep inroads into urban, suburban and rural geographies across California. As of July 12, 2020, nineteen California Counties were on the state’s “watchlist” with a testing positivity rate greater than eight percent. Many are rural and suburban (see figure 1).

Seven of eight San Joaquin Valley counties—where the majority of the state’s agricultural production hails from—are among the state’s eighteen counties with COVID-19 positivity above eight percent. This includes

Figure 2. County-level COVID-19 positivity by worker distress, California



Source: UC Merced Community and Labor Center analysis of IPUMS-USA American Community Survey 2018 PUMS data; California Department of Public Health, County Data Monitoring, July 12, 2020

Stanislaus (17.7%), Merced (16.1%), Tulare (15.1%), San Joaquin (14.4%), Madera (13.0%), Kings (11.7%), and Fresno (11.1%).

Los Angeles County (10.4%), the state’s largest urban area, was also among counties with a positivity rate above eight percent. Lastly, Riverside (15.0%) and San Bernardino (14.5%), large suburban regions outside of Los Angeles, were also on the list.

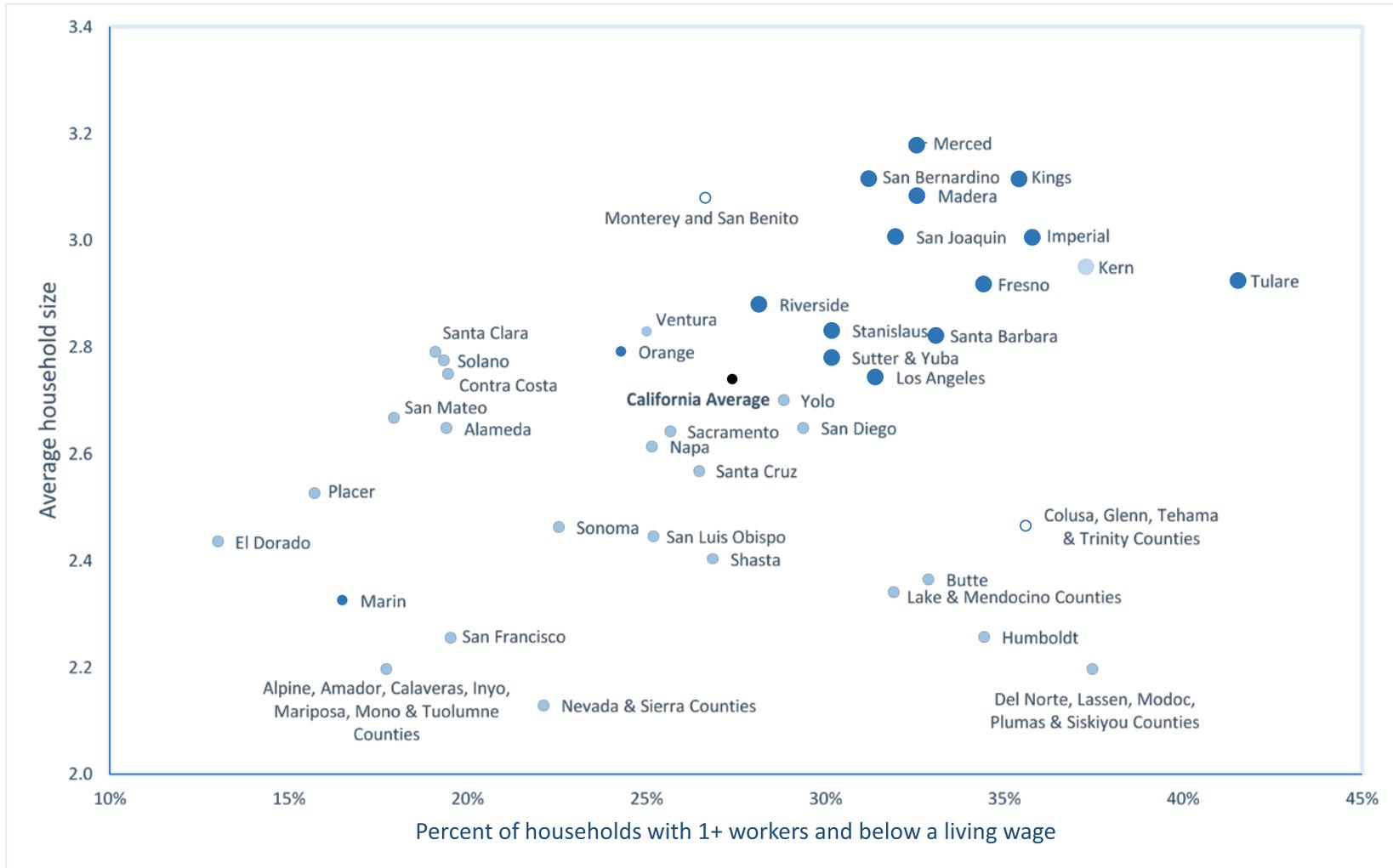
Worker Distress and COVID-19 Positivity

Strikingly, fourteen of the fifteen counties characterized by high worker distress (above the state average for percent of households earning less than a living wage, and households larger than the state average) had COVID-19 positive testing rates above eight percent. In contrast, only two of thirty-seven counties marked by low worker distress had COVID-19 positivity above eight percent (see figure 2).

Figure 3 illustrates the relationship between household size, percent of households below a living wage, and COVID-19 positivity greater than eight percent. In this figure, California is represented by a large black dot in the middle of the scatterplot, while worker distress is represented by the upper-right quadrant. (The right side of the horizontal axis signifies rates of worker households living below a living wage that surpass the state average of 27.4%, and the vertical axis represents average household sizes above the state average of 2.74 persons per household).

In the upper-right quadrant of figure 3 (worker distress), large, dark-blue dots represent counties with COVID-19 positivity greater than 8%. Only Kern, represented by a large, light-blue dot, was characterized by high worker distress without a high positivity rate.

Figure 3. Average household size, by percent of households with 1+ workers and below a living wage, California counties



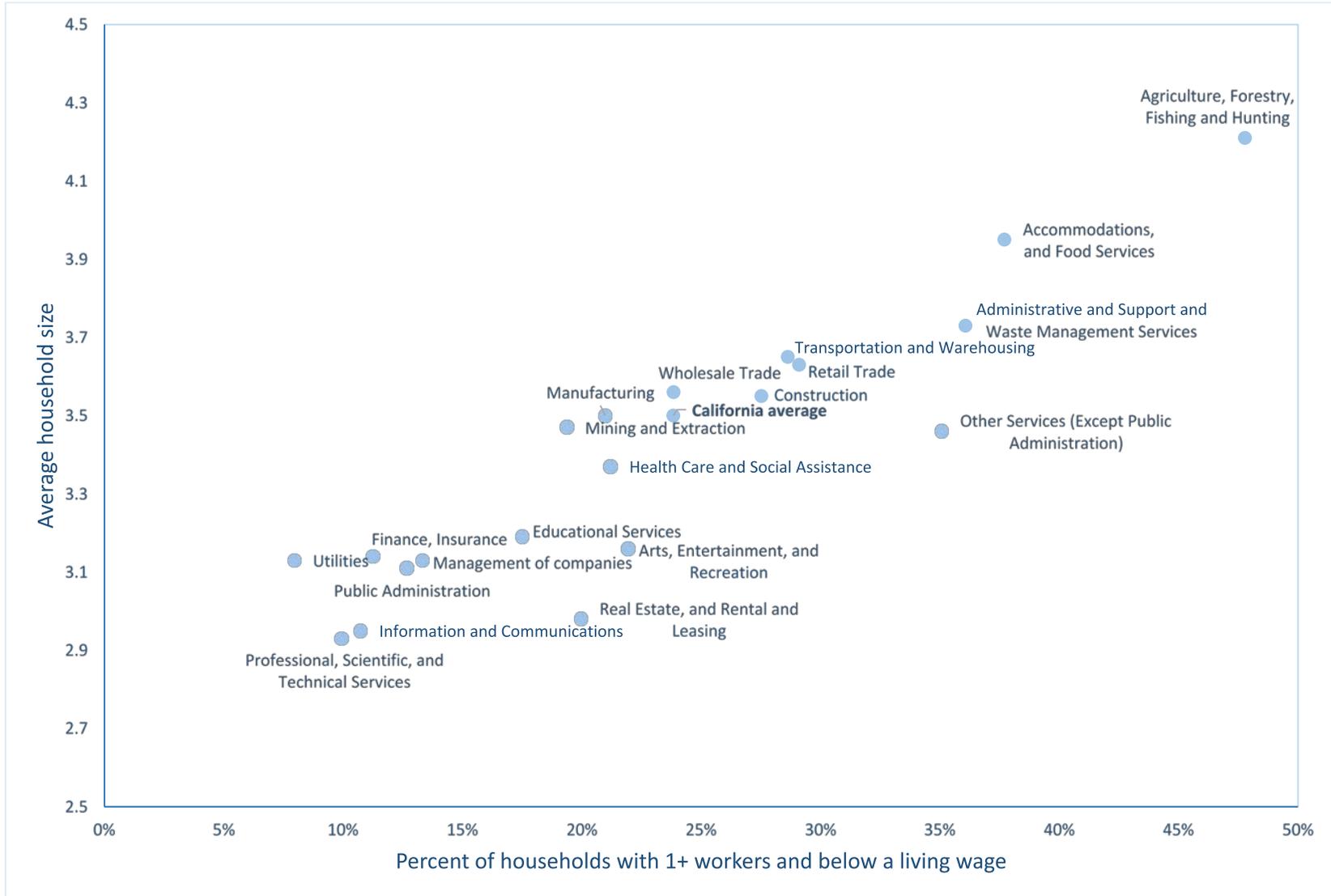
Source: UC Merced Community and Labor Center analysis of IPUMS-USA American Community Survey 2018 PUMS data

Note: Large dots (any color) = counties above California average in both average household size and worker households below a living wage

Note: Dark blue dots (any size) = counties with COVID-19 positivity rates exceeding the state threshold (>8%)

Note: White dots (any size) = some counties with COVID-19 positivity rates exceeding the state threshold (>8%)

Figure 4. California worker distress, by industry



Source: UC Merced Community and Labor Center analysis of IPUMS-USA American Community Survey 2018 PUMS data

In contrast, among the thirty-seven counties with low worker distress (located in the upper-left, lower-left and lower-right quadrants), only two were characterized by high COVID-19 positivity: Marin and Orange (see figure 3). (These are represented by small, dark-blue dots). Of these two, Orange was very close to being defined as high worker distress and was positioned very close to the upper-right quadrant (see figure 3).

Worker Distress by Industry

In figure 4, we examine California worker distress by industry. Our previous measure of worker distress focused on a county-level analysis of all households. Here we focus on a person-level analysis of industries.

We examine industries characterized by A) a percentage of workers living below a living wage that surpassed the state average for workers (23.8%), and B) industries above the state average for household size among workers (3.5). These metrics comprise an individual-level measure of worker distress.

Figure 4 reveals that workers in six groupings of California industries exhibited worker distress—higher-than-state-average rates of low-wage work and higher-than-state-average household sizes. These six groupings of industries included: agriculture, forestry, fishing and hunting; accommodations and food services; administrative and support and waste management services; transportation and warehousing; and retail.

Agriculture, forestry, fishing and hunting were characterized by the greatest levels of worker distress. In these industries, almost half (47.8%) of all workers lived in households with less than a living wage

income, and the average household size was 4.2 persons per household.

The conditions in agricultural work place it at high risk for COVID-19 transmission. Stories of recent outbreaks among pistachio plant workers in Wasco, meatpacking plant workers in Hanford, or field workers in Oxnard and Imperial County reveal the potent spread of COVID-19 in rural communities with high proportions of low-wage workers.

Other industries also suffer from high levels of worker distress that risk the spread of COVID-19. These include accommodations and food services. Almost two in five (37.7%) workers in these industries earned less than a living wage, and the average household size for these workers was 4.0 persons per household.

In addition, transportation and warehousing industries also exhibited high levels of worker distress. More than one in four workers (28.6%) in these industries lived in a household with less than a living wage, and the average household size was 3.7.

The retail trade industry, which includes essential, grocery retail workers, also exhibited levels of worker distress that suggest potent COVID-19 spread. More than one in four (29.1%) of these workers lived in a household which had less than a living wage income, and their average household size was 3.6 persons per household.

At the same time, several industries were characterized by low levels of worker distress. Persons working in utilities had the lowest rate of living below a living wage (8.0%), and workers in this industry lived in households with 3.1 persons, on average.

Table 2. Estimates of US private sector workers lacking one or more forms of (FFCRA) emergency paid leave, by industry

<i>Industry</i>	Lack One or More Forms of Emergency Paid Leave	
	Percent	Number
Agriculture, Forestry, Fishing and Hunting	83.1%	2,030,976
Accommodations, and Food Services	85.6%	10,251,938
Administrative and Support and Waste Management Services	77.7%	4,983,007
Other Services (Except Public Administration)	86.8%	6,912,218
Retail Trade	86.8%	14,882,740
Transportation and Warehousing	81.3%	4,802,695
Construction	77.3%	7,978,845
Arts, Entertainment, Recreation	75.5%	2,529,675
Wholesale Trade	69.7%	2,618,803
Health Care and Social Assistance	94.0%	18,279,067
Manufacturing	72.0%	11,617,732
Real Estate, and Rental and Leasing	84.3%	396,951
Mining and Extraction	76.4%	579,840
Educational Services	70.4%	3,944,799
Management of companies	70.1%	138,654
Finance, Insurance	81.7%	5,994,003
Information and Communications	78.0%	2,156,059
Professional, Scientific, and Technical Services	78.1%	8,672,834
Utilities	83.9%	990,583
<i>Total</i>	81.8%	109,769,055

Source: UC Merced Community and Labor Center analysis of IPUMS Current Population Survey 2018

Note: Sample restricted to (non-incorporated) self-employed, and wage-earning workers

Note: Industries listed by order of highest rate of workers living in households below a living wage

Lack of Federal Emergency Paid Leave

In this section we estimate the prevalence of access to federal emergency paid leave among US private sector workers. Low-wage workers without access to paid leave are vulnerable to the transmission of COVID-19; those earning less than a living wage and lacking paid leave risk significant housing and food insecurity by calling in sick to work.

The Families First Coronavirus Response Act (FFCRA) provides up to eighty hours of fully-

paid, emergency sick and family leave to employees of private firms with 50 to 499 employees. (Healthcare provider employees are exempted, while employees who work for firms with less than fifty persons are exempted from the family leave provision.) The bill is set to expire December 31, 2020.

While the FFCRA may provide some safety net for workers with no other form of paid sick or family leave, lack of paid leave exposes low-wage workers—many whom do not have any form of paid leave and cannot

afford to miss a day of work—to risk of COVID-19 transmission at their workplace and in the communities they live in.

We draw from CPS-ASEC 2018 data to estimate the number of private sector workers in each US industry, in 2017, that worked for employers that would today be exempt from the FFCRA: those with less than 50 employees, 500 or more employees, or who work for a healthcare provider.

Over one hundred million (109.8 million) American workers in the private sector, or more than four in five (81.8%), are exempted from one or more of the FFCRA's paid leave provisions (see table 2). Without further reform expanding paid leave, these figures suggest that states and localities will need to play a central role in creating a safety for all if COVID-19 spread is to be stemmed.

Already, some major California cities have begun to enact or to further extend existing paid leave ordinances, mandating eighty hours of emergency paid leave to employees of firms with less than fifty workers, or more than five hundred workers (Reyes and Zahniser 2020). Such ordinances help to close the massive loopholes in the FFCRA that place workers and the broader public at risk of COVID-19 spread.

Table 2 presents the prevalence of working for an employer with less than fifty or more than five hundred employees, by industry (also see figure 4). This table is sorted by industry; at top are those industries with the highest rates of workers living in a household with below a living wage income.

While workers in healthcare and social assistance industries do not exhibit levels of worker distress very different from the state

average, we estimate that most workers in this industry (94.0%) lack at least one form of FFCRA paid leave due to the FFCRA's exemption for healthcare providers. While some employers in this industry may provide some form of paid leave, the healthcare industry nonetheless has the highest rate of workers who lack access to federal, guaranteed emergency paid leave.

Several more industries exhibit high rates of workers who lack access to paid sick or family leave, even above the state average of 81.8%. In retail trade, 86.8% of workers—or 14.9 million—work for employers with less than fifty or more than five hundred employees, and would not qualify for one or more of the FFCRA's paid leave provisions. Other industries with similarly high rates include retail trade (such as grocery retail workers) at 86.8%, other services (which include personal services, such as housekeepers or gardeners) also at 86.8%, and accommodations and food services (such as hotel or fast food workers) at 85.6%.

Agriculture, forestry, fishing and hunting had the highest rate of workers who live below a living wage, and a rate of workers who may not qualify for federal paid sick or family leave (83.1%) above the nation's average.

In April, California Governor Gavin Newsom issued an order extending eighty hours of emergency paid sick leave to California food chain workers (including agricultural, grocery retail, and food delivery workers) (Office of the Governor 2020). In addition to the local ordinances mentioned earlier, this is an important first step demonstrating how state or local policy may begin to close gaps in federal laws and address the racial and economic disparities that allow COVID-19 to spread in the workplace and beyond.

CONCLUSION

In conclusion, we find a striking relationship between county-level worker distress and county-level COVID-19 positive test rates that exceed the state standard (8%). Most counties (93%) with *high* worker distress were on the state's COVID-19 watchlist with positivity rates above 8%, while most counties (95%) with *low* worker distress were marked by low COVID-19 positivity. Only two of thirty-seven counties with low worker distress had rates above 8%.

We also find a relationship between worker distress and COVID-19 positivity that remains consistent across geographies. While the dominant narrative about COVID-19 has emphasized urban settings and public gatherings, our analysis suggests that COVID-19 spread is associated with rural and suburban counties (such as Imperial, Tulare, and Riverside) through worker distress.

Lastly, worker distress was highest in particular industries. These industries included: agriculture, accommodations and food services, administrative and support and waste management, transportation and warehousing, and retail. Despite the FFCRA, in all of these industries (and all other US industries) most workers still lacked access to at least one form of federal emergency paid leave.

POLICY RECOMMENDATIONS

1. We recommend the reporting of COVID-19 positivity by industry. Understanding industry trends in COVID-19 transmission will play a critical role in developing appropriate workplace health and safety standards that mitigate the transmission of COVID-19.

2. Improved workplace health and safety standards. While much of the public debate on COVID-19 safety has centered on the regulation of large public gatherings, our analysis suggests a widespread, potent association between COVID-19 and low-wage work that places the broader public at risk and requires meaningful reform at the workplace.

3. A greater safety net for workers in essential jobs. Millions of workers lack access to traditional unemployment benefits, guaranteed emergency paid leave, or affordable health coverage. For essential workers who do not have the option to telework, a safety net may enhance policy efforts to reform workplace health and safety standards.

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About UC Merced Community and Labor Center

The UC Merced Community and Labor Center is located at the University of California Merced. It conducts research and education on issues of community, labor and employment.