

## Experiences of structural violence and wage theft among immigrant workers in the California cannabis industry

Stella Beckman<sup>a\*</sup>

University of California, Davis

Anaisabel Chavez<sup>d</sup>

Yale University

Xóchitl Castañeda<sup>b</sup>

University of California, Berkeley

Marc B. Schenker<sup>e</sup>

University of California, Davis

Vania del Rivero<sup>c</sup>

Universidad Nacional Autónoma de México/  
National Autonomous University of Mexico  
(UNAM)

Submitted February 5, 2023 / Revised April 5 and April 24, 2023 / Accepted April 25, 2023 /  
Published online June 1, 2023

Citation: Beckman, S., Castañeda, X., del Rivero, V., Chavez, A., & Schenker, M. B. (2023).  
Experiences of structural violence and wage theft among immigrant workers in the California  
cannabis industry. *Journal of Agriculture, Food Systems, and Community Development*, 12(3), 127–140.  
<https://doi.org/10.5304/jafscd.2023.123.014>

Copyright © 2023 by the Authors. Published by the Lyson Center for Civic Agriculture and Food Systems. Open access under CC BY license.

### Abstract

The multibillion-dollar California cannabis (*Cannabis sativa*, marijuana) industry employs an unknown number of seasonal workers, including

many immigrants. Most production occurs in the remote, rural, far-northern counties where farms may be hours by vehicle from the nearest town. While licenses for cannabis cultivation became available following legalization in California for adult recreational use in 2016, most cannabis—about 80%—is still grown on unlicensed farms. Cannabis is a labor-intensive crop, and the skilled

<sup>a\*</sup> *Corresponding author*: Stella Beckman, PhD, MPH; Epidemiologist, Center for Health and the Environment, University of California, Davis.

Stella Beckman is now at the California Department of Public Health, Occupational Health Branch; 850 Marina Bay Parkway, Building P, 3<sup>rd</sup> Floor; Richmond, CA 94804 USA; [stella.beckman@cdph.ca.gov](mailto:stella.beckman@cdph.ca.gov)

<sup>b</sup> Xóchitl Castañeda, MA; Director, Health Initiative of the Americas, University of California, Berkeley; Berkeley, California, USA.

<sup>c</sup> Vania del Rivero; Student, Facultad de Filosofía y Letras, Colegio de Geografía, Universidad Nacional Autónoma de México/National Autonomous University of Mexico (UNAM); Ciudad de México, México.

<sup>d</sup> Anaisabel Chavez; Student, Yale College, Yale University; New Haven, Connecticut, USA.

<sup>e</sup> Marc B. Schenker, MD, MPH; Distinguished Professor Emeritus of Public Health Science and Medicine, Department of Public Health Sciences, School of Medicine; University of California, Davis; Davis, California, USA.

### Funding Disclosure

Grant sponsor: California Department of Consumer Affairs, Bureau of Cannabis Control; Grant number: 65322.

and time-consuming task of hand-trimming flowers is the most common seasonal job in the industry. Some immigrant workers return for multiple cannabis harvest seasons and are attracted to the work by an interest in the cannabis culture and consumption or the opportunity to earn enough money in several months to live the rest of the year in their home country. Others are farmworkers moving from work in traditional crops for the relatively higher pay in the cannabis industry. Seasonal cannabis workers are exposed to many of the physical hazards found in all agricultural workplaces, like dust, pesticides, and injuries; another commonality with California's traditional agricultural workforce is vulnerability to structural violence stemming from factors related to race, gender, immigration status, and employer/employee power imbalance. Cannabis workers are also uniquely affected by the intersections of these structural factors with the isolated and remote nature of cannabis farms and the ongoing criminalization of the industry. In this article we present the results of a qualitative study of the occupational health and safety of Mexican and South American immigrant seasonal cannabis workers who have previous cannabis-industry-specific skills and experience. Workers were recruited using a peer-recruitment method, with 25 participants in three online focus group discussions on a range of occupational health and safety topics. This qualitative descriptive analysis is focused on experiences of structural violence and wage theft.

## Keywords

Cannabis Industry, Farmworker Health, Structural Violence, Occupational Health, Immigrant Health, Farm Labor

## Introduction

Cannabis is the most valuable agricultural product in California, with combined legal and unlicensed revenues estimated at US\$8.7 billion in 2019 (Sumner et al., 2020). It is also the only commercial crop that is criminalized; while medical cannabis is legal in 38 states and recreational adult use legal in 21 (National Conference of State Legislatures, 2023), cannabis cultivation and use is illegal at the federal level and most California farms remain unli-

censed. The rural, far-north counties in California, including the “Emerald Triangle” of Humboldt, Trinity, and Mendocino counties, produce the largest share of total cannabis, where about 90% is grown outdoors or in greenhouses (Sumner et al., 2020). Cannabis cultivation lends itself to land that is too rugged or isolated for other crops, and many unlicensed farms (“grows”) are dispersed in the mountains (Dillis et al., 2021). No formal records are kept of employment in the cannabis industry, so the number of workers is difficult to estimate; conservative econometric models provide an estimate of 58,000 full time-equivalent jobs in the California legal industry in 2021 (Barcott et al., 2021). However, only about 20% of cannabis produced in state is sold legally (Sumner et al., 2020), and so the scale of total employment is unknown. There are also no data on the demographic characteristics of the cannabis workforce.

Cannabis cultivation and processing are labor-intensive, with the most detailed and time-consuming task being hand-trimming, where workers use small scissors to trim leaves and stems away from cannabis flowers. During the outdoor harvest season in Northern California, seasonal trimmers (sometimes referred to as *trimmigrants*) congregate in search of jobs where they will be paid by the pound of finished product, often working 10–12 hour shifts at isolated grow sites (Beckman, Castañeda et al., 2022). Due to the illegal status of cannabis at the federal level, there are no legal routes for U.S. visa holders to work in the cannabis industry. Following the 2016 legalization of adult recreational use in California, cannabis-specific labor staffing agencies have been established that place trimmers and other seasonal workers on licensed farms; however, the many unlicensed operations do not have access to hiring via staffing agencies, nor are undocumented workers able to seek employment through an agency or legal hire. Most seasonal trimmers seek work either through existing peer-to-peer contacts or by meeting growers in the larger towns in cannabis-growing regions.

In the past, trimmigrants were drawn to the industry not only by relatively high pay for seasonal work but due to an interest in consuming cannabis, being part of the cannabis culture, or seeking a long-term career in the industry. These workers

were characterized as largely U.S. citizens or European immigrants; while some of these seasonal workers still arrive, recreational legalization has resulted in the number and size of cannabis farms growing and decreasing piece-rate pay as the market is flooded with lower-price cannabis (Wilson, 2022). In California, farmers need to hire more workers who are willing to accept lower pay, and the worker population has shifted to experienced white and Latino immigrants from Latin America who return yearly for the cannabis season, and most recently to Latino farm workers transitioning from other crops and to Asian immigrants (Hamilton, 2018; Velie, 2018).

A major driver of health disparities in farm-worker communities is structural violence—the totality of social systems and arrangements that cause harm to individuals and populations, including constructions of race, gender, and immigration status (Sbicca et al., 2020). Structural violence is further described this way by medical anthropologist Paul Farmer and colleagues (2006): “The arrangements are *structural* because they are embedded in the political and economic organization of our social world; they are *violent* because they cause injury to people (typically, not those responsible for perpetuating such inequalities)” (“Defining Structural Violence,” para. 1). To varying degrees, these post-legalization immigrant workers are vulnerable to the same set of hazards that affect most immigrant and migrant agricultural workers. Despite being undocumented, returning skilled immigrants are often English-speaking, have existing contacts in the industry, and are more likely to be able to navigate the industry landscape safely (Raskin, 2016). Workers transitioning from other crops are more likely to share the characteristics of other California agricultural workers, who are predominantly Hispanic/Latino (96%), have lower English fluency (84% speaking little or no English), and are likely (51%) to be undocumented (Ornelas et al., 2022). Labor trafficking does occur in the industry and has been discovered at both licensed (Velie, 2018) and illicit (Fertig & Mueller, 2022; Hernandez, 2021) grows—in those reports, trafficked workers were Latino and Hmong immigrants.

This article is one part of a series of analyses

from a qualitative study using focus group discussions (FGDs) and key informant interviews (KIIs) of the experiences and knowledge of people who work or have worked in the cannabis industry. To our knowledge, this is the first cannabis worker health study that recruited immigrant seasonal trimmers. The purpose of this study was to gather information on cannabis workplace hazards that is critically needed to inform future research as well as regulatory and outreach actions, while using an approach that allows workers to steer conversations to the concerns and needs they feel are most important. Three domains emerged during the analysis, resulting in a previously published analysis of physiological hazards and their health effects (Beckman, Castañeda et al., 2022), a forthcoming analysis of job stress and mental health, and the present qualitative descriptive discussion of structural violence and experiences of wage theft endured by participants who were immigrant seasonal workers.

### Applied Research Methods

The study methods have previously been described in detail (Beckman, Castañeda et al., 2022). We used a peer-recruiting approach, with three seasonal immigrant trimmers known to the research team via previous work agreeing to recruit participants among their friends and industry contacts, resulting in four FGDs of 32 workers total and nine KIIs. The FGD/KII facilitator (XC) prompted open-ended discussions of worker health and safety topics using semi-structured guides. Sessions were held online (via Zoom) in English with informal Spanish interpretation available by the facilitator, a native Spanish speaker. The guides did not solicit information on immigration or documentation status or participation in illegal activities, and the KIIs and FGDs were not video- or audio-recorded. Two trained study staff members transcribed the sessions, omitting any identifying information such as person, business, or specific location names. They then combined notes to ensure that no responses were missed. The study protocol was determined to be exempt from review by University of California, Davis, and University of California, Berkeley, institutional review boards (IRBs) under 45 CFR 46 Subpart A §46.104

Exempt research, Category 2 (i) “The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects” (U.S. National Archives and Records Administration: Office of the Federal Register, 2021). Participants provided verbal informed consent at the beginning of each session and were free to decline to respond to any topics or leave the discussion at any time.

This analysis focuses on the 25 immigrant FGD participants from Mexico and South America who had experience primarily as seasonal cannabis workers. Six FGD participants who had held primarily year-round jobs and one seasonal trimmer who was a U.S. citizen were excluded. Using deductive thematic analysis (Braun & Clarke, 2006), we grouped responses by semi-structured guide topic; for responses falling outside the semi-structured guide, topics were grouped inductively. We identified subthemes based on applicable social structures and analyzed these experiences in the context of the structural conditions that enable them: immigration status, race and/or ethnicity, gender, workplace relational hierarchies, and the criminalized nature of the cannabis industry. These issues are deep and complex, with many intersections, and for interpretation we sought to organize the social conditions as discretely as possible and contextualize each with relevant literature. The experience of wage theft was prominent and universal—a common thread influenced by all the social factors.

Since the slang term *trimmigrants* is sometimes used to refer to all seasonal workers who travel to Northern California for cannabis work, and not just immigrants, we will refer to these workers as “immigrant trimmers.” While some of the experiences of withheld or shorted pay could be considered labor trafficking, we use the term “wage theft” out of deference to the participants choice not to describe their experiences as trafficking.

## Results and Discussion

### *Demographics*

Most participants self-identified as Latino/a/x (17, 68%) with 5 (20%) identifying as white, and most

gave their country of origin as Mexico (21, 84%). The median age was 34 years (interquartile range [IQR]: 29, 35), and 56% were women. College education was common—21 (84%) reported at least some college education. All had worked as trimmers, with six reporting additional experience with outdoor cultivation work. Focus groups were held in English, but 80% of participants spoke only Spanish at home. The median duration of employment in the cannabis industry was seven months (IQR: 3, 18) which is equivalent to about three harvest seasons.

### *Immigration and Documentation*

All the participants entered the U.S. using a tourist visa (U.S. visa category B-2), which prohibits any employment or paid work, and went on to work as undocumented immigrants. All reported working in the cannabis industry primarily for the money, but none reported working to send money home for family. Several specified that they worked as a trimmer because the wages in U.S. dollars of one harvest season supported them in their home country for the rest of the year. While the participants and many workers like them travel to the U.S. voluntarily using a visa, some year after year, there are documented cases of cannabis workers who are transported across the U.S. border without documents, associated with operations involving organized crime (St. John, 2022). None of the participants reported being trafficked or working with trafficked persons.

The stress described by participants began before crossing the border. They had strategies including choosing airports where they thought they would have a better chance of avoiding interrogation and deleting applications and data on their phone to eliminate any information that could indicate they intended to work in the U.S. Several participants had experienced detentions:

It is a physical, emotional, and psychological preparation to come to the U.S. I need to have all the answers prepared, I have to make sure to have Instagram, WhatsApp, Telegram, and all the data on my phone erased before crossing the border.

Last year I traveled with my boyfriend and he is an almost-white man, and they did not arrest him. They kept me for several hours in the detention room. I am brunette and with Indigenous features, I am from Mexico.

Like other undocumented immigrants, participants had a fear of deportation, which causes negative psychological and physical health effects (Hacker et al., 2015). The potential for immigration status disclosure and deportation causes stress, and, in addition, reduces health care utilization and decreases the chance that the victim of any crime (e.g., wage theft) will make a formal report. Participants repeatedly stated that their undocumented status prevented any recourse for wage theft. Regardless of documentation status, immigration policy is a key determinant of Latino health disparities in the U.S. by affecting access to healthcare and improved working conditions and wages (Philbin et al., 2018).

The most common response when participants were asked “What do you fear the most when working in this industry?” was that they would not be paid. Some cannabis growers leveraged the immigration status of trimmers by direct threats to report undocumented workers as well as by the implicit threat of detention if a worker tried to report mistreatment or wage theft:

They treat you [immigrants] differently. It’s instantaneous. I had a terrible experience where the first year they didn’t pay my friends and they paid others [U.S. residents]. And then they say, “well what are you going to do, you’re an illegal immigrant.”

The friction between escalating immigration policy enforcement and a continual need in the U.S. for low-wage labor results in an environment where wage theft (including non- and underpayment and failure to pay overtime) as well as workplace abuse are commonly experienced by undocumented workers in almost every industry (Fussell, 2011). Undocumented workers have the same legal rights to a safe workplace and workers’ compensation as all workers, but these rights are *de facto* inaccessible due to fears of retaliation by employers or

job loss as well as exposure to law enforcement. Consistent with producers of other agricultural products, licensed cannabis producers benefit from hiring undocumented workers who accept lower pay and allow them to avoid insurance and payroll taxes. One participant expressed the opinion that hiring undocumented and “under the table” seasonal workers is the only way licensed cannabis growers can remain profitable.

### **Race**

All the participants had experienced racism in the workplace; because Latin American immigrants are racialized in the U.S. (Misra et al., 2021), even those identifying as white were discriminated against on this basis. The employers described by participants were white men, who they said treated European immigrant and white U.S. citizen workers better regardless of job type.

It’s really difficult, people who own the farm, or are the supervisors, are mostly white. You can see how they treat you; the racism is obvious, and we are treated differently, they pay you less.

Almost all the owners are Americans, and white. They can do whatever they want. It’s scary that everyone knows they have guns, do drugs, not in their five senses [behaving unpredictably], and most of the time they are racist, so you really live very concerned.

Participants described the demographic shift from U.S. citizens and European immigrants before 2016, to predominantly experienced white and Latino seasonal trimmers from Latin America, then to Latino immigrants moving to cannabis from less valuable crops, and most recently including self-organized crews of Hmong immigrants:

A lot of change. ... You hear a lot of the lower-class immigrants from Mexico, El Salvador, Guatemala, and Honduras working in the cannabis industry. Before it was this medium class that was traveling and trying to figure out their lives, but now it’s more for the low class.

The Hmongs and people from Laos are groups of 10-15 people. They have one manager who talks with the owners, and they have a deal for the payment. They promise to the owners that they will do a certain number of pounds a day. They do things in teams; they have a good relationship between them.

Participants also described being a captive audience to racist comments and slurs from white owners and being unable to respond due to their low status in the workplace. Some had bosses who exceptionalized one perceived race of workers to criticize another, such as claiming that Latinos are hard workers but Asians are untrustworthy. Previously, demographic descriptions of seasonal trimmers have been largely confined to news articles that often describe trimmers similar to this study's participants—young Latin American immigrants who choose to travel for cannabis work out of an interest in the culture as well as the potential for high pay (Hamilton, 2018; Raskin, 2016). In contrast, the workers described above as “low class” are likely to be among the traditional farm labor workforce of undocumented immigrants from Mexico and Central America hoping to escape extreme poverty and violence in their country of origin (Holmes, 2013).

Structural racism—the entirety of complex and intersecting systems reinforcing racial discrimination (Reskin, 2012)—is a major driver of health disparities in the U.S. (Phelan & Link, 2015). A component of this overarching system is occupational health inequity. People of color, in particular Black and Latino workers, are more likely to hold lower-paying and precarious jobs and those described as “dirty, dangerous, and demanding (sometimes degrading or demeaning)” (Moyce & Schenker, 2018, p. 352) and have higher risk of workplace injury and illness (Murray, 2003). Study participants described frequent injuries and hazardous exposures in addition to the experiences of structural discrimination (Beckman, Castañeda et al., 2022). Workers who experience or witness acts of racism in the workplace experience psychological distress, depression, and emotional trauma as well as somatic effects like worse self-rated health and body pain (Okechukwu et al., 2013). In addi-

tion to the emotional aspects of distress and frightening situations, study participants ubiquitously reported chronic back and upper extremity pain, which was attributed to chronic stress as well as the physiological hazards of trimming (Beckman, Castañeda et al., 2022).

### *Gender Discrimination and Violence*

Trimming is a marginalized job within the cannabis industry—it is an entry-level job despite requiring specific skills (Robinson, 2016) and is the job most held by women, sometimes called “trim bitches” and hired based on appearance in addition to skill (August, 2013). Participants described a common social hierarchy on farms where male owners who dated pretty women or had the prettiest trimmers were respected more.

I met a guy that has a farm, 60-70 years old. He wanted women on his farm. Trying to seduce you in some way to get you on the farm. ... This guy was very authoritarian, and I am a reactive person so I couldn't say anything because I knew it might go bad, but I was scared of not finding another job at the moment.

Several participants had heard of growers who paid women more to work topless, which is supported by the research of Karen August (2013) based on employment ads for trimmers. All the female study participants reported experiencing some form of sexual harassment or discrimination on the job, most often by supervisors. None reported experiencing sexual assault, but two women participants described sexual assault as the worst thing that could happen while doing cannabis work.

Workplace sexual violence and discrimination cause psychological and physical health effects that include chronic pain, trauma, and depression, which may persist for years after the precipitating event (Kim et al., 2016). Latina farm workers experience sexual violence at much higher rates than other women workers, with 80% of California Mexican women farm workers in one study reporting sexual harassment (Waugh, 2010). The experiences of workplace sexual objectification reported

by women participants of this study are associated with adverse health effects, while co-occurring life experiences of objectification, harassment, and fear of rape result in trauma and chronic physical as well as mental health outcomes (Chan et al., 2008; Miles-McLean et al., 2015). Like many farmworkers, seasonal cannabis workers live in temporary housing at their work site, which causes blurring of the lines between the workplace and personal lives and exposure to perpetrators of violence both on and off the job.

### ***Workplace Injustice***

The organizational structure for rural cannabis grows that participants described most often was a hierarchy with an owner, several long-term workers (who are often white U.S. citizens and friends or family members of the owner), and seasonal workers, including trimmers. Participants unanimously reported that farm owners and managers used their higher status in the workplace to threaten and intimidate workers:

There have been a couple of times that I have had a gun pointed to my head because the owners get paranoid, and they think you're stealing. If they don't pay you, it's not like you can get a bigger gun and come back.

There is coercion from the boss—they walk around with a gun in order to scare us and make sure people are working and don't steal. They want to maintain an atmosphere where everything is under their control even if it's not a direct attack.

The unifying experience in this analysis, wage theft, was enforced by intimidation and threats. Many participants had experienced instances when the owners paid less than the agreed-upon piece rate or even withheld pay entirely because the selling price of cannabis was lower than expected:

You are a migrant on top of a hill in the middle of nowhere and you don't even know if they are going to pay you. Some places pay every week or two weeks or when owners sell a bunch of weed. The payment went from

[US]\$150 to [US]\$125 [per pound] this year. They had told us this the last day of working. You can't tell them anything because they have guns, they have cameras.

You are on a status that doesn't allow you to ask for rights. You feel unsafe. In relation to payment, you are working without a contract or anything that secures that they are going to pay you. ... If the person gets mad and they don't want to, they don't pay you.

Based on the experiences of study participants, some cannabis growers may inflict a more extreme form of abuse than is described in other workplaces. Only two participants reported being threatened by a gun pointed at them, but all participants reported employers displaying guns as an implicit threat. Many participants described the culture of cannabis cultivation in Northern California as “Wild West” and characterized by chaos and violent competition for money and power.

Much of the literature on harassment and abuse in the workplace cites a business management framework of *organizational justice* (Elovainio et al., 2002); however, leveraging the relational power imbalance between employers and employees necessary to extract surplus value fits the definition of structural violence. Interpersonal injustice, in particular abuse by supervisors, is more common in workplaces with minority or low-wage workers (Lopez et al., 2009) and results in physical and mental health disparities that include post-traumatic stress disorder, depression, and cardiovascular disease (Okechukwu et al., 2013). Beyond the overt experiences of intimidation and harassment, participants reported feeling disposable and dehumanized. The temporary residence of trimmers at remote, isolated workplaces with substandard and unsanitary housing (Beckman, Castañeda et al., 2022) parallels the experiences of other migrant farm workers (Moyce & Schenker, 2018). While there are differences between the cannabis industry and conventional agriculture as well as demographic differences between study participants and other farmworkers, the workplace maintains what Peter Benson (2008) describes in a structural violence framework as “a context of ethical variability

in which farm labor seems undignified and deserving of squalid conditions and inadequate social response” (p. 619). The working conditions of seasonal cannabis workers are no secret within cannabis farming communities, but only very recently has their suffering been brought to a more general audience or included in policy efforts (St. John & Elmahrek, 2023).

### *Criminalization of Cannabis*

In addition to the immigration and border policing described previously, immigrant cannabis workers are directly affected by enforcement of the complex and contradictory federal, state, and local laws governing cannabis cultivation. In a historical current rippling to the present troubles of immigrant cannabis workers, the criminalization of cannabis in the U.S. began as a contrived racist backlash to Mexican immigrants in the early 20<sup>th</sup> century (Campos, 2018). The second most common response when participants were asked what they feared most about their job (after wage theft) was interactions with the police. None of them had experienced a raid or been detained, but all reported the risk and most always kept their personal documents and money on their person in case they needed to run from a raid.

The worst [fear] is not getting paid, but also having to see immigration police, get deported. That is the worst because you lose your money AND you can't come back to the States.

The concept of “legal violence” was developed by Menjivar and Abrego (2012) to describe the legal conditions that both inflict violence on undocumented immigrants and exclude them from the legal protections afforded to other groups. Both conditions are doubly inflicted on immigrant cannabis workers, who are undocumented and often working in a criminalized job. This increases the risk of wage theft; there is little recourse for most undocumented workers to obtain unpaid wages, but none for workers producing a criminalized crop. While participants occasionally reported that the working conditions were better on licensed farms, undocumented workers do not significantly benefit from state level legalization of cannabis.

Both licensed and illicit grows in California are raided by local police, the California Department of Fish and Wildlife (DFW), California Department of Cannabis Control (DCC), the federal Drug Enforcement Agency (U.S. DEA), and the Federal Bureau of Investigations (FBI). In 2021, the DEA made almost 4,000 arrests in California alone (U.S. Drug Enforcement Agency, n.d.); total numbers of enforcement actions performed by state and local agencies are not available, but the DCC reported assisting in 208 search warrants during July 2021–July 2022 (DCC, 2022). According to news reports and agency public relations, only farm owners and managers are arrested during raids, while lower-level workers such as trimmers are fingerprinted or photographed and released regardless of their documentation status (Parfitt, 2021/2022). Whether or not they result in detention, these enforcement actions terrorize undocumented workers. There is unequivocal evidence that exposure to police violence causes stress-related mental and physical health outcomes (DeVylder et al., 2022). While none of the study participants had experienced a law enforcement raid, indirect exposure to police violence and encounters with law enforcement, even in the absence of arrest or incarceration, have negative effects on mental and physical wellbeing (DeVylder et al., 2022; Sugie & Turney, 2017).

Due to the federally illegal status of cannabis, even licensed growers rarely have access to banking services, and so large amounts of cash and valuable cannabis products are present at all cannabis workplaces. One participant described a situation where a farmer instructed him to shoot potential robbers:

The guy said here's a shotgun, if someone comes, put the bullet in and shoot. It's just in case of emergency, and he keeps it in the woods so police don't see it. If someone comes, you are supposed to go find a gun in the woods and shoot with no training? Nothing happened, but anything could have happened.

Oregon community stakeholders in another recent qualitative study of the cannabis industry had suspicions of sex trafficking, but were also



concerned about the cash-based economy and crime occurring in communities due to cannabis farming (Smith et al., 2019). Participants in this study reported that trimmers are robbed in the population center of cannabis growing regions because people are aware that trimmers do not have access to banking and carry their season's pay in cash:

Some of the nearby cities know what's going on and what trimmers look like, so they'll jump [rob] them in the middle of the night in their hotel rooms.

When you go to the city people can tell who is a trimmer and who is not, and that is where the robbery happens. You become a target because they know you have cash.

### *Community Assets*

The design of this study resulted in a deficit model (Morgan & Ziglio, 2007) focusing on identifying the vulnerability and problems in the population rather than the positive experiences of worker solidarity and joy. Participants also shared methods they used to cope with the dangers of their work in addition to experiences they enjoyed. The seasonal cannabis workforce is by nature dispersed; unlike many other crops, there are relatively few workers at each grow, and grows are isolated by geographic distance and irregular cell phone and internet access. Workers form communities, friend groups, and small informal teams and share information about bad employers when possible by creating groups using apps like WhatsApp or Telegram. Safety information is also passed by word of mouth—one participant with a longer tenure as a repeat seasonal worker shared that he always advised new women trimmers to work in pairs or teams for safety, and other workers described forming new cooperative relationships with other workers on their job site for transportation and mutual aid. Formal job training on tasks is minimal or absent, and more experienced workers sometimes took time away from their work to show new workers how to trim safely or be more productive.

When asked what they enjoy about their work or why they would return, all cited the money, but

many shared other positive experiences. One woman took pleasure in needing to be resourceful and creative to cook good food, and several workers enjoyed meeting new people and the sense of adventure. A common sentiment was enjoying the mountain scenery and clean air. Several participants did not consume cannabis, but others found success working in the industry to enjoy the “good weed” and learn more about cannabis cultivation.

### *Study Limitations and Strengths*

The key limitation of this study was the sampling methodology, which prevents extrapolation of these results and experiences to the wider cannabis workforce. We used a peer recruitment model that resulted in a cluster of demographically similar workers, and due to the absence of data on cannabis worker demographics, it is not possible to assess how representative the sample is. However, this study is an important first step in describing the seasonal cannabis workforce in California and was a success in recruiting seasonal immigrant workers who would otherwise be difficult or impossible to reach via conventional methods. The FGDs were conducted in English to most accommodate international participants, which limited the groups to workers who felt comfortable communicating in English. In addition, the participants were relatively well-educated, and due to accessibility to peer recruiting, had at least some degree of social networking within the cannabis worker community. All the participants were tourist visa recipients; it can be difficult for Mexican citizens to obtain a tourist visa since they must prove in an interview with U.S. consular staff that they have enough financial resources and family ties in Mexico that they do not plan to overstay the visa or seek employment in the U.S.

This analysis draws comparisons between the participants and the existing body of research on undocumented, immigrant, and migrant farmworkers. It is important to note the sociodemographic differences between the participants and these workers while interpreting the results of this study. California row crop workers are mostly Hispanic/Latino (99%), more than half report not speaking any English, and 90% have less than 12 years of education (Ornelas et al., 2022), whereas the

participants in this pilot were all were English-speaking and most had at least some college education. However, immigrant cannabis workers are unstudied except for this work, and the most similar and reasonably well characterized demographic for comparison is California agricultural workers. There is little research overall on cannabis workers, and those who have participated in the existing published studies are most often white men who work for licensed cannabis businesses that are willing to allow researchers to interact with their employees on the job (Beckman, Langer et al., 2022; Sack et al., 2020; Walters et al., 2018). This creates a bias toward workers who have more stable jobs and relative social privilege over seasonal immigrant workers, and, in addition, includes only businesses that are confident enough about their employee satisfaction and health and safety plans to engage with researchers. This analysis begins to bridge the gap between these workers and the more marginalized and vulnerable groups of cannabis workers.

Due to the small size of the study, analytical limitations created by the choice not to record sessions, and large number of topics discussed during FGDs (as opposed to focused attention on a smaller range of subjects), we opted for a descriptive analysis focused on the words and narratives of participants. We acknowledge that a more scientifically rigorous approach would benefit future research.

## Conclusions

As the cannabis industry works to overcome the legacy and stigma of criminalization, it is important to be clear that many cannabis businesses are invested in the dignity, health, and safety of their workers, including seasonal workers. Some growers have created groups to share information and resources on worker health and sought out voluntary training, and the United Food and Commercial Workers Union Western States Council has made inroads with legal industry workers seeking to organize their workplaces (Otañez & Grewal, 2021). While the problems are heightened by criminalization, isolation, and the “Wild West” culture of cannabis growing in Northern California, the experiences of structural and legal violence, dis-

crimination, and workplace abuse are also suffered by most agricultural workers in the U.S. However, ignoring or minimizing the uniquely precarious and unsafe working conditions endured by cannabis workers does a disservice to the industry in addition to the workers themselves. It is not possible to create effective strategies for advancing and destigmatizing the cannabis industry without acknowledging these problems.

Participants in this study, while demographically distinct from other California farmworkers, experienced similar forms of structural violence. Experiences of abuse and discrimination were ubiquitous, and the greatest concern of participants was wage theft in the form of the agreed-upon piece rate pay being withheld or reduced. The immigration status, perceived race, and gender of participants was intentionally used as leverage to perform this wage theft in workplaces with rampant bullying and sometimes physically violent abuse by supervisors. The criminalization of cannabis cultivation creates additional avenues for owner control of workers, in addition to a secondary legal violence beyond that inflicted by the immigration policing system in the form of law enforcement raids of cannabis workplaces. These complex and intersecting forms of structural violence are difficult to tease apart and impossible to meaningfully rank, but the primary specific concerns of participants beyond wage theft were police interactions and, for women, sexual assault.


## Recommendations

The legalization or decriminalization of cannabis at the federal level will be an important step in advancing the health and safety of cannabis workers (Schenker & Beckman, 2022). In addition to expanding access to licensing, banking, and occupational health resources, federal legalization or decriminalization will likely reduce workers’ interactions with law enforcement. There is potential for a unified, streamlined licensing approach at the federal, state, and local levels that includes equity programs to advance the health of marginalized workers (Stoa, 2021). The difficulty and expense of licensing and regulatory compliance in California is likely responsible for the large market share of illegally grown cannabis in the state

(Sumner et al., 2020). Previous reports of cannabis workplace violence have focused on robberies and assaults (Washington State Department of Labor & Industries, 2020), but this analysis has revealed that structural violence, including the threat and enactment of legal violence, is a key source of workplace violence experienced by seasonal trimmers. It is telling that despite experiences like being threatened with guns by their employers, participants ranked interactions with police as one of their main fears on the job. However, legalizing cannabis will not prevent business owners from leveraging workers' documentation status to perform wage theft. Recommending actions to reduce the violence of U.S. immigration policy and enforcement are beyond the scope of this analysis.

Another critical need for advancing cannabis worker health is widespread access to culturally appropriate training and education on workplace hazards (Schenker & Beckman, 2022). In addition to the occupational health and safety regulations governing all workplaces, California-licensed cannabis businesses are required to provide additional industry-specific health and safety training. However, none of the study participants was aware of the requirement and none had received health or safety training—to paraphrase one participant, if they do not even know if they are going to be paid, of course there is no safety training. Given the low percentage of licensed cannabis farms, educational materials that are broadly available and promoted by avenues directly accessible by workers are needed. In addition, materials accessible to workers with limited literacy, such as videos translated into Spanish, Hmong, and perhaps other languages, will

be required to meet the needs of the ongoing demographic shift among seasonal workers. Outreach to the most vulnerable cannabis worker groups is challenging due to geographic and social isolation and the potential for violence and retaliation by owners, which is anticipated to be more severe in businesses employing trafficked workers. One nonprofit has had success discreetly passing small information cards to workers during community vaccination and health clinics (Hernandez, 2021); this system could be used to communicate resources to workers who may be too fearful of repercussions at work to be approached directly.

Finally, this study and analysis represent a first step in understanding the health and safety of marginalized seasonal and immigrant cannabis workers, but further research is needed. Collaboration with cannabis workers will be essential to ensure that their unique needs are met and that any interventions are both desired and effective. There is little research overall on cannabis worker health and safety, and both quantitative assessments of exposures and outcomes and further qualitative work can identify the immediate and long-term needs of workers as well as guide health interventions and policy actions to protect worker health. 

### Acknowledgments

The authors thank the participants, in particular the peer recruiters, for their time and effort. We would also like to acknowledge the contributions to the conception and design of the study of Chelsea Eastman Langer, PhD, MPH, and Stephany Pizano, MPA, and the assistance with data collection of Likhi Rivas, BA.

### References

- August, K. (2013). Women in the marijuana industry. *Humboldt Journal of Social Relations*, 1(35), 89–103. <https://doi.org/10.55671/0160-4341.1189>
- Barcott, B., Whitney, B., & Bailey, J. (2021). *Leafly Jobs Report 2021*. <https://leafly-cms-production.imgix.net/wp-content/uploads/2021/02/13180206/Leafly-JobsReport-2021-v14.pdf>
- Beckman, S., Castañeda, X., Rivas, L., & Schenker, M. B. (2022). California cannabis cultivation and processing workers: A qualitative analysis of physiological exposures and health effects. *American Journal of Industrial Medicine*, 66(1), 75–84. <https://doi.org/10.1002/ajim.23442>
- Beckman, S., Langer, C. E., & Schenker, M. B. (2022). A pilot study of respiratory and dermal symptoms in California cannabis cultivation workers. *Journal of Agromedicine*, 28(1), 28–35. <https://doi.org/10.1080/1059924X.2022.2141407>

- Benson, P. (2008). EL CAMPO: Faciality and structural violence in farm labor camps. *Cultural Anthropology*, 23(4), 589–629. <https://doi.org/10.1111/j.1548-1360.2008.00020.x>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp0630a>
- Campos, I. (2018). Mexicans and the origins of marijuana prohibition in the United States: A reassessment. *The Social History of Alcohol and Drugs*, 32, 6–37. <https://doi.org/10.1086/SHAD3201006>
- Chan, D. K.-S., Chow, S. Y., Lam, C. B., & Cheung, S. F. (2008). Examining the job-related, psychological, and physical outcomes of workplace sexual harassment: A meta-analytic review. *Psychology of Women Quarterly*, 32(4), 362–376. <https://doi.org/10.1111/j.1471-6402.2008.00451.x>
- Department of Cannabis Control [DCC], California. (2022, July 21). *California cannabis enforcement efforts help protect people, the environment, and the legal market* [Announcement]. <https://cannabis.ca.gov/2022/07/california-cannabis-enforcement-efforts-help-protect-people-the-environment-and-the-legal-market/>
- DeVylder, J. E., Anglin, D. M., Bowleg, L., Fedina, L., & Link, B. G. (2022). Police violence and public health. *Annual Review of Clinical Psychology*, 18, 527–552. <https://doi.org/10.1146/annurev-clinpsy-072720-020644>
- Dillis, C., Biber, E., Bodwitch, H., Butsic, V., Carah, J., Parker-Shames, P., Polson, M., & Grantham, T. (2021). Shifting geographies of legal cannabis production in California. *Land Use Policy*, 105, Article 105369. <https://doi.org/10.1016/j.landusepol.2021.105369>
- Elovainio, M., Kivimäki, M., & Vahtera, J. (2002). Organizational justice: Evidence of a new psychosocial predictor of health. *American Journal of Public Health*, 92, 105–108. <https://doi.org/10.2105/AJPH.92.1.105>
- Farmer, P. E., Nizeye, B., Stulac, S., & Keshavjee, S. (2006). Structural violence and clinical medicine. *PLoS Medicine*, 3(10), Article e449. <https://doi.org/10.1371/journal.pmed.0030449>
- Fertig, N., & Mueller, E. (2022, October 2). 'Real people that we care about are being exploited.' *POLITICO*. <https://www.politico.com/news/magazine/2022/10/02/weed-cannabis-undocumented-immigrants-00059827>
- Fussell, E. (2011). The deportation threat dynamic and victimization of Latino migrants: Wage theft and robbery. *The Sociological Quarterly*, 52(4), 593–615. <https://doi.org/10.1111/j.1533-8525.2011.01221.x>
- Hacker, K., Anies, M., Folb, B. L., & Zallman, L. (2015). Barriers to health care for undocumented immigrants: A literature review. *Risk Management and Healthcare Policy*, 8, 175–183. <https://doi.org/10.2147/RMHP.S70173>
- Hamilton, K. (2018, April 19). California's legal weed farms are replacing trimmigrants with immigrants. *VICE News*. <https://news.vice.com/en/article/evq7gn/californias-legal-weed-farms-are-replacing-trimmigrants-with-immigrants>
- Hernandez, R. (2021, November 17). *Immigrant workers on illegal marijuana farms struggle with working conditions*. Oregon Public Broadcasting. <https://www.opb.org/article/2021/11/17/immigrant-workers-on-illegal-marijuana-farms-struggle-with-working-conditions/>
- Holmes, S. M. (2013). *Fresh fruit, broken bodies: Migrant farmworkers in the United States*. University of California Press. <https://www.jstor.org/stable/10.1525/j.ctt7zw45x>
- Kim, N. J.-E., Vásquez, V. B., Torres, E., Nicola, R. M. B., & Karr, C. (2016). Breaking the silence: Sexual harassment of Mexican women farmworkers. *Journal of Agromedicine*, 21(2), 154–162. <https://doi.org/10.1080/1059924X.2016.1143903>
- Lopez, S. H., Hodson, R., & Roscigno, V. J. (2009). Power, status, and abuse at work: General and sexual harassment compared. *The Sociological Quarterly*, 50(1), 3–27. <https://doi.org/10.1111/j.1533-8525.2008.01131.x>
- Menjívar, C., & Abrego, L. J. (2012). Legal violence: Immigration law and the lives of Central American immigrants. *American Journal of Sociology*, 117(5), 1380–1421. <https://doi.org/10.1086/663575>
- Miles-McLean, H., Liss, M., Erchull, M. J., Robertson, C. M., Hagerman, C., Gnoleba, M. A., & Papp, L. J. (2015). "Stop looking at me!" *Psychology of Women Quarterly*, 39(3), 363–374. <https://doi.org/10.1177/0361684314561018>
- Misra, S., Kwon, S. C., Abraído-Lanza, A. F., Chebli, P., Trinh-Shevrin, C., & Yi, S. S. (2021). Structural racism and immigrant health in the United States. *Health Education & Behavior*, 48(3), 332–341. <https://doi.org/10.1177/10901981211010676>

- Morgan, A., & Ziglio, E. (2007). Revitalising the evidence base for public health: An assets model. *Promotion & Education*, 14(2-Suppl.), 17–22. <https://doi.org/10.1177/10253823070140020701x>
- Moyce, S. C., & Schenker, M. (2018). Migrant workers and their occupational health and safety. *Annual Reviews of Public Health*, 39, 351–365. <https://doi.org/10.1146/annurev-publhealth-040617-013714>
- Murray, L. R. (2003). Sick and tired of being sick and tired: Scientific evidence, methods, and research implications for racial and ethnic disparities in occupational health. *American Journal of Public Health*, 93, 221–226. <https://doi.org/10.2105/AJPH.93.2.221>
- National Conference of State Legislatures. (2023, April 17). *State medical cannabis laws*. <https://www.ncsl.org/health/state-medical-cannabis-laws>
- Okechukwu, C. A., Souza, K., Davis, K. D., & de Castro, A. B. (2013). Discrimination, harassment, abuse and bullying in the workplace: Contribution of workplace injustice to occupational health disparities. *American Journal of Industrial Medicine*, 57(5), 573–586. <https://doi.org/10.1002/ajim.22221>
- Ornelas, I., Fung, W., Gabbard, S., & Carroll, D. (2022). *California findings from the National Agricultural Workers Survey (NAWS) 2015–2019: A demographic and employment profile of California farmworkers* (Research Report No. 15). JBS International. <https://www.dol.gov/sites/dolgov/files/ETA/naws/pdfs/NAWS%20Research%20Report%202015.pdf>
- Otañez, M., & Grewal, J. (2021). Health and safety in the legal cannabis industry before and during COVID-19. *NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy*, 30(4), 311–323. <https://doi.org/10.1177/1048291120976134>
- Parfitt, J. (2021, August 21/Updated 2022, January 12). Hundreds of workers released after raid on illegal marijuana grow near Kerby. *NewsWatch 12 KDRV*. [https://www.kdrv.com/news/local/hundreds-of-workers-released-after-raid-on-illegal-marijuana-grow-near-kerby/article\\_0292b6a1-55b0-5fb3-a298-316716784cae.html](https://www.kdrv.com/news/local/hundreds-of-workers-released-after-raid-on-illegal-marijuana-grow-near-kerby/article_0292b6a1-55b0-5fb3-a298-316716784cae.html)
- Phelan, J. C., & Link, B. G. (2015). Is racism a fundamental cause of inequalities in health? *Annual Review of Sociology*, 41, 311–330. <https://doi.org/10.1146/annurev-soc-073014-112305>
- Philbin, M. M., Flake, M., Hatzenbuehler, M. L., & Hirsch, J. S. (2018). State-level immigration and immigrant-focused policies as drivers of Latino health disparities in the United States. *Social Science & Medicine*, 199, 29–38. <https://doi.org/10.1016/j.socscimed.2017.04.007>
- Raskin, J. (2016, December 2). Marijuana industry’s unseen workforce: The ‘trimmigrants.’ *San Francisco Chronicle*. <https://www.sfchronicle.com/opinion/article/Marijuana-industry-s-unseen-workforce-the-10688637.php>
- Reskin, B. (2012). The race discrimination system. *Annual Review of Sociology*, 38, 17–35. <https://doi.org/10.1146/annurev-soc-071811-145508>
- Robinson, M. (2016, October 5). Being a “trimmigrant” is one of the hardest jobs in the marijuana black market. *Business Insider*. <https://www.businessinsider.com/life-of-trimmigrants-2016-10>
- Sack, C., Ghodsian, N., Jansen, K., Silvey, B., & Simpson, C. D. (2020). Allergic and respiratory symptoms in employees of indoor cannabis grow facilities. *Annals of Work Exposures and Health*, 64(7), 754–764. <https://doi.org/10.1093/annweh/wxaa050>
- Sbicca, J., Minkoff-Zern, L.-A., & Coopwood, S. (2020). “Because they are connected”: Linking structural inequalities in farmworker organizing. *Human Geography*, 13(3), 263–276. <https://doi.org/10.1177/1942778620962045>
- Schenker, M. B., & Beckman, S. (2022). Cannabis industry worker health and safety: Time for action. *Journal of Agromedicine*, 28(1), 14–17. <https://doi.org/10.1080/1059924X.2022.2148031>
- Smith, V. M., Powell, M., Mungeam, D., & Emmons, R. G. (2019). Stakeholder perceptions of the impact of cannabis production on the southern Oregon food system. *Journal of Agriculture, Food Systems, and Community Development*, 8(4), 125–135. <https://doi.org/10.5304/jafscd.2019.084.012>
- St. John, P. (2022, September 8). The reality of legal weed in California: Huge illegal grows, violence, worker exploitation and deaths. *Los Angeles Times*. <https://www.latimes.com/california/story/2022-09-08/reality-of-legal-weed-in-california-illegal-grows-deaths>

- St. John, P., & Elmahrek, A. (2023, January 29). Lawmakers want investigation, hearings into ‘Wild West’ of California cannabis and farm work. *Los Angeles Times*. <https://www.latimes.com/california/story/2023-01-29/lawmakers-want-investigation-hearings-into-the-wild-wild-west-of-california-cannabis-and-farm-work>
- Stoa, R. (2021). Equity in cannabis agriculture (SSRN Scholarly Paper ID 3832228). *Boston University Law Review*, 101(3). Retrieved from SSRN: <https://ssrn.com/abstract=3832228>
- Sugie, N. F., & Turney, K. (2017). Beyond incarceration: Criminal justice contact and mental health. *American Sociological Review*, 82(4), 719–743. <https://doi.org/10.1177/0003122417713188>
- Sumner, D. A., Goldstein, R., Matthews, W. A., & Sambucci, O. (2020). Cannabis in California. In P. L. Martin, R. E. Goodhue, & B. D. Wright (Eds.), *California agriculture: Dimensions and issues, 2nd Edition* (pp. 281–299). Giannini Foundation of Agricultural Economics, University of California. [https://s.giannini.ucop.edu/uploads/pub/2021/01/21/chapter\\_13\\_cannabis\\_2020.pdf](https://s.giannini.ucop.edu/uploads/pub/2021/01/21/chapter_13_cannabis_2020.pdf)
- U.S. National Archives and Records Administration: Office of the Federal Register. (2021). Protection of human subjects. In *Public Welfare. Title 45*. Office of the Federal Register, National Archives and Records Administration. <https://www.govinfo.gov/app/details/CFR-2021-title45-vol1/CFR-2021-title45-vol1-part46>
- U.S. Drug Enforcement Agency [U.S. DEA]. (n.d.). *Domestic Cannabis Suppression / Eradication Program*. Retrieved November 9, 2022, from <https://www.dea.gov/operations/eradication-program>
- Velie, K. (2018, October 18). Immigrants find themselves captive to marijuana harvest. *Cal Coast News*. <https://calcoastnews.com/2018/10/immigrants-find-themselves-captive-to-marijuana-harvest/>
- Walters, K. M., Fisher, G. G., & Tenney, L. (2018). An overview of health and safety in the Colorado cannabis industry. *American Journal of Industrial Medicine*, 61(6), 451–461. <https://doi.org/10.1002/ajim.22834>
- Washington State Department of Labor & Industries. (2020). *SHARP Stats: Cannabis 2020 update: Injury and illness in the legal cannabis industry* (SHARP Publication No. 76-21-2020). [https://www.lni.wa.gov/safety-health/safety-research/files/2020/76\\_21\\_2020\\_Cannabis\\_2020Update3.pdf](https://www.lni.wa.gov/safety-health/safety-research/files/2020/76_21_2020_Cannabis_2020Update3.pdf)
- Waugh, I. M. (2010). Examining the sexual harassment experiences of Mexican immigrant farmworking women. *Violence Against Women*, 16(3), 237–261. <https://doi.org/10.1177/1077801209360857>
- Wilson, S. (2022, August 21). The casualties of California legalizing pot: Growers who went legal. *The Washington Post*. <https://www.washingtonpost.com/nation/2022/08/21/california-marijuana-farms-failing/>