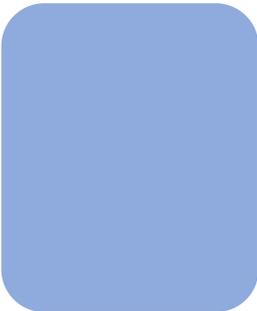
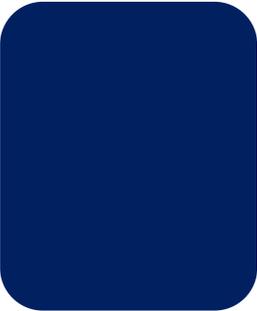


The Effects of the Global Pandemic on Illinois Workers

An Analysis of Essential, Face-to-Face, and Remote Workers During COVID-19

June 4, 2020

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Executive Summary

The novel coronavirus disease (COVID-19) pandemic has brought the economy to a grinding halt. Nearly 40 million Americans have applied for unemployment insurance claims— including more than one million Illinois residents. Still, millions of essential Illinois workers remain employed.

An estimated 3.1 million Illinois workers— or 51 percent of the state’s workforce prior to the COVID-19 recession— were employed in essential sectors of the economy. Essential workers:

- Include registered nurses, firefighters, construction workers, and delivery drivers;
- Are mainly located outside of the City of Chicago; and
- Are disproportionately likely to be union members, with a unionization rate of 22 percent.

In comparison, 1.7 million Illinois workers (27 percent) worked in face-to-face sectors that were restricted under Governor Pritzker’s stay-at-home order. Face-to-face workers:

- Include workers employed in bars, hair salons, and arts and entertainment businesses;
- Are more likely to be women and people of color; and
- Are most at risk of exposure to COVID-19 and most at-risk of being furloughed or unemployed.

A final category of Illinois’ workforce was made up of 1.4 million workers (22 percent) in sectors that could largely be performed in remote settings. Remote workers:

- Include workers in high-paying management, financial, and legal sectors of the economy;
- Are considerably more likely to be men; and
- Are more likely to live in the City of Chicago.

Essential workers and face-to-face workers earn significantly less than remote workers. In Illinois:

- Average hourly earnings are \$20 per hour for face-to-face workers, \$27 per hour for essential workers, and \$35 per hour for remote workers;
- 44 percent of face-to-face workers and 25 percent of essential workers earn less than \$15 per hour, compared with just 14 percent of remote workers; and
- After accounting for other factors including educational attainment, essential workers statistically earn 7 percent less than remote workers and face-to-face workers earn 14 percent less than remote workers.

Essential workers and face-to-face suffer from higher job volatility at a time when efforts to “flatten the curve” have necessitated large-scale shutdowns of traditional economic activity. In Illinois:

- The April 2020 unemployment rate was 16 percent for all workers but 35 percent for face-to-face workers, 12 percent for essential workers, and just over 6 percent for remote workers.
- 545,000 workers have likely lost their employer-provided health insurance coverage, including 298,000 face-to-face workers, 189,000 essential workers, and 58,000 remote workers.

The disparities that essential and face-to-face workers experience in Illinois could be addressed by a range of policy changes. These include, but are not limited to:

1. Introducing hazard pay for essential frontline and face-to-face workers;
2. Passing a statewide paid sick leave law;
3. Enacting a paid family leave policy;
4. Approving a stable and secure scheduling law;
5. Implementing the state’s work-share program;

6. Creating a relief fund for workers who do not have access to state and federal cash aid;
7. Considering a state-run public health care option to expand coverage to the newly unemployed;
8. Providing whistleblower protections for employees who raise concerns about workplace health and safety practices or hazards related to COVID-19;
9. Strengthening collective bargaining rights; and
10. Fast-tracking the \$15 minimum wage, which disproportionately impacts face-to-face workers.

The COVID-19 pandemic has revealed a range of structural economic and public health inequities. On the one hand, the lowest-paid workers—higher shares of whom are women and people of color—are generally at the highest risk of becoming infected, unemployed, and uninsured. On the other hand, many middle-class workers have kept the economy functioning. By bringing new recognition to the value of and challenges faced by both essential and face-to-face workers, the state’s response to COVID-19 may also offer a policy roadmap that can enable Illinois to create a post-pandemic future that protects workers’ rights and rebuilds the middle class.

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Introduction

The novel coronavirus disease (COVID-19) pandemic has brought the economy to a grinding halt. In the first quarter of 2020, U.S. gross domestic product (GDP) contracted by 5 percent, the largest decrease in economic activity since the Great Recession (BEA, 2020). As stay-at-home orders were extended through May and consumer confidence remained low even in states that had begun to reopen, national GDP is expected to shrink even more in the second quarter of 2020 (Bartash, 2020; Badger & Parlapiano, 2020). J.P. Morgan projects a 14 percent decrease in the second quarter of 2020 and Goldman Sachs forecasts a 34 percent decline (J.P. Morgan, 2020; Bivens, 2020). Since March 2020, more than 40 million American workers have applied for unemployment insurance benefits and the unemployment rate had risen to nearly 15 percent (Shierholz, 2020; Schwartz et al., 2020). Fully 37 percent of Latinx Americans and 27 percent of African Americans report that they have been unable to pay at least one type of bill during the coronavirus outbreak, while 17 percent of white Americans say the same (Stafford & Swanson, 2020).

The COVID-19 virus has disproportionately affected Illinois, a global hub of transportation and commerce. The first confirmed case of COVID-19 in Illinois was reported in March of 2020, although recent research has found that the virus was most likely spreading rapidly before testing became available and the first cases were known (Carey & Glanz, 2020). Just two months since the first confirmed case of COVID-19 in Illinois, tens of thousands of people have tested positive for the virus in virtually all of Illinois' counties and more than 5,000 residents have died (IDPH, 2020). By the end of April 2020, 45 percent of businesses had been closed and Illinois' sales tax revenue had decreased by 20 percent (Homebase, 2020; COGFA, 2020). More than one million Illinois residents had filed for unemployment, accounting for 16 percent of Illinois' labor force (Kandra & Wolfe, 2020).

Still, millions of Illinois residents remain employed. In addition to workers who are able to perform their jobs remotely, millions of low-income and middle-class workers have been deemed "essential" to keeping communities running during stay-at-home orders. This group extends far beyond frontline health care professionals, such as nurses and long-term facility aides, who have cared for the sick. It also includes manufacturing workers who have changed production lines to deliver life-saving supplies as well as grocery clerks, farmworkers, warehouse workers, and truck drivers who have risked infection to provide food and other vital goods to homes. It includes construction, sanitation, and maintenance workers who have maintained critical infrastructure to keep communities powered and keep facilities safe. Furthermore, this group also includes firefighters and other first responders who have protected distressed communities.

This report, conducted jointly by researchers at the Illinois Economic Policy Institute (ILEPI) and the Project for Middle Class Renewal (PMCR) at the University of Illinois at Urbana-Champaign, examines the impact of the COVID-19 pandemic on workers across Illinois. The report provides an understanding of which workers are essential in Illinois, which are experiencing the most economic hardship while social distancing measures are in place, and which are able to work remotely. After exploring the occupational breakdown, demographic characteristics, and geographic location of both essential workers and vulnerable employees in face-to-face business sectors, differences in worker incomes are assessed. Then, job volatility data, including April 2020 unemployment rates and the share of workers who have likely lost their employer-provided health insurance, are presented. The report concludes by addressing implications for Illinois during the COVID-19 recession.

Essential Workers Account for Half of Illinois' Economy

On March 20, 2020, Governor J.B. Pritzker issued a statewide stay-at-home order to contain the COVID-19 virus and promote public health ([Office of the Governor, 2020](#)). As the order took effect at 5:00 p.m. on Saturday, March 21, 2020, the Governor specified essential activities, essential government functions, and essential businesses and operations. Essential businesses ranged from health care and public health operations to critical construction trades and laundry services.

James Parrott and Lina Moe, two economists at The New School for Social Research, have grouped the U.S. labor market into three broad categories. These include “essential” workers in public health, safety, and sustenance industries; “face-to-face” businesses that have been restricted, such as bars and restaurants; and occupations that can be performed in a “remote” setting, including many professional sectors and the finance industry. Under Parrott and Moe’s broad classifications, 23 percent of private-sector workers in New York City were considered “essential,” 43 percent worked in “face-to-face” industries, and 34 percent were in “remote” industries ([Parrott & Moe, 2020](#)).

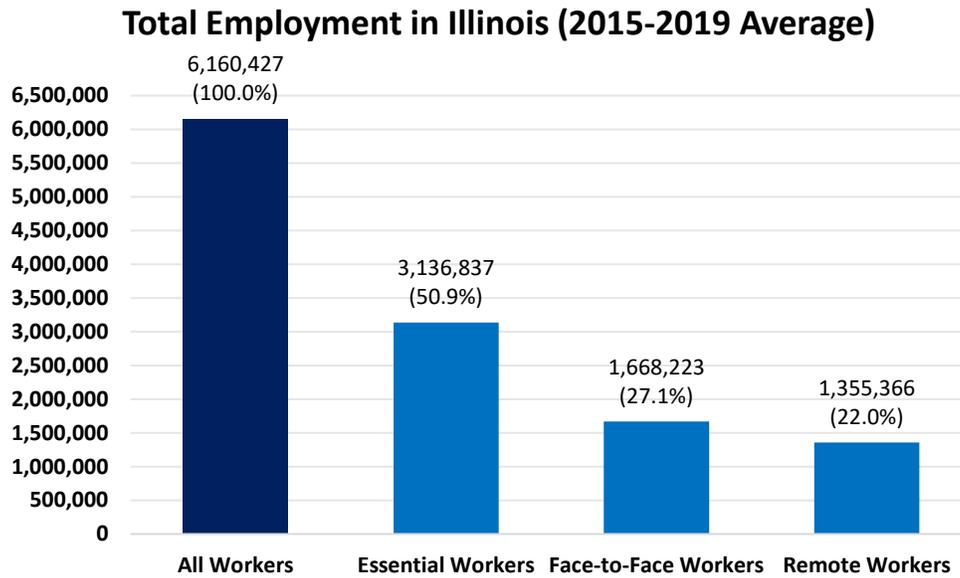
This report utilizes these three broad industry classifications but adjusts them based on Governor Pritzker’s first stay-at-home Executive Order. For instance, Parrott and Moe consider the construction industry “face-to-face” but Governor Pritzker classified the industry as “essential.” An April 2020 survey of more than 19,000 dentists found that 95 percent were either closed or only accepting patients for emergency care; this report considers the offices of dentists “face-to-face” while Parrott and Moe listed them as “essential” ([Carey, 2020](#)). This report also differs from Parrott and Moe by including public sector jobs, such as sanitation workers and firefighters. However, this report does amend a few sectors that were considered “essential” by Governor Pritzker and considers them “face-to-face.” As an example, although public transportation is essential under the Executive Order, public transit ridership in April 2020 fell 82 percent in the Chicago metropolitan area, including a 97 percent drop among Metra commuters ([CMAP, 2020](#)). Due to the proximity to other riders, the public transportation sector is classified as “face-to-face” in this report.

Elementary, secondary, and post-secondary educators are essential workers in Illinois. Under Governor Pritzker’s first stay-at-home order, educational institutions were recognized under “essential businesses and operations” ([Office of the Governor, 2020](#)). Additionally, according to the Department of Homeland Security’s guidance, all teachers are considered part of the “essential critical infrastructure workforce” ([LMI Institute, 2020](#)). Accordingly, even though schools are currently closed and both teachers and school administrators concluded the 2019-2020 academic year by *temporarily* working remotely, this report categorizes employees in elementary and secondary schools, colleges and universities, and apprenticeship programs and career and technical education (CTE) schools as essential workers.

In total, approximately half of all workers in Illinois are employed in essential sectors of the economy (Figure 1). Of the 6.2 million Illinois workers employed on average in Illinois over the past five years, 3.1 million were essential workers (51 percent) and another 1.7 million (27 percent) were employed in face-to-face industries. By contrast, about 1.4 million Illinois workers (22 percent) were employed by businesses and organizations with operations that can be performed remotely.¹ For a full list of industries classified as “essential,” “face-to-face,” and “remote,” please see Table A of the Appendix.

¹ Nationally, 25 percent of U.S. workers reported that they worked from home in 2017 and 2018 ([BLS, 2019](#)). Approximately 47 percent of workers employed in professional and businesses services worked from home, 47 percent in financial activities worked

Figure 1: Total Employment in Illinois by Broad Classification, 2015-2019 Average



Source: Authors’ analysis of 2015-2019 data for Illinois from the Current Population Survey Outgoing Rotation Groups (CPS-ORG) (CEPR, 2020). The full sample includes 27,584 workers in Illinois’ labor force, including 26,289 workers with at least one job. Estimates are weighted to match the actual Illinois population using sampling weights provided by the U.S. Census Bureau and U.S. Department of Labor. For a full list of industries classified as “essential,” “face-to-face,” and “remote,” please see Table A of the Appendix.

Prior to COVID-19, face-to-face workers worked fewer hours and experienced a higher unemployment rate than essential workers and remote workers (Figure 2). While the average employee in face-to-face industries worked about 35 hours per week, just 73 percent were full-time employees. By contrast, 86 percent of essential workers and 89 percent of remote workers were in full-time positions. Moreover, in the 12 months before the pandemic, Illinois’ unemployment rate averaged 4 percent. During this time, face-to-face workers had an unemployment rate approaching 5 percent while essential workers experienced a 3 percent unemployment rate and 2 percent of remote workers were unemployed.

Figure 2: Labor Market Outcomes for Illinois Workers, by Broad Classification, 2015-2019 Average

Illinois Labor Market Metrics (2015-2019)	All Workers	Essential	Face-to-Face	Remote
Share of Illinois’ workforce	100.0%	50.9%	27.1%	22.0%
Usual hours worked per week (average)	38.4 hours	39.1 hours	35.3 hours	40.2 hours
Share working 35 or more hours per week	83.3%	85.9%	73.4%	89.4%
Unemployment rate (Pre-COVID-19)*	3.8%	3.3%	4.5%	2.3%

Source: Authors’ analysis of 2015-2019 CPS-ORG data (CEPR, 2020) and monthly CPS data from January 2019 through April 2020 for Illinois (Flood et al., 2020). *The pre-COVID-19 timeframe includes 12 months of data from March 2019 through February 2020.

Essential industries in Illinois are more likely to employ workers in occupations that have traditionally provided pathways into the middle class (Figure 3). Across Illinois, 4 percent of all workers are employed in construction occupations, 6 percent work in manufacturing production occupations, and 23 percent are employed in professional and related occupations. In comparison, workers in construction occupations account for 7 percent of the essential workforce, 8 percent are employed in production jobs, and 29

from home, and 45 percent in the information industry— including news media— worked from home. By contrast, just 7 percent of workers in leisure and hospitality worked from home (BLS, 2019).

percent work in professional occupations such as nurses and teachers. Face-to-face industries disproportionately employ people in service and sales jobs, who combined account for about half (48 percent) of the total face-to-face workforce. Most workers in the “gig economy,” including those on app-based for-hire vehicle platforms like Uber and Lyft, are face-to-face workers. By contrast, workers in management, business, and financial occupations and those in other professional occupations— such as lawyers and economists— comprise the majority of the remote workforce (64 percent combined).

Figure 3: Major Occupation of Illinois Workers, by Broad Classification, 2015-2019 Average

Illinois Workers by Occupation	All Workers	Essential	Face-to-Face	Remote
All occupations in Illinois	6,160,427	3,136,837	1,668,223	1,355,366
<i>Breakdown within each industry classification</i>				
Management, business, and financial occupations	17.4%	12.5%	11.3%	36.2%
Professional and related occupations	23.3%	28.6%	9.4%	28.1%
Service occupations	16.5%	13.4%	31.2%	5.9%
Sales and related occupations	10.2%	6.8%	17.0%	9.4%
Office and administrative support occupations	12.2%	11.3%	11.4%	15.6%
Farming, fishing, and forestry occupations	0.3%	0.6%	0.0%	0.0%
Construction and extraction occupations	3.9%	7.1%	0.5%	0.5%
Installation, maintenance, and repair occupations	3.1%	3.8%	2.8%	2.1%
Production occupations	6.1%	7.9%	6.8%	1.0%
Transportation and material moving occupations	6.9%	7.9%	9.6%	1.2%

Source: Authors’ analysis of 2015-2019 CPS-ORG data for Illinois (CEPR, 2020).

Who Are the Workers in Essential, Face-to-Face, and Remote Industries?

Essential workers generally reflect the broader Illinois economy (Figure 4). Essential workers are 66 percent white, 12 percent African American, 16 percent Latinx, and 6 percent Asian. Essential workers are slightly more likely to be male (54 percent) than the overall Illinois workforce (53 percent). While registered nurses and pre-K through 12 teachers are more likely to be women, other essential workers like doctors, police officers, firefighters, and construction tradespeople are more likely to be men.

In comparison, face-to-face workers are disproportionately more likely to be people of color and women, while remote workers are more likely to be white (Figure 4). Of all face-to-face workers in Illinois, African Americans account for 13 percent and Latinx individuals comprise another 22 percent. African Americans and Latinx workers are less able to work from home than white workers, and thus make up a smaller share of remote workers (Cerullo, 2020). In remote industries, African Americans make up just 10 percent of the workforce and Latinx workers account for just 9 percent. White workers hold 73 percent of all positions in remote industries. Furthermore, women are 49 percent of all workers in face-to-face businesses compared with 47 percent in remote industries.

Naturalized and non-naturalized immigrants constitute a large proportion of face-to-face and essential business sectors (Figure 4). Foreign-born residents in Illinois are employed in nearly one out of every five jobs in face-to-face industries (20 percent) and essential activities (19 percent). Conversely, only about one out of every eight workers in remote jobs is foreign-born (13 percent). Immigrants account for about one out of every five production workers, construction workers, food preparation and serving workers, and health care practitioners (Han, 2020). Foreign-born workers are particularly important in farming, fishing, and forestry occupations and in the food manufacturing industry, which includes businesses like

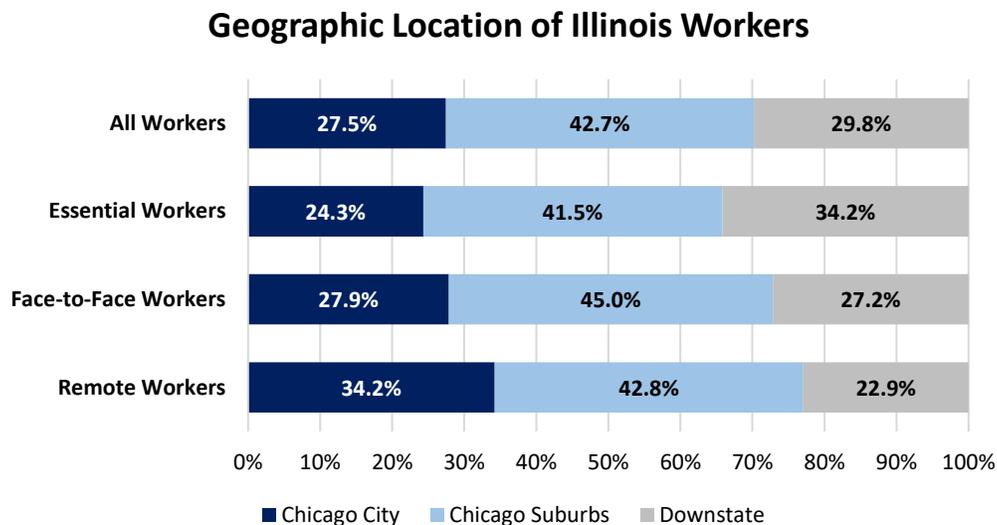
animal slaughtering and processing: 30 percent of workers in this essential sector are immigrants (18 percent are non-naturalized) and Latinx workers represent 29 percent of farmworkers and food production workers.² In Illinois’ meatpacking industry, foreign-born workers represent 45 percent of the labor force and over two-thirds (65 percent) of those workers are likely undocumented. Undocumented workers, who have been the target of mass deportation since 2017, have largely been feeding U.S. citizens during the pandemic.

Figure 4: Demographic Characteristics of Illinois Workers, by Broad Classification, 2015-2019 Average

Demographic Characteristics	All Workers	Essential	Face-to-Face	Remote
<i>Racial and ethnic identification</i>				
White (non-Latinx)	65.5%	65.6%	59.1%	73.0%
African American	11.7%	11.7%	13.1%	9.8%
Latinx	16.3%	16.5%	22.0%	8.9%
Asian	6.2%	5.9%	5.4%	8.1%
<i>Gender identification</i>				
Male	52.6%	53.5%	50.7%	52.8%
Female	47.4%	46.5%	49.3%	47.2%
<i>Additional demographics</i>				
Foreign-born	17.8%	18.9%	19.6%	13.0%
Veteran	4.2%	4.6%	3.1%	4.7%

Source: Authors’ analysis of 2015-2019 CPS-ORG data for Illinois (CEPR, 2020).

Figure 5: Geographic Location of Illinois Workers, by Broad Classification, 2015-2019 Average



Source: Authors’ analysis of 2015-2019 CPS-ORG data for Illinois (CEPR, 2020).

Figure 5 displays the geographic location of Illinois workers by each of the three broad classifications. Among all workers in Illinois, about 27 percent live in the City of Chicago, 43 percent reside in the suburbs of Chicago, and 30 percent are in the rest of Illinois (often referred to as “downstate”). Compared with the statewide average, essential workers in Illinois are more likely to be located outside of the Chicago

² For more information on farmworkers and those employed in food manufacturing plants, please see Table B in the Appendix.

area. Fully 34 percent of essential workers live in downstate Illinois. In comparison, a higher percentage of face-to-face workers live in the suburbs (45 percent) than the statewide average (43 percent). Meanwhile, a significantly greater portion of workers who can work remotely (34 percent) live in the City of Chicago than the overall workforce (27 percent).

The health and earning advantages of working from home are only available to a minority of workers. A separate analysis by researchers at the University of Chicago Booth School of Business revealed that 39 percent of Chicago metropolitan area jobs could plausibly be performed at home (Dingle & Neiman, 2020). The most remote accessible jobs are in the educational services, professional and scientific services, management, finance and insurance, and information sectors. By comparison, the least likely jobs to be performed at home are in transportation and warehousing, construction, retail trade, farming, food production, and food services. Notably, with some exceptions, most essential occupations cannot be performed from home.

Essential and Face-to-Face Workers Experience Pay Penalties

Essential workers and face-to-face workers earn significantly less than remote workers (Figure 6). On average, essential workers earned about \$27 per hour in Illinois while face-to-face workers earned just over \$20 per hour between 2015 and 2019. In comparison, remote workers had average hourly earnings of nearly \$35. Consequently, essential workers earned about \$8 less per hour and face-to-face workers earned over \$14 less per hour than workers in industries with the ability to work remotely. Likewise, while earnings were \$28 per hour for the median remote worker, the median worker in Illinois’ essential industries earned about \$22 per hour, or \$6 less per hour. The median worker in Illinois’ face-to-face sectors earned just \$15 per hour, which was \$13 less than the median remote worker.

Low-income workers were disproportionately employed in face-to-face sectors of the economy that have been most at risk of being furloughed or unemployed (Figure 6). About 740,000 face-to-face workers, accounting for 44 percent of all face-to-face workers in Illinois, earned less than \$15 per hour. By contrast, one-in-four essential workers earned less than \$15 per hour. Remote industries had the smallest share of low-income workers, with only 14 percent of the workforce earning less than \$15 per hour.

Figure 6: Income Metrics for Illinois Workers, by Broad Classification, 2015-2019 Average

Illinois Income Metrics	All Workers	Essential	Face-to-Face	Remote
Average inflation-adjusted hourly earnings	\$27.07	\$27.29	\$20.46	\$34.85
Median inflation-adjusted hourly earnings	\$20.67	\$21.58	\$15.00	\$28.00
Total employment	6,160,427	3,136,837	1,668,223	1,355,366
Workers earning less than \$15 per hour	1,715,504	784,775	740,493	190,237
Share earning less than \$15 per hour	27.8%	25.0%	44.4%	14.0%

Source: Authors’ analysis of 2015-2019 CPS-ORG data for Illinois (CEPR, 2020).

The consequence of being employed in face-to-face jobs is not only layoffs or significantly reduced hours, but also punitive harm done to the families of retail, restaurant, and personal service industry employees. In 2017, when the Chicago area economy and national economies were both strong, approximately 185,000 children in Cook County were “food insecure” (Feeding America, 2017). However, a recent survey conducted by Feeding America, a nationwide association of 200 food banks and 60,000 food pantries, found a 63 percent increase in demand. The Greater Chicago Food Depository saw a 40 percent rise in

demand in April 2020 compared to the previous year (Parra, 2020). This increase in demand at food banks is driven by face-to-face, low-wage workers who were previously fully employed.

Essential, face-to-face, and remote workers are generally divided by class status. Essential workers are broadly those in middle-class careers, including registered nurses, teachers, firefighters, and construction workers. As a result, these workers tend to earn hourly wages that align with the overall Illinois average. Face-to-face workers are disproportionately low-income, with 44 percent earning less than \$15 per hour. Examples of face-to-face workers are bartenders, clothing store employees, and child care workers. Remote workers are largely in high-income positions, including lawyers, bankers, and lobbyists.

The income gap between higher-paid remote workers and their counterparts in lower-income face-to-face jobs and essential middle-class sectors cannot be explained by educational attainment (Figure 7). Across all levels of educational attainment, essential workers earned lower hourly wages than remote workers, and face-to-face workers earned even less. On average, essential workers who have high school degrees or less earned about \$20 per hour and their equivalents in face-to-face business sectors earned less than \$17 per hour while their counterparts in remote industries earned nearly \$23 per hour. Similarly, remote workers with bachelor’s and advanced degrees earned over \$41 per hour on average. In comparison, essential workers with bachelor’s degrees or more (\$36 per hour) earned \$5 less per hour and face-to-face workers that have bachelor’s degrees or more (\$31 per hour) earned \$10 less per hour.

Figure 7: Hourly Earnings of Illinois Workers, by Education and Broad Classification, 2015-2019 Average

Average Hourly Earnings	All Workers	Essential	Face-to-Face	Remote
All workers at all levels of education	\$27.07	\$27.29	\$20.46	\$34.85
Workers with high school degrees or less	\$19.36	\$20.43	\$16.72	\$22.70
Workers with associate’s degrees	\$23.64	\$24.45	\$20.41	\$25.86
Workers with bachelor’s degrees or more	\$37.17	\$36.27	\$31.02	\$41.45

Source: Authors’ analysis of 2015-2019 CPS-ORG data for Illinois (CEPR, 2020).

Essential workers are, however, significantly more likely to be union members (Figure 8). From 2015 through 2019, Illinois’ union membership rate was about 14 percent on average. During this time, 22 percent of essential workers were union members. By contrast, just one out of every fifteen workers were union members in both face-to-face sectors (6 percent) and remote industries (7 percent). Unions continue to play a critical role in Illinois, with working people propping up the economy during the COVID-19 pandemic.

Statistical regression results on the impact of being either an essential worker or a face-to-face worker are reported in Figure 9. Many factors influence a worker’s hourly wage, including level of educational attainment, age, gender identification, racial and ethnic background, location in Illinois, citizenship status, immigration status, veteran status, marital status, public or private sector employment status, and occupation of employment. After accounting for these observable factors, essential workers statistically earn 7 percent less on average than remote workers. Face-to-face workers earn 14 percent lower hourly earnings than remote workers, even after accounting for level of educational attainment and other factors.

Figure 8: Union Membership Rates of Illinois Workers, by Broad Classification, 2015-2019 Average

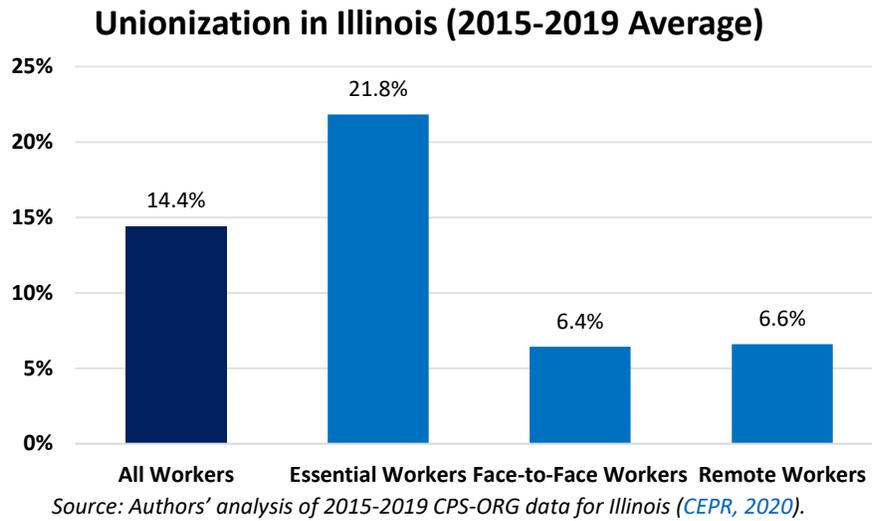
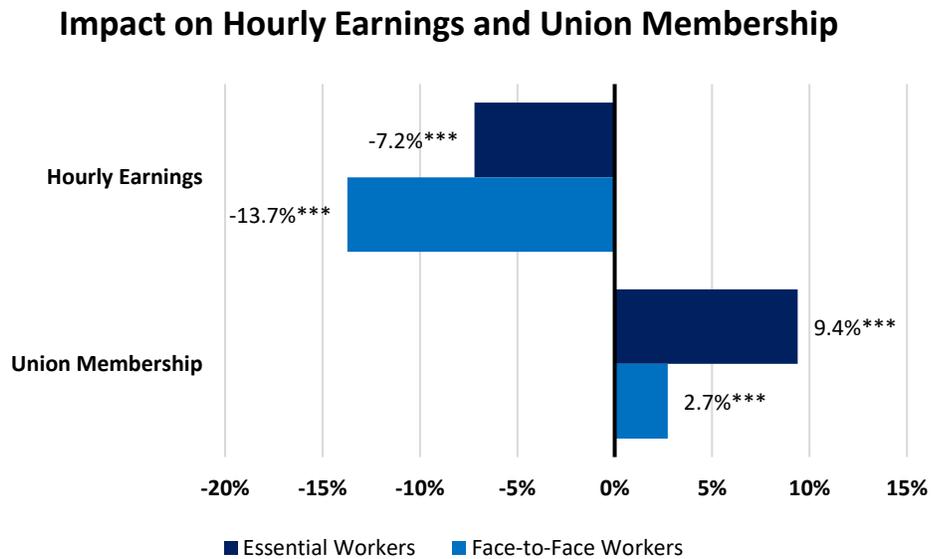


Figure 9: Impact of Being an Essential or Face-to-Face Worker on Wages and Unionization, 2015-2019



Source: Authors' analysis of 2015-2019 data for Illinois from the Current Population Survey Outgoing Rotation Groups (CEPR, 2020). *** $p \leq 0.01$; ** $p \leq 0.05$; * $p \leq 0.10$. For full regression results, please see Table C in the Appendix.

Essential workers and face-to-face workers are statistically more likely to be union members (Figure 9). After controlling for other factors that may impact whether a worker is a union member, being employed in an essential industry increases the chances of union membership by 9 percentage points. Relative to remote workers, face-to-face workers are 3 percentage points more likely to be union members. Union membership statistically increases worker incomes by about 10 percent on average (Manzo et al., 2019).³ Consequently, the pay penalties for essential workers (7 percent) and for face-to-face workers (14 percent) would be even larger if they were not more likely to be represented by unions.

³ Regression results using Illinois data from 2015 to 2019 yield a 10.3 percent union wage premium, an effect that is statistically significant at the 99 percent level of confidence. For more, please see Table 2 in the Appendix.

It is worth noting that a recent study evaluated each major occupation on three physical attributes: contact with others, physical proximity to others, and rates of exposure to hazardous conditions (Lu, 2020). Occupations were assigned a “COVID-19 Risk Score” between 0 and 100, with 100 representing the highest possible risk. In general, remote workers had the least risk of being exposed to the virus. Economists had the lowest risk score, at about 1. Other remote workers like web developers and lawyers ranged between 12 and 23 on the scale. By contrast, middle-class essential workers like delivery drivers (34 risk score), construction laborers (36 risk score), and police officers (52 risk score) were at greater threat of exposure, with registered nurses recording an 86 on the risk scale.⁴ Furthermore, despite a 14 percent pay penalty relative to remote workers, face-to-face occupations have the highest risk of exposure to COVID-19. Face-to-face workers like waiters and waitresses (44 risk score), barbers and cosmetologists (62 risk score), and dental hygienists (100 risk score) are among the most endangered during the global pandemic (Figure 10).

Figure 10: COVID-19 Occupational Risk Score for Selected Occupations in Broad Classifications, 2020

COVID-19 Occupational Risk Score, Selected Occupations	
<i>Essential workers</i>	
Registered nurses	86.1
Police officers	51.8
Construction laborers	36.2
Light truck or delivery services drivers	33.8
Postal service mail carriers	16.0
<i>Face-to-face workers</i>	
Dental hygienists	99.7
Personal care aides	64.0
Hairdressers, hairstylists, and cosmetologists	62.1
Amusement and recreation attendants	56.0
Waiters and waitresses	43.6
<i>Remote workers</i>	
Lawyers	23.0
Bookkeeping, accounting, and auditing clerks	22.0
Financial analysts	19.3
Web developers	12.5
Economists	1.4

Source: Analysis by Visual Capitalist (Lu, 2020).

Essential and Face-to-Face Workers Have the Highest Unemployment Rates

By April 2020, Illinois’ employers had laid off or furloughed more than 800,000 workers and the state’s unemployment rate had increased to more than 16 percent due to the COVID-19 pandemic (IDES, 2020). While the Illinois Department of Employment Security (IDES) reports which industries suffered the largest job losses– with leisure and hospitality shedding more than 320,000 jobs (a 52 percent decrease)– compared with one year ago, IDES does not report information by demographic group. Using data from

⁴ While essential workers are those in industries deemed “essential” in Governor Pritzker’s initial stay-at-home order, many are in occupations that require significant person-to-person, face-to-face interaction– like registered nurses, doctors, police officers, and grocery store clerks. Others are able to work remotely. However, in this report, workers in the “face-to-face” and “remote” categories are exclusively those in the sectors that were not specifically deemed “essential” in the initial stay-at-home order.

the *Current Population Survey*, which is used by IDES and the Bureau of Labor Statistics at the U.S. Department of Labor to determine monthly unemployment rates, Figure 11 provides the breakdown by gender identification, racial or ethnic background, and educational attainment.

Illinois’ unemployment rate increased from less than 4 percent in the 12 months prior to the first confirmed case of COVID-19 to more than 16 percent in April 2020, which is more than four times as many unemployed Illinois residents (Figure 11). Women, who had a similar unemployment rate as men before the pandemic, now face an estimated 19 percent unemployment rate, more than five times as high as before the pandemic. By contrast, about 15 percent of men in Illinois were unemployed as of April 2020, about four times as high as before the pandemic. The unemployment rate is about 15 percent for white workers, 19 percent for African American workers, and more than 24 percent for Latinx workers in Illinois. Latinx workers experienced a six-fold increase in unemployment, the largest of any racial or ethnic group. By educational attainment, workers without high school degrees had 28 percent unemployment, workers with only high school degrees had 25 percent unemployment, and workers with some college experience but no degrees had 23 percent unemployment as of April 2020. In comparison, the lowest unemployment rates were for workers with advanced degrees (8 percent), bachelor’s degrees (11 percent), and associate’s degrees (18 percent). In general, women, people of color, and less-educated workers have been most likely to be unemployed in Illinois due to the COVID-19 pandemic (Figure 11).

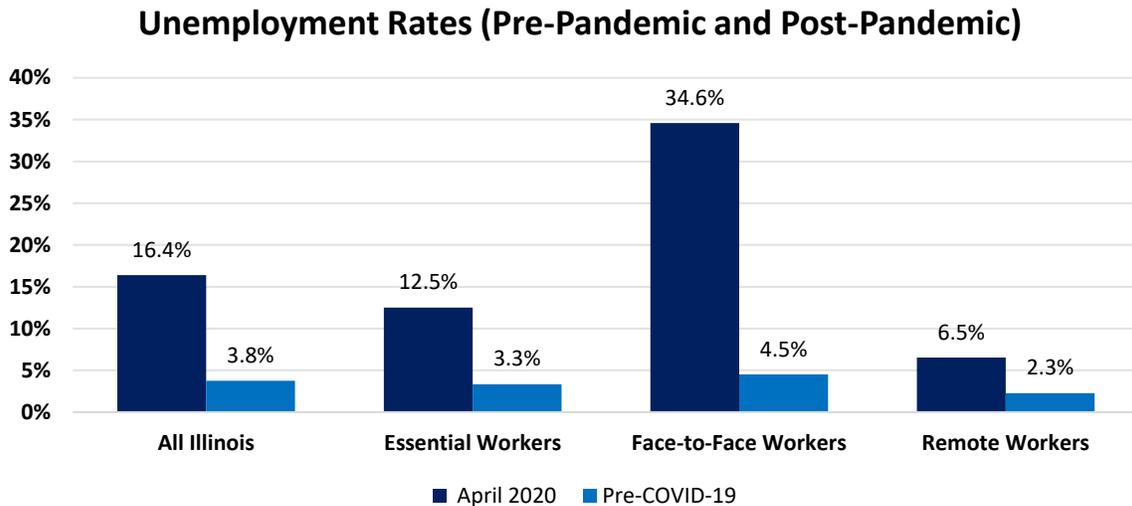
Figure 11: Illinois Unemployment Rates, by Demographic Group, April 2020 vs. Prior to COVID-19

Illinois Unemployment Rates (Current Population Survey)	April 2020	12 Months pre-COVID-19*	Rate Change	Percent Change
Illinois	16.4%	3.8%	12.6%	437.0%
<i><u>By gender identification</u></i>				
Women	19.0%	3.7%	15.3%	512.1%
Men	15.3%	3.8%	11.5%	403.1%
<i><u>By racial or ethnic background</u></i>				
White	15.2%	3.0%	12.2%	504.4%
African American	19.4%	7.9%	11.5%	246.4%
Latinx	24.5%	4.0%	20.5%	616.4%
<i><u>By educational attainment</u></i>				
Less than a high school degree	27.8%	7.0%	20.8%	396.0%
High school degree or equivalent	24.9%	5.8%	19.1%	430.7%
Some college but no degree	23.3%	4.5%	18.8%	520.1%
Associate’s degree	18.2%	2.5%	15.6%	714.7%
Bachelor’s degree	10.8%	2.3%	8.5%	476.7%
Advanced degree	8.1%	1.7%	6.4%	470.4%

Source: Authors’ analysis of monthly CPS data from January 2019 through April 2020 for Illinois (Flood et al., 2020). *The 12 months pre-COVID-19 include March 2019 through February 2020.

As of April 2020, essential workers had an unemployment rate of about 12 percent, approximately 4 percentage-points lower than the statewide average (Figure 12). Workers in face-to-face industries in Illinois suffered from an unemployment rate of nearly 35 percent. About eight times more face-to-face workers were unemployed in April 2020 than prior to COVID-19. By contrast, just over 6 percent of remote workers in Illinois were unemployed. Face-to-face workers– who are more likely to be women and people of color– also suffer from the highest job volatility at a time when efforts to “flatten the curve” have necessitated large-scale shutdowns of traditional economic activity.

Figure 12: Illinois Unemployment Rates, by Broad Classification, April 2020 vs. Prior to COVID-19



Source: Authors’ analysis of monthly CPS data from January 2019 through April 2020 for Illinois (Flood et al., 2020). The pre-COVID-19 timeframe includes 12 months of data from March 2019 through February 2020.

Finally, Figure 13 provides estimates on the number of workers in Illinois who have likely lost their employer-provided health insurance in Illinois due to the COVID-19 pandemic. Because the United States is unique among developed countries in tying health insurance coverage to employment, recessions increase the number of people who are uninsured. Compared with the 12 months prior to the pandemic, more than 800,000 workers in Illinois have newly become unemployed. On average, about 73 percent of all Illinois workers had health insurance that was either provided by their employers or collectively bargained for by their unions before the pandemic. As a result, it is estimated that about 545,000 workers in Illinois have likely lost their employer-provided health insurance (Figure 13).

Figure 13: Impact on Employer-Provided Health Insurance Coverage, by Broad Classification, April 2020

Impact of COVID-19 on Health Insurance Coverage	Newly Unemployed Workers (April 2020)	Share with Employer-Provided Insurance	Estimated Workers Losing Employer-Provided Insurance
Essential Workers	250,166	75.6%	189,006
Face-to-Face Workers	487,179	61.2%	298,254
Remote Workers	70,755	81.4%	57,578
Illinois Totals	808,100	72.9%	544,838

Source: Authors’ analysis of monthly CPS data from January 2019 through April 2020 for Illinois (Flood et al., 2020) and 2018 data on employer-provided health insurance coverage from the 2018 American Community Survey (5-Year Estimates) (Ruggles et al., 2020). Note that the value for newly unemployed workers is determined by taking the estimated number of unemployed persons in Illinois in April 2020 and subtracting out the average number of unemployed persons in Illinois over the 12 months from March 2019 through February 2020.

More than half of the workers who have likely lost their employer-provided health insurance come from face-to-face sectors of the economy (Figure 13). An estimated 298,000 face-to-face workers have likely lost their employer-provided health insurance, accounting for 55 percent of the newly uninsured. Another 189,000 essential workers have likely lost their employer-provided health insurance (35 percent of the newly uninsured). By contrast, about 58,000 people who could work remotely likely lost their employer-provided health insurance (about 10 percent of the newly uninsured). While some of these workers may be able to join their spouse’s health care plans or their parent’s health care plans, many will be forced to

either pay for costly individual health insurance policies or apply for Medicaid and other public health care options.

Implications for Illinois

The COVID-19 pandemic has revealed the structural inequities plaguing Illinois (Figure 14). The lowest-paid workers— such as bartenders, restaurant employees, cosmetologists, and personal care aides— are at the highest risk of COVID-19 and the greatest risk of seeing their hours cut, being furloughed, becoming unemployed, and losing their employer-provided health insurance. Women and people of color are more likely to be in these low-wage jobs. The demographics of the low-wage, face-to-face workforce contribute to a disproportionately high rate of COVID-19 deaths among the African American population in Illinois (Blow, 2020). Although African Americans account for 14 percent of Illinois’ population, they comprise 30 percent of all deaths (IDPH, 2020).

On the other end of the income distribution are workers in industries with operations that can be performed remotely (Figure 14). Management, financial, and professional sectors that are more likely to be located in the City of Chicago are included in this sector. These remote workers, who are more likely to be white, have the lowest risk of job loss and the lowest risk of exposure to COVID-19.

Illinois’ middle class and low-wage workers have kept both communities and the economy functioning during the current public health crisis (Figure 14). Doctors, nurses, paramedics, construction trades workers, maintenance workers, production workers, farmworkers, grocers, warehouse workers, delivery drivers, postal workers, teachers, and firefighters have each endured physical health risks to carry out essential activities for the rest of Illinois’ residents, who can shelter and work from home. Despite being essential to the Illinois economy, these middle-class workers are paid an average of 7 percent less than remote workers with the same level of educational attainment.

Figure 14: Summary Table of Results by Broad Classification in Illinois

Characteristic	Face-to-Face Workers	Essential Workers	Remote Workers
Income level	Low-income	Middle-class	High-income
Demographics	Women and people of color	Men	White
Location	Chicago suburbs	Downstate	City of Chicago
Unionization rates	Low	High	Low
Risk of COVID-19	High	Medium	Low
Unemployment risk	High	Medium	Low
Health insurance loss	High	Medium	Low
Example occupations	Bartenders Cosmetologists Personal care aides	Registered nurses Construction workers Firefighters	Lawyers Bankers Lobbyists

Source: Authors’ analysis of 2015-2019 CPS-ORG data for Illinois (CEPR, 2020) and analysis by Visual Capitalist (Lu, 2020).

The COVID-19 pandemic is likely to further exacerbate economic inequities in Illinois. There are 1.7 million face-to-face workers in Illinois representing 27 percent of the state’s pre-pandemic workforce who are at the greatest risk of exposure to the COVID-19 virus and greatest risk of unemployment. Even as Illinois lifts the stay-at-home order and enters phases of re-opening the economy, many residents are likely to be reluctant to go to businesses where social distancing is difficult, like restaurants, shopping malls, movie theaters, and concert venues. As demonstrated in the states that never issued stay-at-home orders and

those that have partially reopened, consumer spending, the number of small businesses open, and restaurant reservations have decreased just as much as in states with early stay-at-home orders like Illinois ([Badger & Parlapiano, 2020](#)). The economic recession is caused by the virus, not statewide stay-at-home orders. Without more testing, more treatments, and a clinically-proven vaccine, face-to-face workers could suffer prolonged unemployment in 2020 and beyond.

And yet, essential workers and face-to-face workers will be vital in the recovery from the COVID-19 recession. While remote workers will be asked to do their part and work from home for as long as possible in order to contain the virus and minimize the chance of another wave of infections, essential workers will be needed to repair critical infrastructure, improve Illinois' health care system, and educate Illinois' youth. Face-to-face workers will be required to return to work, providing goods and services to consumers across the state.

In light of the outsized physical and economic risks that have been exposed by the COVID-19 pandemic, elected officials in Illinois may consider policy changes that support workers and address systemic inequities. These could include, but are not limited to, the following ten potential policy options:

1. Introducing hazard pay for essential frontline and face-to-face workers ([Kinder, 2020](#));
2. Passing a statewide paid sick leave law that guarantees at least five paid sick days to all workers ([Manzo et al., 2020](#));
3. Enacting paid family leave policy so workers can care for sick children and grandparents ([Gigstad, 2020](#));
4. Approving a stable and secure scheduling law to make caregiving and child care more predictable for hourly workers ([Dickson et al., 2018](#));
5. Implementing the state's work-share program to keep workers employed ([Manzo & Bruno, 2020](#));
6. Creating a relief fund for workers who do not have access to state and federal cash aid, like undocumented workers and farmworkers ([Nieto-Munoz, 2020](#));
7. Considering a state-run public option to expand health care coverage to all Illinois residents, including the newly unemployed ([Bivens & Zipperer, 2020](#));
8. Providing whistleblower protections for employees who raise concerns about workplace health and safety practices or hazards related to COVID-19 ([Berkowitz & Sonn, 2020](#));
9. Strengthening collective bargaining rights, particularly for misclassified independent contractors and gig economy workers ([McNicholas & Poydock, 2020](#)); and
10. Fast-tracking the \$15 minimum wage, which is now more important than ever for face-to-face workers who are at the greatest risk of exposure to COVID-19 ([Manzo et al., 2018](#)).

Conclusion

The novel coronavirus disease (COVID-19) has exposed significant structural inequities in the economy, both in Illinois and across the nation. In general, those performing essential or face-to-face work— who are more likely to be women and people of color— have the highest risk of workplace exposure and are paid less than comparable workers who are able to work from home. Face-to-face workers also suffer from higher job volatility at a time when efforts to “flatten the curve” have necessitated large-scale shutdowns of traditional economic activity. Ultimately, COVID-19 has brought new recognition to the value of and challenges faced by both essential and face-to-face workers, who have been disproportionately impacted by the economic and public health fallout of the pandemic. By considering measures that better protect workers' rights, promote labor standards, and rebuild the middle class, Illinois can turn this recognition into a rising tide that lifts all boats.

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Appendix

Table A: Full List of Industries by Essential, Face-to-Face, and Remote Determination

Industry Classification by the U.S. Census Bureau	Determination
<i>Agriculture, Forestry, Fishing, and Hunting</i>	
170 Crop production	Essential
180 Animal production and aquaculture	Essential
190 Forestry except logging	Essential
270 Logging	Essential
280 Fishing, hunting and trapping	Essential
290 Support activities for agriculture and forestry	Essential
<i>Mining, Quarrying, and Oil and Gas Extraction</i>	
370 Oil and gas extraction	Essential
380 Coal mining	Essential
390 Metal ore mining	Essential
470 Nonmetallic mineral mining and quarrying	Essential
490 Support activities for mining	Essential
<i>Construction</i>	
770 Construction	Essential
<i>Manufacturing</i>	
1070 Animal food, grain and oilseed milling	Essential
1080 Sugar and confectionery products	Essential
1090 Fruit and vegetable preserving and specialty food manufacturing	Essential
1170 Dairy product manufacturing	Essential
1180 Animal slaughtering and processing	Essential
1190 Retail bakeries	Essential
1270 Bakeries and tortillerias, except retail bakeries	Essential
1280 Seafood and other miscellaneous foods	Essential
1290 Not specified food industries	Essential
1370 Beverage manufacturing	Essential
1390 Tobacco manufacturing	Essential
1470 Fiber, yarn, and thread mills	Face-to-Face
1480 Fabric mills, except knitting mills	Face-to-Face
1490 Textile and fabric finishing and coating mills	Face-to-Face
1570 Carpet and rug mills	Face-to-Face
1590 Textile product mills, except carpets and rugs	Face-to-Face
1670 Knitting fabric mills, and apparel knitting mills	Face-to-Face
1680 Cut and sew apparel manufacturing	Face-to-Face
1690 Apparel accessories and other apparel manufacturing	Face-to-Face
1770 Footwear manufacturing	Face-to-Face
1790 Leather tanning and finishing, and other allied products manufacturing	Face-to-Face
1870 Pulp, paper, and paperboard mills	Face-to-Face
1880 Paperboard container manufacturing	Face-to-Face
1890 Miscellaneous paper and pulp products	Face-to-Face
1990 Printing and related support activities	Face-to-Face
2070 Petroleum refining	Essential
2090 Miscellaneous petroleum and coal products	Essential
2170 Resin, synthetic rubber, and fibers and filaments manufacturing	Essential
2180 Agricultural chemical manufacturing	Essential
2190 Pharmaceutical and medicine manufacturing	Essential
2270 Paint, coating, and adhesive manufacturing	Essential
2280 Soap, cleaning compound, and cosmetics manufacturing	Essential

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2290	Industrial and miscellaneous chemicals	Essential
2370	Plastics product manufacturing	Essential
2380	Tire manufacturing	Essential
2390	Rubber products, except tires, manufacturing	Essential
2470	Pottery, ceramics, and plumbing fixture manufacturing	Essential
2480	Clay building material and refractories manufacturing	Essential
2490	Glass and glass product manufacturing	Essential
2570	Cement, concrete, lime, and gypsum product manufacturing	Essential
2590	Miscellaneous nonmetallic mineral product manufacturing	Essential
2670	Iron and steel mills and steel product manufacturing	Essential
2680	Aluminum production and processing	Essential
2690	Nonferrous metal (except aluminum) production and processing	Essential
2770	Foundries	Essential
2780	Metal forgings and stampings	Essential
2790	Cutlery and hand tool manufacturing	Essential
2870	Structural metals, and boiler, tank, and shipping container manufacturing	Essential
2880	Machine shops; turned product; screw, nut and bolt manufacturing	Essential
2890	Coating, engraving, heat treating and allied activities	Essential
2970	Ordnance	Essential
2980	Miscellaneous fabricated metal products manufacturing	Essential
2990	Not specified metal industries	Essential
3070	Agricultural implement manufacturing	Essential
3080	Construction, and mining and oil and gas field machinery manufacturing	Essential
3095	Commercial and service industry machinery manufacturing	Essential
3170	Metalworking machinery manufacturing	Essential
3180	Engine, turbine, and power transmission equipment manufacturing	Essential
3190	Machinery manufacturing	Essential
3365	Computer and peripheral equipment manufacturing	Essential
3370	Communications, and audio and video equipment manufacturing	Essential
3380	Navigational, measuring, electromedical, and control instruments manufacturing	Essential
3390	Electronic component and product manufacturing	Essential
3470	Household appliance manufacturing	Essential
3490	Electric lighting and electrical equipment manufacturing	Essential
3570	Motor vehicles and motor vehicle equipment manufacturing	Essential
3580	Aircraft and parts manufacturing	Essential
3590	Aerospace products and parts manufacturing	Essential
3670	Railroad rolling stock manufacturing	Essential
3680	Ship and boat building	Essential
3690	Other transportation equipment manufacturing	Essential
3770	Sawmills and wood preservation	Face-to-Face
3780	Veneer, plywood, and engineered wood products	Face-to-Face
3790	Prefabricated wood buildings and mobile homes	Face-to-Face
3875	Miscellaneous wood products	Face-to-Face
3895	Furniture and related product manufacturing	Face-to-Face
3960	Medical equipment and supplies manufacturing	Face-to-Face
3970	Sporting and athletic goods, and doll, toy and game manufacturing	Face-to-Face
3980	Miscellaneous manufacturing	Face-to-Face
3990	Not specified manufacturing industries	Face-to-Face
<i>Wholesale Trade</i>		
4070	Motor vehicle and motor vehicle parts and supplies merchant wholesalers	Face-to-Face
4080	Furniture and home furnishing merchant wholesalers	Face-to-Face
4090	Lumber and other construction materials merchant wholesalers	Essential
4170	Professional and commercial equipment and supplies merchant wholesalers	Essential

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4180	Metals and minerals (except petroleum) merchant wholesalers	Essential
4195	Household appliances and electrical and electronic goods merchant wholesalers	Face-to-Face
4265	Hardware, plumbing and heating equipment, and supplies merchant wholesalers	Essential
4270	Machinery, equipment, and supplies merchant wholesalers	Essential
4280	Recyclable material merchant wholesalers	Face-to-Face
4290	Miscellaneous durable goods merchant wholesalers	Face-to-Face
4370	Paper and paper products merchant wholesalers	Essential
4380	Drugs, sundries, and chemical and allied products merchant wholesalers	Essential
4390	Apparel, piece goods, and notions merchant wholesalers	Face-to-Face
4470	Grocery and related product merchant wholesalers	Essential
4480	Farm product raw material merchant wholesalers	Essential
4490	Petroleum and petroleum products merchant wholesalers	Essential
4560	Alcoholic beverages merchant wholesalers	Essential
4570	Farm supplies merchant wholesalers	Essential
4580	Miscellaneous nondurable goods merchant wholesalers	Face-to-Face
4585	Wholesale electronic markets and agents and brokers	Remote
4590	Not specified wholesale trade	Face-to-Face
<i>Retail Trade</i>		
4670	Automobile dealers	Face-to-Face
4680	Other motor vehicle dealers	Face-to-Face
4690	Automotive parts, accessories, and tire stores	Face-to-Face
4770	Furniture and home furnishings stores	Face-to-Face
4780	Household appliance stores	Face-to-Face
4795	Electronics stores	Essential
4870	Building material and supplies dealers	Essential
4880	Hardware stores	Essential
4890	Lawn and garden equipment and supplies stores	Essential
4970	Grocery stores	Essential
4980	Specialty food stores	Essential
4990	Beer, wine, and liquor stores	Essential
5070	Pharmacies and drug stores	Essential
5080	Health and personal care, except drug, stores	Face-to-Face
5090	Gasoline stations	Essential
5170	Clothing stores	Face-to-Face
5180	Shoe stores	Face-to-Face
5190	Jewelry, luggage, and leather goods stores	Face-to-Face
5275	Sporting goods, and hobby and toy stores	Face-to-Face
5280	Sewing, needlework, and piece goods stores	Face-to-Face
5295	Musical instrument and supplies stores	Face-to-Face
5370	Book stores and news dealers	Face-to-Face
5380	Department stores and discount stores	Face-to-Face
5390	Miscellaneous general merchandise stores	Face-to-Face
5470	Retail florists	Face-to-Face
5480	Office supplies and stationery stores	Face-to-Face
5490	Used merchandise stores	Face-to-Face
5570	Gift, novelty, and souvenir shops	Face-to-Face
5580	Miscellaneous retail stores	Face-to-Face
5590	Electronic shopping	Essential
5591	Electronic auctions	Essential
5592	Mail-order houses	Face-to-Face
5670	Vending machine operators	Face-to-Face
5680	Fuel dealers	Essential
5690	Other direct selling establishments	Face-to-Face

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5790	Not specified retail trade	Face-to-Face
<i>Transportation and Warehousing</i>		
6070	Air transportation	Face-to-Face
6080	Rail transportation	Face-to-Face
6090	Water transportation	Face-to-Face
6170	Truck transportation	Essential
6180	Bus service and urban transit	Face-to-Face
6190	Taxi and limousine service	Face-to-Face
6270	Pipeline transportation	Essential
6280	Scenic and sightseeing transportation	Face-to-Face
6290	Services incidental to transportation	Face-to-Face
6370	Postal Service	Essential
6380	Couriers and messengers	Essential
6390	Warehousing and storage	Essential
<i>Utilities</i>		
570	Electric power generation, transmission and distribution	Essential
580	Natural gas distribution	Essential
590	Electric and gas, and other combinations	Essential
670	Water, steam, air-conditioning, and irrigation systems	Essential
680	Sewage treatment facilities	Essential
690	Not specified utilities	Essential
<i>Information</i>		
6470	Newspaper publishers	Remote
6480	Periodical, book, and directory publishers	Remote
6490	Software publishing	Remote
6570	Motion pictures and video industries	Face-to-Face
6590	Sound recording industries	Remote
6670	Broadcasting (except internet)	Remote
6672	Internet publishing and broadcasting and web search portals	Remote
6680	Wired telecommunications carriers	Remote
6690	Telecommunications, except wired telecommunications carriers	Remote
6695	Data processing, hosting, and related services	Remote
6770	Libraries and archives	Face-to-Face
6780	Other information services, except libraries and archives, and internet publishing and broadcasting and web search portals	Remote
<i>Finance and Insurance</i>		
6870	Banking and related activities	Remote
6880	Savings institutions, including credit unions	Remote
6890	Nondepository credit and related activities	Remote
6970	Securities, commodities, funds, trusts, and other financial investments	Remote
6990	Insurance carriers and related activities	Remote
<i>Real Estate and Rental and Leasing</i>		
7070	Real estate	Remote
7080	Automotive equipment rental and leasing	Remote
7170	Video tape and disk rental	Face-to-Face
7180	Other consumer goods rental	Face-to-Face
7190	Commercial, industrial, and other intangible assets rental and leasing	Face-to-Face
<i>Professional, Scientific, and Technical Services</i>		
7270	Legal services	Remote
7280	Accounting, tax preparation, bookkeeping, and payroll services	Remote
7290	Architectural, engineering, and related services	Remote
7370	Specialized design services	Remote
7380	Computer systems design and related services	Remote

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7390	Management, scientific, and technical consulting services	Remote
7460	Scientific research and development services	Remote
7470	Advertising, public relations, and related services	Remote
7480	Veterinary services	Essential
7490	Other professional, scientific, and technical services	Remote
<i>Management of Companies and Enterprises</i>		
7570	Management of companies and enterprises	Remote
<i>Administrative and Support and Waste Management Services</i>		
7580	Employment services	Face-to-Face
7590	Business support services	Face-to-Face
7670	Travel arrangements and reservation services	Remote
7680	Investigation and security services	Remote
7690	Services to buildings and dwellings (except cleaning during construction and immediately after construction)	Essential
7770	Landscaping services	Face-to-Face
7780	Other administrative and other support services	Face-to-Face
7790	Waste management and remediation services	Essential
<i>Educational Services</i>		
7860	Elementary and secondary schools	Essential
7870	Colleges, universities, and professional schools, including junior colleges	Essential
7880	Business, technical, and trade schools and training	Essential
7890	Other schools and instruction, and educational support services	Remote
<i>Health Care and Social Assistance</i>		
7970	Offices of physicians	Essential
7980	Offices of dentists	Face-to-Face
7990	Offices of chiropractors	Essential
8070	Offices of optometrists	Essential
8080	Offices of other health practitioners	Essential
8090	Outpatient care centers	Essential
8170	Home health care services	Essential
8180	Other health care services	Essential
8190	Hospitals	Essential
8270	Nursing care facilities (skilled nursing facilities)	Essential
8290	Residential care facilities, except skilled nursing facilities	Essential
8370	Individual and family services	Essential
8380	Community food and housing, and emergency services	Essential
8390	Vocational rehabilitation services	Face-to-Face
8470	Child day care services	Face-to-Face
<i>Arts, Entertainment, and Recreation</i>		
8560	Performing arts, spectator sports, and related industries	Face-to-Face
8570	Museums, art galleries, historical sites, and similar institutions	Face-to-Face
8580	Bowling centers	Face-to-Face
8590	Other amusement, gambling, and recreation industries	Face-to-Face
<i>Accommodation and Food Services</i>		
8660	Traveler accommodation	Face-to-Face
8670	Recreational vehicle parks and camps, and rooming and boarding houses	Face-to-Face
8680	Restaurants and other food services	Face-to-Face
8690	Drinking places, alcoholic beverages	Face-to-Face
<i>Other Services, Except Public Administration</i>		
8770	Automotive repair and maintenance	Essential
8780	Car washes	Essential
8790	Electronic and precision equipment repair and maintenance	Essential
8870	Commercial and industrial machinery and equipment repair and maintenance	Essential

8880	Personal and household goods repair and maintenance	Face-to-Face
8970	Barber shops	Face-to-Face
8980	Beauty salons	Face-to-Face
8990	Nail salons and other personal care services	Face-to-Face
9070	Drycleaning and laundry services	Essential
9080	Funeral homes, and cemeteries and crematories	Essential
9090	Other personal services	Remote
9160	Religious organizations	Face-to-Face
9170	Civic, social, advocacy organizations, and grantmaking and giving services	Remote
9180	Labor unions	Remote
9190	Business, professional, political, and similar organizations	Remote
9290	Private households	Essential
<i>Public Administration</i>		
9370	Executive offices and legislative bodies	Remote
9380	Public finance activities	Remote
9390	Other general government and support	Remote
9470	Justice, public order, and safety activities	Essential
9480	Administration of human resource programs	Remote
9490	Administration of environmental quality and housing programs	Remote
9570	Administration of economic programs and space research	Remote
9590	National security and international affairs	Remote
<i>Active Duty Military</i>		
9670	U.S. Army	Essential
9680	U.S. Air Force	Essential
9690	U.S. Navy	Essential
9770	U.S. Marines	Essential
9780	U.S. Coast Guard	Essential
9790	U.S. Armed Forces, branch not specified	Essential
9870	Military Reserves or National Guard	Essential

Source: Authors' analysis of 2015-2019 data for Illinois from the Current Population Survey Outgoing Rotation Groups (CPS-ORG) (CEPR, 2020).

Table B: Summary Statistics of Illinois Farm and Food Manufacturing Workers, 2015-2019 Average

Farmworkers and Food and Beverage Manufacturing Workers	Summary Statistics
<u><i>Racial and ethnic identification</i></u>	
White (non-Latinx)	50.9%
African American	13.4%
Latinx	29.5%
Asian	5.4%
<u><i>Gender identification</i></u>	
Male	64.6%
Female	35.4%
<u><i>Additional demographics and data</i></u>	
Foreign-born	29.8%
U.S. Citizens	81.8%
Veteran	2.9%
Average Hourly Wage	\$24.47

Source: Authors' analysis of 2015-2019 CPS-ORG data for Illinois (CEPR, 2020). Dataset includes 512 workers— representing weighted average of 612,000 workers over five years— in food, fishing, and forestry occupations and/or the food and beverage manufacturing industries (e.g., dairy product manufacturing and animal slaughtering and processing).

Table C: Regression Results for Labor Market Outcomes, Robust OLS and Probit Regressions, 2015-2019

Robust OLS and Probit Regressions	Ln(Real Hourly Wage)		Prob(Union Member)	
	Coefficient	SE	Coefficient	SE
Essential workers	-0.0721***	0.010	0.0940***	0.007
Face-to-face workers	-0.1373***	0.011	0.0272***	0.008
Union membership	0.1033***	0.011		
Demographics: Age	0.0411***	0.002	0.0064***	0.001
Demographics: Age ²	-0.0004***	0.000	-0.0001***	0.000
Demographics: Female	-0.1768***	0.008	-0.0122**	0.005
Demographics: Military Veteran	0.0438**	0.020	0.0122	0.010
Demographics: U.S. Citizen	0.0470***	0.017	0.0246**	0.012
Demographics: Foreign-born	-0.0524***	0.014	-0.0336***	0.009
Demographics: White (non-Latinx)	-0.0144	0.016	0.0125	0.011
Demographics: African American	-0.1673***	0.019	0.0421***	0.013
Demographics: Latinx	-0.0921***	0.017	0.0023	0.012
Location: City of Chicago	0.0860***	0.010	0.0188***	0.006
Location: Chicago suburbs	0.1056***	0.008	0.0004	0.005
Sector: Federal government	0.0710***	0.025	0.1831***	0.013
Sector: State government	-0.0865***	0.020	0.1991***	0.009
Sector: Local government	-0.0863***	0.015	0.2278***	0.006
Employment: Usual hours worked	0.0064***	0.000	0.0017***	0.000
Education: Less than high school degree	-0.1078***	0.014	-0.0006	0.011
Education: Some college but no degree	0.0410***	0.010	0.0085	0.007
Education: Associate's degree	0.0888***	0.013	0.0213***	0.008
Education: Bachelor's degree	0.3066***	0.012	-0.0083	0.007
Education: Master's degree	0.4238***	0.015	0.0259***	0.008
Education: Professional or doctorate degree	0.5809***	0.024	-0.0530***	0.013
Occupation: Management, business, and financial	0.3424***	0.017	-0.1640***	0.012
Occupation: Professional and related	0.2164***	0.016	-0.0420***	0.010
Occupation: Service	-0.0830***	0.015	-0.0479***	0.010
Occupation: Sales and related	0.0700***	0.018	-0.1135***	0.013
Occupation: Office and administrative support	0.0249	0.015	-0.0798***	0.011
Occupation: Farming, fishing, and forestry	-0.1999***	0.048	-0.2176***	0.054
Occupation: Construction and extraction	0.2102***	0.024	0.1175***	0.011
Occupation: Installation, maintenance, and repair	0.1630***	0.021	0.0302**	0.013
Occupation: Transportation and material moving	-0.0616***	0.018	0.0151	0.011
Year: 2016	0.0301***	0.011	-0.0026	0.007
Year: 2017	0.0388***	0.011	-0.0042**	0.007
Year: 2018	0.0588***	0.011	-0.0219***	0.007
Year: 2019	0.0693***	0.011	-0.0175**	0.007
Constant	1.6600***	0.042	0.1390***	0.002
R ²	0.437		0.260	
Observations	20,213		20,311	
Weighted	Y		Y	

Source: Authors' analysis of 2015-2019 data for Illinois from the Current Population Survey Outgoing Rotation Groups (CPS-ORG) (CEPR, 2020). *** $p \leq 0.01$; ** $p \leq 0.05$; * $p \leq 0.10$. "SE" denotes the standard error. The probabilistic model requires two steps—the probit regression and average marginal effects (margins, dy/dx). Racial identification is relative to all other races, including Asian and Pacific Islander. Location is relative to "downstate" Illinois. Education is relative to high school degree or equivalent. Occupation is relative to production occupations. Year is relative to 2015.