

# California Crop Labor Supply and Demand During COVID-19

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Data indicate that effects from COVID-19-induced agricultural labor shortages during 2020 were less pronounced than demand-side market disruptions like restaurant closures. Going into 2021, vaccines and other preparedness measures look promising for reducing agricultural supply disruptions.

The early days of the COVID-19 pandemic sparked widespread concerns regarding major farm labor shortages. Academic publications and news articles cited potential labor supply-side effects from limited healthcare access, childcare facility and school closures, outbreaks on farms and in worker housing units, and international travel restrictions interfering with the H-2A visa program.

However, even during peak months of farm employment, reports of labor shortages among California producers were lower than initially anticipated. Results from a California Farm Bureau survey found that 16%

of survey respondents reported being unable to undertake normal seasonal activities due to COVID-19-related employee absences. By comparison, labor demand-side effects appear more influential. In the same California Farm Bureau survey, 57% of survey respondents reported losing customers or sales, and 24% of survey respondents reported reducing their workforce due to COVID-19. Labor supply issues might have been more pronounced if these demand-side effects did not occur.

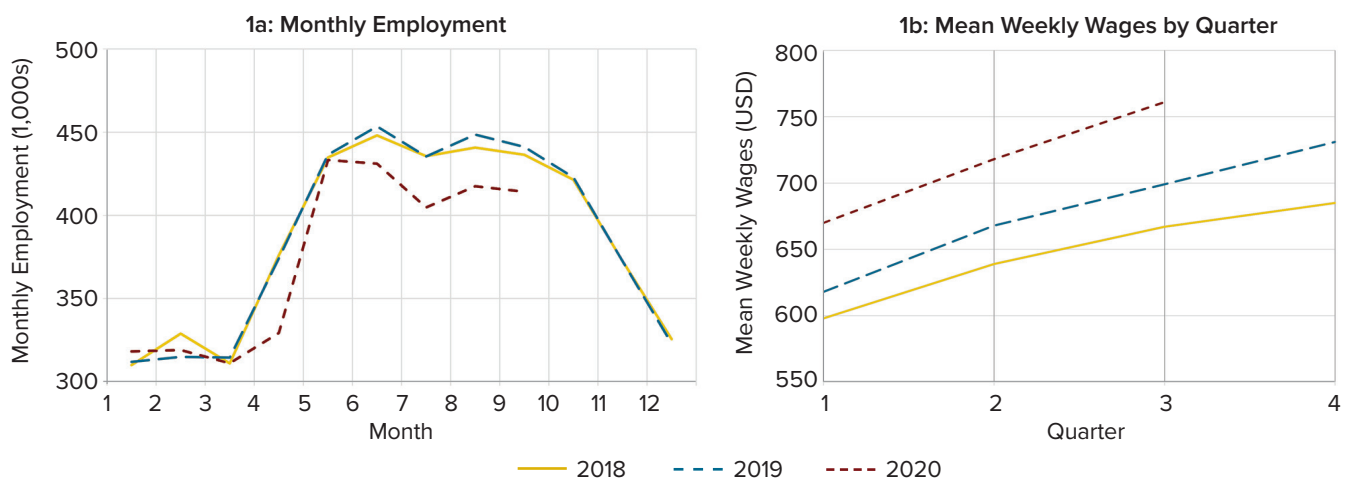
As we move into the months of peak California farm employment in 2021, this article summarizes what we can learn from the data now available from 2020, and provides a brief overview of farm labor conditions in 2021. Given the relative importance of labor for crop production, the focus is on employment in crop production and support activities for crop production. Support activities include all establishments that perform any activities associated with crop production but are not a farm—these are most often farm labor contractors.

## California Agricultural Employment and Wages in 2020

Businesses in most industries were forced to close offices and move to remote working arrangements due to COVID-19. However, most workers in agricultural industries were expected to continue working. Major changes in employment and unemployment in many U.S. industries were due to these office closures. In agriculture, observed changes in employment can instead be attributed to either changes in labor availability and willingness to work (labor supply) or changes in employment needs (labor demand).

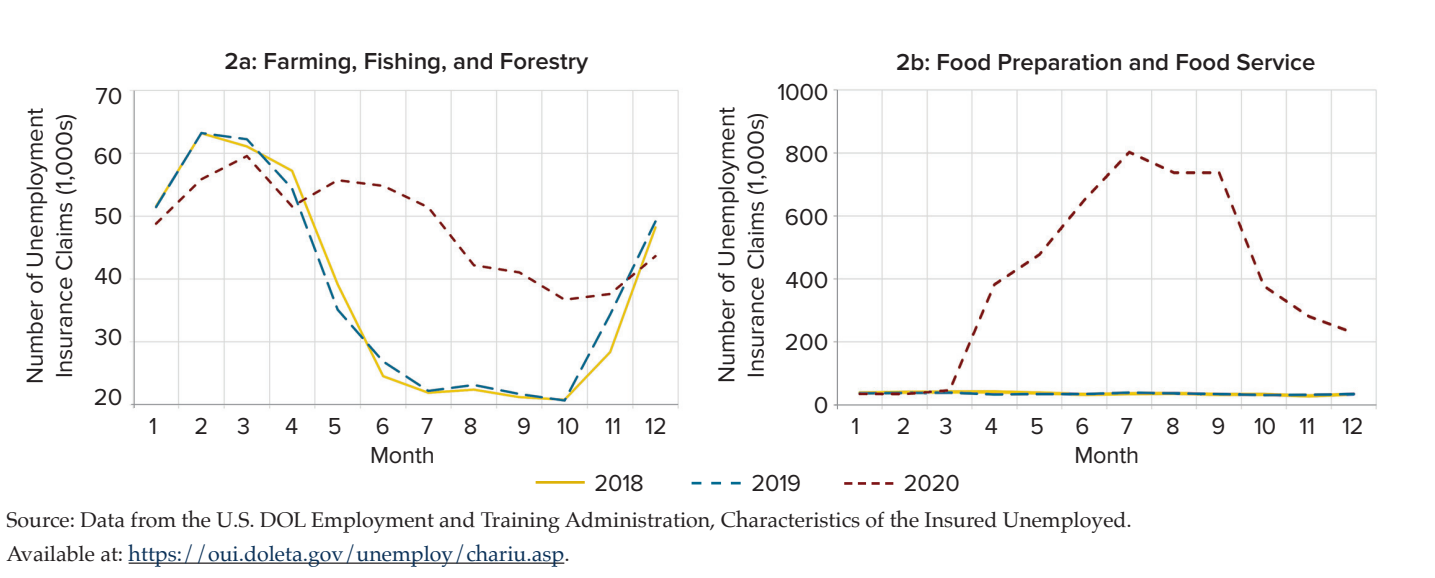
Figure 1 overlays trends in monthly employment and quarterly wages for California employers engaged in crop production or support activities for crop production (including farm labor contractors) from 2018–2020. Figure 1a shows that employment in 2020 was lower than employment in 2018 and 2019, both in April (when California shelter-in-place orders first went into effect) and during the peak employment months of June through

Figure 1. California Employment and Wages for Crop Production and Support Activities for Crop Production



Source: Data from the Quarterly Census of Earnings and Wages, Quarterly Employment by Industry Files. Available at: <https://www.bls.gov/cew/>.

**Figure 2. California Monthly Unemployment Insurance Claims by Occupation**



Source: Data from the U.S. DOL Employment and Training Administration, Characteristics of the Insured Unemployed. Available at: <https://oui.doleta.gov/unemploy/chariu.asp>.

September. Compared with 2019 employment, average employment in 2020 was 5.5% lower in quarter 2 (April–June) and 7% lower in quarter 3 (July–September).

When decreases in employment are caused by labor supply shortages, they are accompanied by wage increases because employers increase wages to attract more workers. Figure 1b shows that wages were higher in 2020 compared with 2019. However, this is unlikely in response to worker shortages from COVID-19.

Mean weekly wages in 2020 were 8.5%, 7.4%, and 8.8% higher than 2019 wages in quarters 1, 2, and 3, respectively. Because these relative wage increases began in quarter 1, prior to any changes in employment, this was most likely an artifact of the statewide increase in the hourly minimum wage rate from \$12 to \$13, or an 8% increase. It may have also been driven in part by a 6% increase in the minimum wage for H-2A workers from \$13.92 to \$14.77. The increased H-2A wage along with an increased number of H-2A workers (from roughly 23,000 to 27,500) in 2020 helps to explain the increase in weekly earnings.

### California Agricultural Unemployment Insurance Claims in 2020

Additional evidence on the cause of changes in employment levels during 2020 comes from unemployment insurance claims. During COVID-19, initial unemployment insurance claims in California peaked at more than 3 million claims in July. Claims were lower in critical infrastructure industries, where mandatory layoffs were not a driving force. Unemployment insurance claims in those industries largely reflect changes in demand for workers, but also potentially reflect differences in worker eligibility for and use of unemployment insurance.

Figure 2 shows unemployment insurance claims by worker occupation for 2018 through 2020. Unemployment insurance claims in farming, fishing, and forestry (Figure 2a) have historically peaked from December to April, before dropping off sharply during the main growing season. However, in 2020 the number of new unemployment insurance claims remained well above historical numbers during these months. Given the high percentages of undocumented workers employed in agriculture, these unemployment insurance claims

are likely undercounts of the true number of unemployed workers, but the comparative trends across years remain useful indicators of changes in unemployment.

By comparison, unemployment insurance claims in food preparation and food service (Figure 2b) were well above historical numbers. This is not surprising in an industry not deemed essential, where workers are unable to work from home, and in light of mandated restaurant closures. These restaurant closures and high unemployment rates in food service were responsible for at least some of the demand-side market disruptions in farm production.

### California H-2A

Early projections of the effects of COVID-19 on U.S. agriculture also pointed to issues with the H-2A visa program due to international travel restrictions. However, available data on the number of H-2A positions certified, combined with anecdotal evidence, do not support this claim.

Indeed, the government responded quickly to address concerns regarding the H-2A program, streamlining the application process and removing barriers like mandatory in-person interviews. Figure 3 shows the number

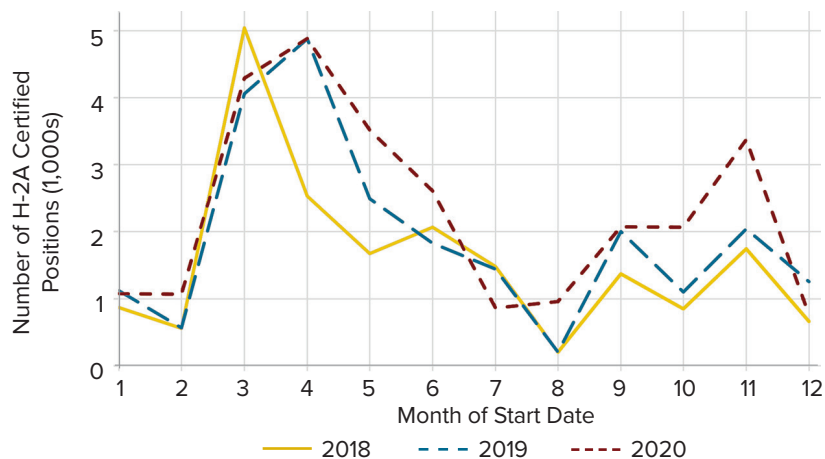
of certified H-2A positions by the month employment begins for the requested workers. This figure shows that the number of certified positions for employment in 2020 was higher than in 2018 or 2019 for all months except July. Comparing the dates that H-2A applications were submitted reveals similar trends and indicates that the drop in certified positions in July might have been driven by fewer applications submitted in June. In total, there were roughly 27,500 H-2A positions certified to begin in 2020 for crop and crop support activities, compared with 23,000 in 2019 and 19,000 in 2018.

The data reflect governmental efforts to streamline the application process to prevent potential food supply disruptions due to shortages of domestic workers during the pandemic. The number of days between application submission and the decision date was on average 21 days from April through September in 2020, compared with 27 days in 2019. Similarly, the number of days between the application submission and requested worker start date was 47 in peak months in 2020, and 60 in the same months in 2019.

### Looking Forward: What Will Be Different in 2021?

Due to vaccines and general preparedness for the virus, 2021 will likely look much different than 2020. These measures have already resulted in national and statewide changes in COVID-19-related policies. In California, the prioritization of grocery workers, restaurant staff, and other essential workers in the early phases of the vaccine rollout, combined with falling caseloads, led to openings of indoor dining in more than ten counties by mid-March. As essential workers, California farmworkers were included in the early phases of vaccine eligibility and administration. Government agencies, healthcare

**Figure 3.** California Crop and Support Activities for Crop Certified H-2A Positions



Source: Data from the U.S. DOL Foreign Labor Certification H-2A Program Data. Available at: <https://www.dol.gov/agencies/eta/foreign-labor/performance>.

workers, and employers have worked together to achieve high rates of vaccination among farmworkers, largely facilitated by widespread in-field vaccine administration.

Worker vaccinations, re-openings of schools and childcare facilities, the continued viability of the H-2A program, and an improved understanding of effective safety precautions to reduce COVID-19 transmissions are likely to result in fewer labor supply-side disruptions in 2021 compared with 2020. However, the same mechanisms are also likely to result in fewer demand-side shocks. Without this reduced demand, employers might be more impacted by labor shortages in 2021, due to having too few workers relative to their higher needs.

Finally, rising minimum wages and the continued phase in of new overtime standards for California agricultural employers will increase payroll costs and potentially reduce profitability. California's state minimum wage in 2021 is \$14, an 8% increase over 2020; the minimum wage for H-2A workers is \$16.05, nearly a 9% increase. Additionally, employers will be required to pay workers for overtime after 8.5 hours a day and 45 hours a week, compared to overtime after 9

hours a day and 50 hours a week in 2020. In summary, California farm employers will likely face similar labor supply challenges in 2021 as they did in the years leading up to COVID-19, but these challenges are unlikely to be exacerbated by the virus.

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#### For additional information, the authors recommend:

California Farm Bureau Federation COVID-19 Survey Results:

<https://bit.ly/3xgVEt4>

Hill, A.E., and P.L. Martin. 2021. (Forthcoming) "COVID-19 and Farm Workers." *Western Economic Forum*.