



Workforce Changes and the Food Supply Chain - Understanding and Mitigating the effects of COVID-19 on the Agricultural Workforce

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Bottom Line

Social distancing measures implemented because of the Covid-19 pandemic have caused thousands of Coloradans to file unemployment insurance claims (UI) each week. In the week ending March 28th there were 66,491 UI claims in Colorado, which is 36 times the number of claims at the same time last year. As the pandemic has continued, we have continued to see an unprecedented level of unemployment claims. Despite growing unemployment in some sectors, there are other sectors of the economy that are growing or concerned about the lack of labor availability. This white paper focuses on the impacts to agricultural labor resulting from COVID-19, and potential opportunities to supplement the agricultural labor force with recently displaced workers from other sectors. Colorado State University Extension is uniquely positioned to play a role in training and facilitation of these transitions as well as training in the implementation of safety protocols to minimize the risk of employee infections.

Policy Recommendations for Colorado

- Provide testing and treatment to workers independent of legal immigration status to ensure the health and safety of our agricultural workforce.
- Create wage support programs for producers training and hiring individuals who are new to agriculture. These supplemental wages must outweigh the benefits workers in other laborintensive industries would otherwise receive through unemployment insurance.
- Expand workforce safety requirements and guidance for food producers and processors and provide financial and educational resources to support the implementation of the new standards.
- Enact paid sick leave benefits for food sector workers independent of legal immigration status like policies recently put into place in California.
- Provide support for the development and implementation of training programs through Colorado State University Extension teams and partnerships.

Context

A combination of factors throughout the COVID-19 epidemic have led to rising unemployment insurance claims over the past several months. These factors include government policies, such as mandated business closures and shelter-in-place orders, shifts in consumer behavior, such as decreased demand for many products, and shifts in worker behavior. For example, workers face new childcare obligations amidst school closures and fears of contracting COVID-19 in the workplace. For businesses in essential critical infrastructure industries, as defined by the Colorado Governor's office, government policies work









in the opposite direction and convey that it is essential for workers in these industries to continue working.

This brief focuses on the agricultural workforce, which is classified as essential critical infrastructure. We outline strategies and policy responses that will help ensure the continued functioning of the ag and food sector, accounting for potential shifts in worker behavior that might reduce the already limited supply of workers. Our primary focuses are on the potential to supplement agricultural workers with those in other industries that have lost employment during the epidemic, the role of enhanced health and safety policies and guidelines in the workplace, and how CSU Extension technical assistance can facilitate these efforts. We begin with an overview of unemployment insurance claims to show the potential of unemployed workers in non-agricultural industries to fill unmet labor needs. We then move to a description of the ag workforce, highlighting key characteristics that might lead to fewer workers amidst the COVID-19 outbreak. We also outline some of the challenges and peculiarities of the agricultural sector that make substituting ag workers with workers from other sectors more challenging. Finally, we give details on the training that would be necessary to replace the current workforce and explain the capacities and potential role of CSU Extension in ensuring a healthy agricultural workforce.

With these simultaneous factors, it will likely take a long time for businesses to return to pre-COVID-19 employment levels. In the meantime, there are an abundance of workers unable to work in their usual professions while agricultural operations move into their peak employment season (June-October). Shifts from one industry to another may lessen the operations disruption and broader economic impact of this situation. Workers in all industries may not be able to make the transition to labor intensive agricultural field work, but trials done through non-profits such as Uproot Colorado have shown there is promise for quickly on-boarding and training new agricultural employees from non-agricultural backgrounds: particularly those with military or outdoor work experience (such as landscapers).

Unemployment Insurance Claims and the Role of Non-Agricultural Industries

The number of unemployment insurance (UI) claims filed by Colorado residents has drastically increased due to the COVID-19 pandemic. According to data from the Colorado Department of Labor and Employment, on average, UI claims in Colorado this year are 36 times what they were in 2019. While UI claims have been increasing in all counties and for all industries relative to 2019 levels, there are some industries which have disproportionately seen a rise in UI claims and represent an opportunity to explore new models for supplementing the potential workforce gap in agricultural sectors.

While all Colorado counties have seen increases in UI claims, urban areas appear to be hit harder than rural areas with some urban and mountain areas seeing claims at more than 95 times the rate they saw in 2019. These increases in claims are not uniform across industries: UI claims in accommodation and food services, for example, were 138 times what they were in 2019. In contrast, UI claims for agriculture are much less than the Colorado average at around 9 times what they were in 2019. Figure 1 below depicts UI claims by key industries including agriculture and food service industries. Mining, construction, and manufacturing as well as transportation and warehousing are included as workers in these sectors may be best suited for transition into employment in agriculture.

During the week ending 3/21/2020, UI claims in the restaurant and other eating places sector accounted for 37% of all UI claims in Colorado (Table 1). While this number has decreased over the weeks since the stay at home order was implemented, for the week ending 4/4/2020 this category still accounted for 14% of total claims. Overall, the retail and tourism related industries appear to have been hit the hardest based on UI claims by industry.

The proportion of Unemployment Insurance claims coming from the accommodation and food services industry outpaces that of other sectors: in March of 2019 this sector accounted for 5.2% of all new UI claims and in April of 2019 it accounted for 6.2% of all new UI claims, Table 2 shows how much that proportion has increased due to the pandemic.

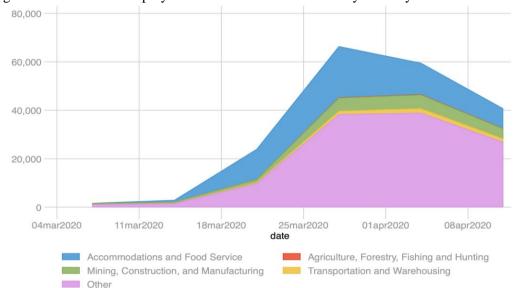


Figure 1: Colorado Unemployment Insurance Initial Claims by Industry

Table 1: Top Ten Industries by UI Claims, Week Ending 3/21/2020

Top 10 Colorado Claims by Detailed Industry Week Ending 3/21/2020				
Rank	4-digit NAICS Code	NAICS Title	Share of Claims with Identifiable Industry	
1	7225	Restaurants and other eating places	37.0%	
2	7211	Traveler accommodation	8.9%	
3	6212	Offices of dentists	6.6%	
4	8121	Personal care services	5.7%	
5	7139	Other amusement and recreation industries	4.3%	
6	7224	Drinking places, alcoholic beverages	3.6%	
7	7223	Special food services	1.9%	
8	5613	Employment services	1.7%	
9	6213	Offices of other health practitioners	1.4%	
10	2382	Building equipment contractors	1.0%	
		Top 10 Total Share	72.1%	

Table 2: UI claims during the Pandemic in the Accommodation and Food Service Sector as a percentage of total UI claims

Week ending March 14th	6.3%
Week ending March 21st	25.3%
Week ending March 28th	51.6%
Week ending April 4th	31.8%
Week ending April 11th	21.8%

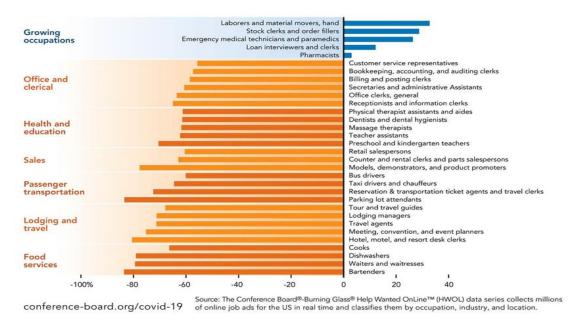
Agricultural Workers and the Agricultural Sector

Agricultural work, particularly field work, is physically demanding, often demands working long hours in strenuous conditions (e.g. high temperatures) and can require very specific skill sets and work experience to succeed at the job. Additionally, ag work is highly seasonal, with peak employment and labor needs occurring during the summer harvest months. Agricultural employers across the country have been reporting worker shortages at an increasing rate in recent years, and these shortages are likely to be exacerbated by the pandemic this year. A 2019 survey administered by the California Farm Bureau found that more than half (56%) of California farmers were unable to meet their labor needs at some point in the previous five years. Several news outlets have highlighted these challenges for farmers across the country, citing many instances of entire fields left unharvested because there are too few workers.

Relevant to COVID-19, there are many reasons that we might see even fewer workers this season. First, many workers live in crowded housing and most work in teams, making them a vulnerable group for catching and spreading COVID-19. Second, many workers have meager savings and the majority do not have health insurance, which might increase workplace transmission if any worker contracts COVID-19 because they are likely to continue working due to economic pressure and might be unlikely to seek medical care. Third, workers might face increased child-care obligations due to school closures. Finally, as we are seeing in many sectors, workers might fear contracting the illness at work and decide to quit.

We are seeing from sources that collect data on job advertisements, that while there are lower labor needs in most industries right now, there is a growing need in particular sectors (see Figure 2). At the national level, these data suggest that there are current unmet needs for hand laborers, warehouse workers, medical professionals, loan clerks, and pharmacists. While this may indicate growth in the industries, it is difficult to disentangle how much of it is growth and how much is due to workers leaving their positions. Regardless, in the agricultural sector, these unmet needs are likely to keep rising as we enter peak employment in the summer.

Figure 2: Percent Change in Average Daily Help Wanted Online Ads (3/29 – 4/11 vs. February)



Potential Impacts on Agricultural Employers

Farmworkers are essential and critical to maintaining the food supply chain. Particularly as we move into the peak employment season for agricultural businesses, having too few agricultural workers can disrupt food supply in the short and long run, as we have seen in the meat sector already. In the immediate run, too few workers can reduce the supply of food if producers shift away from labor-intensive crops, particularly fresh fruits, and vegetables, and lead to lower (or even negative) profits if farmers are unable to complete harvest. In the long run, this might lead to farmers planting less food in later seasons, increasing investment in technology replacements for workers, increased reliance on H-2A visa workers, and some farmers might choose to close their business.

Demand for labor in food manufacturing and processing businesses is more stable than in fresh fruit and vegetable production because there is less volatility in the production process. However, as we have observed with the recent closures of several meat processing facilities, workers in these indoor facilities might be at higher risk for contracting COVID-19 and might feel less safe in the workplace due to the close proximity to other workers in an enclosed space. The supply chain for fresh produce and meat could be further endangered if the virus spreads through these workplaces or rural communities, further contracting available and willing workers. It seems clear that policies need to be enacted to reduce a range of potential impacts on the food supply chain.

Job Training Programs and the Role of Colorado State University Extension and the Broader University

Supporting, protecting, and training the agricultural workforce during and following the pandemic will be critical, as agricultural work cannot be done remotely. With physical offices and partnerships across the entire state of Colorado, CSU Extension is best equipped to provide training for agricultural employers and workers during this unprecedented time. CSU Extension is dedicated to serving the needs of Coloradans by providing educational information and programs that safeguard health, increase livelihood, and enhance well-being. CSU extension already has several relevant programs developed, and the expertise to develop new programs for this sector.

Relevant Existing Programs

- Food safety training related to the cottage food bill for home food producers, could potentially play a role in extended food safety training for new workers who are not familiar with agriculture.
 - The training could be applied to those who are having to change the market channels in which they sell their products because of the epidemic.
- Extension, in a partnership with the Produce Safety Collaboration, is compiling information for producers on best practices for all production, handling and market channels. Including webinars, risk management communications, employee training tools and factsheets.
- Food Safety Works and ServSafe certification trainings for retail food workers
- Food safety and preservation workshops for Master Food Safety Advisor Volunteers and county Extension agents

New Programs CSU Extension has the expertise to develop, if deemed necessary

- Expand on the existing CSU meat school to help support small scale processors and expand capacity to meet needs if larger plants continue to have disruptions
- Training on how to prepare a preparedness and response plan.
- Expanded training for transition into the farm workforce through partnerships with organizations who are already doing this at a smaller scale such as National Farmworkers Jobs Program (NFJP) to help to scale up to a state level.
- The food safety questions and problems that emerged during the first two months of the COVID19 pandemic highlight the need across our population for a stronger base of foundational knowledge regarding food handling and pathogen transmission. From consumers following dangerous advice posted on social media, to misuse of cleaners and sanitizers, actions that negatively impacted public health could have been prevented. Many of today's consumers and food industry workers have never received any secondary education targeted toward health, hygiene, or safe food handling practices.
 - Online modules could address these deficiencies and help ensure post-pandemic resiliency and readiness for future threats.
 - CSU Extension's food safety education team is well-equipped to research, develop, and disseminate this curriculum.

Moving Forward and Future Opportunities

The impacts of the pandemic are likely to have effects long into the future. While there are many short-term needs that need to be addressed immediately, there are longer term opportunities to strengthen the sector and provide resilience in the future. Some of these long-term opportunities include:

- Increase mechanization: As labor shortages in agriculture continue work towards the development of increased mechanization can help to alleviate the shortfall.
- Develop extensive workforce training programs modelled off Innovative examples of workforce training programs in the U.S.
- Promote changes in policies and best practices surrounding worker housing situations that are more conducive to maintaining worker health.

• Support changes in the benefit structure for agricultural employers. For example, we have seen California lead the way in this arena most recently with new policies around health coverage.

Data Sources

- OSHA Guidance on Preparing Workplaces for COVID-10 https://www.osha.gov/Publications/OSHA3990.pdf
- Colorado State University Extension COVID Resources Produce Safety: http://freshproduce.colostate.edu/covid-19-resources-and-information/
- Colorado Department of Labor and Employment: https://www.colorado.gov/cdle
- EMSI: https://www.economicmodeling.com/
- Uproot Colorado: https://www.uprootcolorado.org/
- Produce Safety Collaboration: http://freshproduce.colostate.edu/covid-19-resources-and-information/
- Produce Safety Collaboration Webinars: http://freshproduce.colostate.edu/webinars/
- National Farm Workers Jobs Program: https://www.rmser.org/NFJP

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