



MIGRANT AGRICULTURAL WORKERS IN BC FACE COMPOUNDING CRISES: HOUSING AND CLIMATE

A Collaboration between the Centre for Climate Justice and RAMA



TABLE OF CONTENTS

01 **Executive Summary**

02 **Context and Project Background**

Summary of Findings

06 Finding 1: Workers experience extreme indoor temperatures and prolonged heat exposure throughout the day

10 Finding 2: Adaptation measures are enacted for agricultural products but not workers

11 Finding 3: Workers' ability to enact adaptive measures is limited by fear of reprisal and difficulty accessing tenant protections

12 Finding 4: Hotter summers are accompanied by the loosening of housing inspection guidelines

14 **Recommendations**

17 **References**



Migrant Agricultural Workers in BC Face Compounding Crises: Housing and Climate

A Collaboration between the Centre for Climate Justice and RAMA

August 2024

Authors (alphabetical): Mohammed Rafi Arefin, Fernanda Novoa, Laura Prada, Geraldine Pratt, Isabel Siu-Zmuidzinas

The Centre for Climate Justice (CCJ) at the University of British Columbia advances the urgent social, political, and economic changes necessary to address the climate crisis. As a Centre operating on unceded ancestral territories of the xʷməθkʷəy̓əm (Musqueam), Skwxwú7mesh (Squamish), səliłwətał (Tseil-Waututh), and Syilx Okanagan Nation and their peoples, this work takes place in the spirit of repair and transformation. That includes an ongoing attempt to repair the damage done to our collective knowledge by the systemic exclusion of Indigenous, Black and non-European experts and knowledge holders, often created by extractive, unaccountable research practices in frontline communities.

RAMA is a migrant justice collective that advocates for Latin American and Caribbean migrant farm workers in the unceded Syilx and Secwepemc territories of the Okanagan Valley. We work to build radically inclusive and more socially just communities by engaging in political advocacy, accompaniment, direct support work, public awareness campaigns, and the documentation of workers' conditions and experiences. We are a volunteer-run, not-for-profit group.

Suggested Citation: Mohammed Rafi Arefin, Fernanda Novoa, Laura Prada, Geraldine Pratt, and Isabel Siu-Zmuidzinas, "Migrant Agricultural Workers in British Columbia Face Compounding Crises: Housing and Climate," 2024, The Centre for Climate Justice and Radical Action with Migrants In Agriculture [<https://cfcj.cms.arts.ubc.ca/news/migrant-agricultural-workers-in-bc-face-compounding-crises-housing-and-climate/>]

Acknowledgements: Thank you to Javier Robles, Sara Nelson, Katie McChesney, Samyukta Srinivasan, Amelia Linett, Inari Sosa Aranda, and RAMA members.

Funding for this project came from the Centre for Climate Justice and the Canada Research Chair Program.

Photography credit: rawpixel.com/USDA, RAMA member (in order presented).

EXECUTIVE SUMMARY

As the climate emergency intensifies, housing is emerging not only as an issue of affordability, but as a health and occupational safety crisis. In British Columbia, a province increasingly experiencing the impacts of climate change amidst an existing housing crisis, longstanding inequalities in agricultural labour are rendering migrant agricultural workers some of the most vulnerable.

In a summer of 2023 pilot research collaboration between university researchers and the grassroots migrant justice organisation Radical Action with Migrants in Agriculture (RAMA), 10 migrant agricultural workers recorded the temperatures and relative humidity in their employer-provided housing in the Okanagan region of BC from August 1st to September 15th. Throughout August, workers recorded extremely high temperatures in their housing, with readings far exceeding the guidelines set by the BC Agricultural Council and the Western Agriculture Labour Initiative (2020).

The results showed that indoor temperatures consistently exceeded outdoor temperatures, revealing that migrant agricultural workers are not exposed only to single instances of extreme heat; they are plagued by excessively hot conditions without reprieve at their workplace or in their home, throughout the day and overnight. Further, inadequate regulations for housing inspection and employer accountability, and the profound vulnerability of workers on temporary work visas, leave workers without adaptation measures such as air conditioners and without the rights or job security to demand them.

Recommendations based on these findings include:

1. Enact and enforce robust national housing standards and inspections
2. Adapt workers' housing for extreme weather
3. Increase workers' access to multilingual legal education and representation
4. Address the fundamental precarity of migrant agricultural workers by creating accessible and equitable pathways to permanent status for temporary workers.

CONTEXT AND PROJECT BACKGROUND

The devastating impacts of climate change, the ongoing crisis of accessible and affordable housing, and temporary migration programs are the leading issues of the day dominating popular and policy discussions. While these crises are often presented as distinct and sometimes abstract, they come together in concrete ways in migrant agricultural workers' lives, with implications for national food security and Canada's responsibility to uphold basic human rights. **Poor access to decent and affordable housing, exposure to climate-induced extreme weather, and precarity created by temporary migration programs are interrelated problems that migrant agricultural workers navigate on a daily basis.** These issues are particularly difficult to address because they are siloed in a patchwork of municipal, provincial, and federal guidelines and regulations, resulting in state abandonment and neglect. This creates the conditions for Canada's essential agricultural workers to suffer intolerable conditions and to be ignored in discussions around climate adaptation, housing equality, and migrant justice.

Migrant agricultural workers are not a small or insignificant population of workers in Canada. In 2018 around 28% of agricultural workers in plant production in Canada (as opposed to animal production and aquaculture) were temporary foreign workers (TFWs), with highest percentages in fruit and nut-tree farming (48%), vegetable and melon farming (39%) and greenhouse, nursery and floriculture (32%) (Falconer, 2020). In 2022, there were 70,365 temporary foreign workers (TFWs) working in the agricultural industry, up 15.3% from 2021 and 25.4% higher compared with five years earlier ([Government of Canada, 2023](#)). In 2021, more than 10,000 of these workers were working in BC (Vescera, 2023).

Many migrant agricultural workers are working in Canada under the Seasonal Agricultural Worker Program (SAWP), which means that they come to Canada each year to work a maximum of 8 months of the year (typically April through to November). They must reapply to return each year. Effective recently, if employers have a record as a good employer, in some cases SAWP permits are issued for two years. Many workers in

this program return year after year, some for well over a decade. Alternatively, a large proportion of migrant agricultural workers come to Canada through the Temporary Foreign Worker Program (TFWP) in the Agriculture Stream, with an employer-specific work permit limited to 2 years. Ostensibly TFW in the Agricultural Stream have an opportunity to transition to permanent resident status, although few workers in crop production are able to make this transition ([Zhong et al., 2024](#)). TFW programs in agriculture have the lowest rates of transition to permanent residency of all TFW programs, and unlike all other TFW programs, the transition rate to permanent residency has decreased over the last 20 years ([Lu & Hou, 2024](#)). **Periodically concerns are raised about Canada's heavy reliance on temporary workers for food production, but the consensus across a spectrum of political positions and interests is that migrant agricultural workers are essential and there will be no adequate domestic labour force unless the sector is radically transformed, with better wages and working conditions (BCAC undated).** The Canadian Agricultural Human Resource Council (CAHRC) and partnering organisations identified “immigration and foreign workers” as one of the five “key pillars” of the sector in their interim 2022 report ([CAHRC, 2022](#)).

As reliance on migrant agricultural workers increases, so do the impacts of climate change and extreme weather. **With the precarity of temporary work and long term exposure to the outdoors, migrant agricultural workers are especially vulnerable to the ravages of climate change.** More than an abstract prospect, the impacts of climate change in our province are far reaching. We know that British Columbia homes were dangerous places for some residents during the heat dome of summer 2021 and subsequent heat waves.

Of the 619 people who died during the heat dome -- the deadliest environmental disaster in Canadian history -- most were low-income and died in their homes, often alone. We know as well that workplaces can be dangerous places for some workers during extreme heat events. Research on service workers ([Worker Solidarity Network, 2023](#)), outdoor workers (Riley et al., 2018) and agricultural workers (Caxaj & Cohen, 2019; Fleischer et al., 2013; Jackson & Rosenberg, 2010) indicate that extreme heat events exacerbate occupational health risks, resulting in heat-related illness, strokes, and even death.

What is less known is how experiences at home and employment work in tandem, and how precarious work conditions can exacerbate precarious conditions at home (and vice versa). While often siloed, the relationship between housing and work is explicitly and legally linked for migrant workers employed under SAWP, whose employers are required to provide rental housing. Because the SAWP employer is also the worker's landlord, this creates the structural conditions in which concerns about job security can prevent workers from voicing legitimate concerns about their housing. Although workers in the TFWP are in principle able to live in non-employer provided housing, employers are required to provide the option of housing for workers. Thus, most migrant workers live in employer-provided housing, most often in the orchard or farm's premises in a trailer, onsite building, or warehouses.

The poor quality of migrant agricultural workers' housing was documented in 2020 in a national study (Migrant Rights Network, 2020), which advocated for decent housing with privacy, adequate space, and accessibility to transportation, services and the wider community. Our focus on heat is thus just one facet of a wider call for better housing. Advocates for migrant workers in agriculture have long called for closer government regulation and regular unannounced inspections of this employer-provided housing (minimally, once a season: [RAMA, 2005](#); [Migrant Rights Network, 2020](#)). **In the words of a representative of Radical Action with Migrants in Agriculture (RAMA): "Housing for [workers] is a huge limitation and one of the things they want to improve the most." Extreme weather events of excessive heat and cold, fires and flooding are exacerbating the (in many cases) already inadequate housing.**

Housing guidelines and regulations are in place but are inaccessible and/or unenforced ([Vescera, 2023](#)). Migrant workers pay rent to their employers for their housing, and thus the BC tenancy rights and regulations through BC Residential Tenancy Act should apply (and technically do). In BC, inspections should be done annually using the BC Agricultural Council (BCAC) and Western Agriculture Labour Initiative (WALI) [housing inspection form](#). However, workers face significant barriers to exercising their rights as tenants. The inspection process is governed by guidelines rather than regulations and is often flawed. Inspection guidelines exist to regulate in-door temperature requirements, although --oddly-- the guidelines for maximum temperature have weakened over the last

decade (see Finding 4). Furthermore the livability of migrant agricultural workers' units is assessed unsystematically, according to RAMA advocates who report that inspectors are often not allowed access to a representative sample of units and that farm owners sometimes show only a portion of compliant units before workers arrive, concealing the conditions many workers endure.

The research reported here tackles the issue of temperature extremes by documenting the temperatures inside worker housing during summer months.

Migrant agricultural workers recorded the temperatures in their employer-provided housing, after long days working outdoors in extremely hot and sometimes dangerous work conditions in the Okanagan region of British Columbia. We (RAMA advocates, workers, and CCJ researchers) conducted a small pilot study in the summer of 2023. RAMA distributed thermometers to 10 migrant agricultural workers, asking them to record the temperatures and relative humidity in their housing from August 1st to September 15th.

Five workers recorded daily temperatures in their bedrooms and 5 made these recordings in the common area of their housing **(See Table 1 and Table 2)**. The housing varied, and included rooms in a warehouse, a rented house, and trailers. In the double wide trailers, workers sleep in bunk beds, up to four in each bedroom. The number of workers in the housing units in which temperatures were recorded varied from four to fifteen. One qualification needs to be noted: this study began in August 2023, missing the month of July 2023 when the temperature exceeded 30 C for more than half of the days of the month.



FIGURE 1: A THERMOMETER RECORDING HUMIDITY (TOP READING) AND TEMPERATURES (LOWER READING) IN THE INTERIOR OF WORKER HOUSING

SUMMARY OF FINDINGS

FINDING 1: WORKERS EXPERIENCE EXTREME INDOOR TEMPERATURES AND PROLONGED HEAT EXPOSURE THROUGHOUT THE DAY

Throughout August workers recorded extremely high temperatures in their housing, with readings far exceeding the guidelines set by the BCAC and WALI. The maximum temperature recorded was 42.8 C in a common area and there were many readings consistently at temperatures over 30 C. Within the recorded extremes, workers lived in prolonged high temperatures. Every location recorded temperatures consistently in the mid 20s to high 30s C range for at least 4 days in a row. Rather than providing relief at the end of the workday outdoors where high temperatures average 27 C + in July and August, employer-provided housing was a setting where workers continued to experience high temperatures with little to no relief. **Data collected from workers and local weather stations show that the indoor housing temperatures were consistently higher than outside temperatures and never cooled below those outside (Figure 2).** These temperatures exceed the World Health Organisation (WHO)'s recommendation of 24 C at night.

TABLE 1. AVERAGES FOR AFTERNOON/EVENING AND NIGHT/EARLY MORNING TEMPERATURES (AUGUST 1-15) IN COMMON AREAS*

	Average Late Afternoon/Evening High* (degrees Celsius)	Average Night/Early Morning Time High** (degrees Celsius)
Average of all common area readings	33.0	26.5
Worker 2	34.5	27.0
Worker 4	34.7	28.3
Worker 6	29.7	No data
Worker 7	27.6	22.8
Worker 10	No data	26.4

* For the Average Late afternoon/Evening High, readings are from the late afternoon/evening (usually between 4 - 9 pm). Some workers sent readings everyday, while others did not. The temperatures represent an average based on the available number of data points. There were 43 afternoon/evening readings and 37 night/early morning readings.

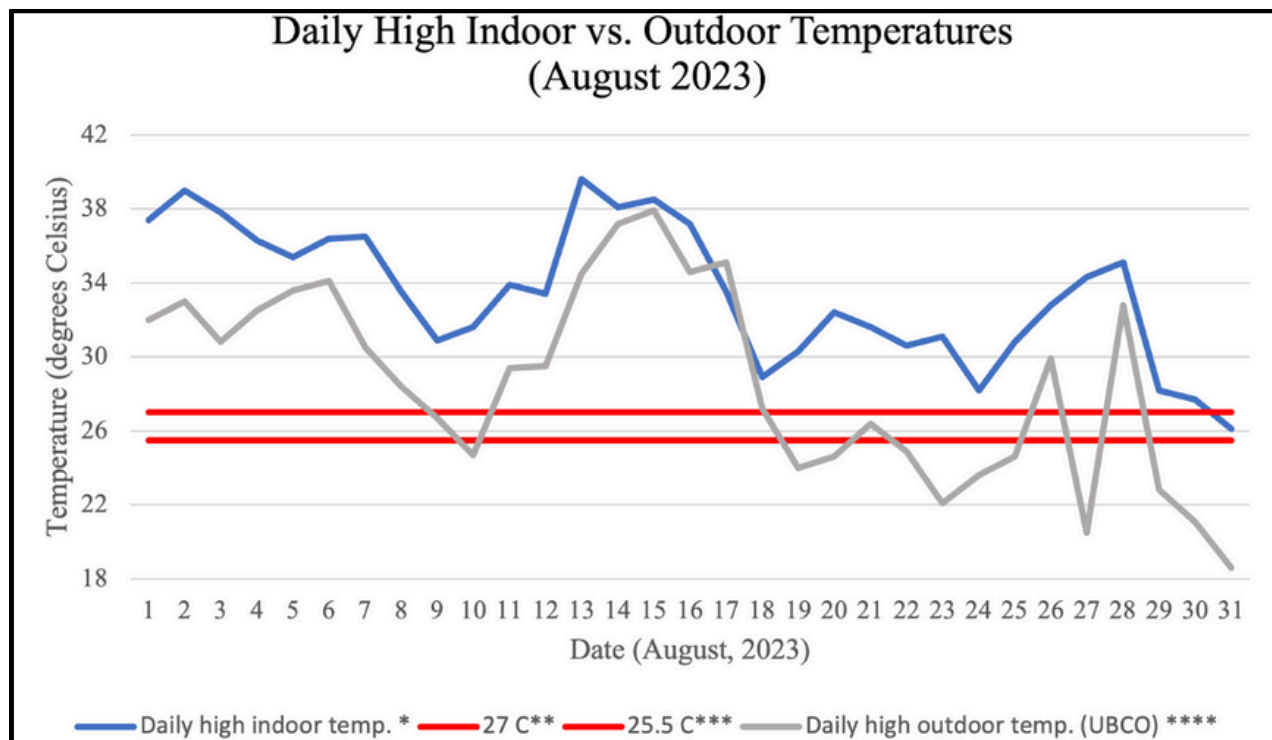
TABLE 2. AVERAGES FOR AFTERNOON/EVENING AND NIGHT/EARLY MORNING TEMPERATURES (AUGUST 1-15) IN BEDROOMS

	Average Afternoon/Evening High* (degrees Celsius)	Average Night/Early Morning High** (degrees Celsius)
Average of all bedroom readings	27.8	24.5
Worker 1	25.0	24.3
Worker 3	27.8	25.3
Worker 5	26.8	24.2
Worker 8	27.5	23.8
Worker 9	29.3	24.3

* For Average Afternoon/Evening High, readings are from the evening (usually between 4 - 9 pm). Some workers sent readings everyday, while others did not. The temperatures represent an average based on the available number of data points. There were 43 afternoon bedroom readings made by 5 workers.

** For Average Night/Early Morning High, readings are from the morning (usually between 4 - 6 am). Some workers sent readings everyday, while others did not. The temperatures represent an average based on the available number of data points. Five workers made 48 evening readings.

FIGURE 2: COMPARISON OF HIGH INDOOR AND OUTDOOR TEMPERATURES



*The daily high indoor temperature recorded here is the highest reading for that day (from common rooms and bedrooms).

** 27 C represents the maximum indoor temperature to be maintained per the [WALI 2020 BC Temporary Foreign Agriculture Worker Housing Inspection Housing Guide](#).

*** 25.5 C represents the maximum indoor temperature to be maintained in now replaced guidelines per the [BCAC 2016 Guidelines for Seasonal Housing for Temporary Farm Workers in BC](#).

**** Highest hourly temperature recorded for the day by UBCO weather station (Environment and Climate Change Canada, 2009).

The high recorded inside temperatures surprised even the workers. A representative of RAMA remarked:

“Some of [the workers] were thinking that it wasn't too bad, but having the numbers there made them realize that it was in fact really, really hot during the days. I don't think they ever had an opportunity before to see that the temperature inside was the same or hotter than outside.” Some of the workers thought **“Oh my room is not the worst in the house, so you probably won't get great data from my room.”** A week later they reflected: **“[...]it looks pretty bad, looking at these numbers.”**

Research into indoor environments and liveable indoor temperatures is an emerging field as regions throughout the world continue to experience some of the hottest recorded temperatures. Such work is often siloed, with occupational health focusing on the workplace and environmental health scholarship on private spaces of the home. WorkSafeBC does not provide specific maximum temperatures guidelines, but does suggest that employers assess the risk of heat related occupational safety issues whenever conditions reach above 23 C (British Columbia, n.d.). **Research has shown that even a single shift of work above 24.8 C puts workers at risk for heat strain. In this same study, researchers found that “15% of individuals who typically or frequently worked under heat stress... experienced kidney disease or acute kidney injury.” (Flouris et. al., 2018, p. 527). Furthermore prolonged and repeated heat exposure has also been linked to the deterioration of mental health (Nori-Sarma et. al., 2022).**

In BC, migrant agricultural workers are, as the data shows, exposed to prolonged heat not only in the outdoor workplace, but also at their employer-provided rental homes.

The City of Vancouver, for example, warns that indoor temperatures between 26 C to 31 C can be dangerous to some adults and further recommends that people seek a temperature-controlled shelter if temperatures rise above 31C (Vancouver, C. of., 2023). The World Health Organization recommends that indoor temperatures should be kept below 32 C during the day and below 24 C at night ([World Health Organization, 2019](#)). Such guidelines are useful for understanding relative baselines, but it is important to recognise that migrant agricultural workers are not exposed to single instances of extreme heat; they are plagued by excessively hot conditions without reprieve. **While some temperatures might fall below what is stated as dangerous levels, our research found that the problem of prolonged heat exposure fell through the regulatory gaps where maximum temperature guidelines are siloed between work and home.** The experience of migrant agricultural workers points to the fact that such distinctions are arbitrary and ineffective when employers are responsible for both labour and housing conditions.

FINDING 2: ADAPTATION MEASURES ARE ENACTED FOR AGRICULTURAL PRODUCTS BUT NOT WORKERS

The wide ranging impacts of climate change including heatwaves, but also wildfires and smoke and cold snaps, are being felt by everyone in the Okanagan region, and employers are putting climate adaptation strategies in place. But often these measures are adaptations to mitigate the impacts of climate change on products and profitability rather than to protect workers. On some farms employers are rescheduling work hours from roughly 4:00 am to 11:00 am, with workers breaking in the heat of the afternoon and returning to work from early evening until 10:00 pm. This leaves workers in the heat of their homes midday, which as the collected data shows can reach unbearable temperatures especially in communal spaces. Other farms have addressed the effects of long and cold winters on crop yield by having workers lay down silvery-white reflective plastic lining on both sides of the rows of fruit trees. This reflects heat back to the trees, allowing the fruit to ripen more quickly. But as a member of RAMA put it: "Now, it's not hot anymore for the workers. It's super incredibly hot." The workers on one farm asked their employer if they could lift the lining during the day while they were picking fruit, and put it back when they're done with the line. The employer refused this simple coping strategy.

Some employers have provided air conditioning in their workers' housing. In other cases, workers have been forced to take the initiative on their own. As a representative of RAMA described: "They had to wait until it was incredibly hot, and they had to ask for it many times for their boss to say, 'Okay, I'll give you some units.' Some of them just went to the store and got the AC unit, installed it and said, 'I'm getting my own unit because I'm frying in here.'"

There are several issues to unpack here. Even if workers buy the cheapest available air conditioner at approximately 200 dollars, with wages at minimum levels this would require almost 12 hours of work, a full day of heavy work. Workers' priority is to send money home to their families, and so (in the words of a RAMA representative) "They say 'It's just going to be four weeks of hell'" and work through it. Second, options for purchasing air conditioners are limited. An employer typically drives workers to a store in town on a weekly or bi-weekly basis to purchase groceries, and arranges to pick workers up at that

spot in 2 to 3 hours. If an air conditioner is unavailable at the store where they are dropped, given the retail and transportation infrastructure in the Kelowna area (shopping malls along a highway), typically workers would need to walk up the highway to find another option (and carry the air conditioner back in the heat). So too, installing air conditioners without proper tools or support is less than ideal. In one case, the employer installed air conditioners in the bedrooms but heat continued to enter the kitchen through a broken window. Workers in some cases have been forced to remove air conditioners that they have purchased and installed after their employers noticed rising electricity bills (Novoa Vignau, 2023).

These transportation limitations also prevent workers from taking advantage of the city's provided cooling centres or from accessing the lake to cool-off. These are strategies that other residents use to navigate the extreme heat conditions in the valley.

FINDING 3: WORKERS' ABILITY TO ENACT ADAPTIVE MEASURES IS LIMITED BY FEAR OF REPRISAL AND DIFFICULTY ACCESSING TENANT PROTECTIONS

For many workers, asking for air conditioning or other adaptive measures runs the risk of asking too much, and they weigh the costs of enduring heat against possibly damaging their relationship with their employer and the option to return the next year. **While no explicit right to cooling or maximum in-door temperature for rental units currently exists, workers' housing is covered by the provinces' Residential Tenancy Act and the tenant protections it provides.** But, accessing rights and protections even when they are guaranteed by law is another matter. Temporary work programs, almost by definition, place workers in conditions of precarity in which it is extremely difficult to exercise rights, even when they exist 'on the books' (Caxaj & Cohen, 2019; Hennebry et al., 2016; Prebiesch, 2010; Vosko et al., 2019). The threat of being 'repatriated' by their employer is ever present, as is the threat of not being hired the following season if seen to be a problematic worker.

A representative of RAMA notes:

“That’s something we talk about very often. The biggest fear is that if they're seen as a problematic worker, meaning somebody who's asking for things, they're just not going to be asked to come back. When you're part of the program between Canada and Mexico as part of the SAWP that can mean two things: you're blacklisted from the program or you go back into a list and then you're distributed wherever the Mexican government distributes you.”

There are fears of being allocated to a worse farm or to a job in another province. “Some of them can end up in Quebec: it’s way colder and it's French. And for them English is hard, French would be another level of difficulty.” In the assessment of a RAMA advocate: “That's the biggest limitation: not knowing whether if they ask for an AC it would mean that they lose their job and their job security or that they end up in a worse farm. There is this narrative: ‘I don't have it the worst. There's people who have it worse than I do.’ In reality, that's probably true.”

FINDING 4: HOTTER SUMMERS ARE ACCOMPANIED BY THE LOOSENING OF HOUSING INSPECTION GUIDELINES

As noted, there do exist federal and provincial guidelines and inspections meant to ensure that employer-provided housing meets basic standards for habitation. Federally, Employment and Social Development Canada requires employers to file a Schedule F Housing Inspection Report. This report includes sections on heating and ventilation,

but does not review maximum temperatures nor passive or mechanical cooling. In BC, employers are required to use the guidelines from the WALI (a subsidiary of the British Columbia Agricultural Council) housing inspection in lieu of the federal Schedule F form. This form, which was updated in 2020 and is conducted pre-season, asks:

6. GENERAL INTERIOR ACCOMMODATION INFORMATION

a. Are all interior areas of the accommodation clean and free of excess stored items?
 Yes No

b. Are the interior walls, ceilings and floors in good condition?
 Yes No

c. Are ceilings at least seven (7) feet high?
 Yes No

d. Can temperature be maintained at most times between 18°C and 27°C while occupied by TFWs?
 Yes No

e. Is there adequate lighting?

WALI 2020 INSPECTION FORM

“Can the [interior] temperature be maintained at most times between 18 C and 27C while occupied by TFWs?” It is striking that this is a different question from the previous 2016 BC AC housing inspection form with a lower maximum temperature limit over a longer duration. The 2016 form included the question: “Can a temperature ranging from 18 Celsius degrees minimum and 25.5 degrees Celsius maximum be maintained in the accommodations at all times either by heating or cooling as necessary?”

General	B. BUILDING INTERIOR
<p>9. Are the following interior components of the accommodations in good condition and appropriately sealed?</p> <p>Ceilings: <input type="checkbox"/> Yes <input type="checkbox"/> No Walls: <input type="checkbox"/> Yes <input type="checkbox"/> No Windows: <input type="checkbox"/> Yes <input type="checkbox"/> No Floors: <input type="checkbox"/> Yes <input type="checkbox"/> No Doors: <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>10. Are the ceilings in the accommodations' living spaces at least seven feet high? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>11. Can a temperature ranging between 18 degrees Celsius minimum and 25.5 degrees Celsius maximum be maintained in the accommodations at all times either by heating or cooling as necessary? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>12. Is there adequate lighting by either natural or artificial means? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="text-align: right;"><i>continued on next page</i></p>
<p>(White Copy: BCAC OFFICE Canary Copy: SERVICES CANADA CENTRE Pink Copy: OWNER/EMPLOYER Goldenrod Copy: INSPECTOR)</p> <p>2016 Inspection Form and Report of Housing for temporary or seasonal foreign worker programs</p>	

WALI 2016 INSPECTION FORM

Since 2016, BC has experienced multiple extreme weather events and increasingly warm summers. And yet, as the climate is changing, we found that inspection guidelines loosened. First, the requirement in the 2016 report specifies that the mandated temperature be maintained at “all times,” while the current guidelines shift that requirement to a more ambiguous “at most times.” Second, the inspected temperature range increased by 1.5 degrees Celsius. Finally, while the 2016 inspection guidelines suggested the possible necessity of passive or mechanical cooling, the recent guidelines make no mention of how a cooler temperature might be achieved. While WALI-BCAC housing inspections are not intended to replace or ensure that all legislative or regulatory requirements are met in regards to housing conditions, such inspections are the only, regularized mechanism for ensuring some standard of habitability. They are the inspections required in BC by the federal government.

This finding points to an alarming trend: as climate change reshapes what qualifies as safe when it comes to indoor temperatures, guidelines are becoming more lenient and ambiguous. Enforcing such guidelines has always been an issue due to factors outlined in previous findings. Loosened guidelines not only create more obstacles to accessing justice through enforcement, they also weaken basic protections in a time when more specific and accessible in-door temperature guidelines are desperately needed.

RECOMMENDATIONS

As the climate emergency in our province intensifies, housing is emerging not only as an issue of affordability, but as a health and occupational safety crisis. Longstanding inequalities in agricultural labour are rendering migrant agricultural workers some of the most vulnerable tenants in British Columbia to the unequal impacts of climate change. Our research clearly demonstrates the need for urgent and far-reaching measures to protect the life and dignity of workers who are vital to the province's food systems and security. We outline our recommendations in four points:

1. ENACT AND ENFORCE ROBUST NATIONAL HOUSING STANDARDS AND HOUSING INSPECTIONS

- **The most immediate change to workers' housing conditions will be effected through the creation of an enforceable national standard for migrant worker housing.** The Housing Inspection Report must be carried out in a more effective and systematic way including unannounced annual inspections during regular work shifts. These inspections must include clear and enforceable guidelines around cooling and heating. Inspections must include the full extent (or at least a representative sample) of employer-provided housing units on the site and be carried out while workers are living there.
- **Housing inspections must include private interviews with workers and include interpreters. Inspections should occur when workers are present** (i.e., not in the 'pre season' before workers arrive).
- The housing provided by employers should be inspected annually, regardless of whether their workers have been issued two-year work visas. The Recognized Employer Pilot program introduced in 2024, which extends employers' labour market impact assessment (LMIS) approval to 36 months, should not exempt employers from annual housing inspections. **Bottom line: all employer-provided housing should be inspected annually, without exception. With extreme weather associated with climate change, housing will likely be more compromised and regular inspection more pressing.**

- The federal and provincial governments hold the responsibility to ensure an adequate number of housing inspectors to carry out annual inspections.
- **Inspectors have a responsibility to follow up in cases where worker housing does not meet required standards.** The enforcement needs to be proactive rather than reactive. That is, it should be responsive to complaints but not in the first instance complaint driven.
- **Data on complaints, actions taken, and enforcement needs to be publicly available.** This basic element of data justice–transparency–is necessary to hold both employers and the government accountable.

2. ADAPT WORKERS' HOUSING FOR EXTREME WEATHER

In reforming the process of housing inspections, housing must be examined for its ability to provide decent and safe shelter in a rapidly changing climate, which is both colder and hotter in the Okanagan.

- **The inspection form must be amended to include a mechanical cooling requirement.** Migrant agricultural workers are essential workers and cannot wait for municipal and provincial laws regulating maximum indoor temperatures, which could take years to go through planning committees, municipal charters, and provincial law making.
- **Adequate plans for keeping workers safe during climate-induced weather events must be formulated at the provincial level (i.e., PrepareBC) with input from workers.** A tailored and adequate response to the unique context of migrant agricultural workers will require collaborative efforts involving all stakeholders, including migrant agricultural workers, community organisations, agricultural employers, policy makers and public health authorities.
- **Given the location of this study, we call attention to the inadequacy of the Kelowna bulletin number 14A-02 for Temporary farm workers housing (TFWS).** The bulletin needs updating to add climate protections and climate units in every mobile home building for TFWS.

3. INCREASE ACCESS TO MULTILINGUAL LEGAL EDUCATION AND REPRESENTATION

Temporary work programs through which the employer is simultaneously a landlord and visa sponsor create enormous obstacles to accessing justice and enforcing existing rights. Because concerns around migrant workers' housing conditions implicate tenancy, labour, and migration regulation and law, pro-bono education and/or representation often falls through the cracks of BC's existing legal aid service provision. **We call for expanded access to multilingual migrant worker-specific resources with advocates knowledgeable of the overlapping areas of law, policy, and support to serve as a counterweight to the obstacles for migrant agricultural workers accessing justice. These resources also must be clearly accessible and multilingual.**

4. CREATE ACCESSIBLE AND EQUITABLE PATHWAYS TO PERMANENT STATUS FOR TEMPORARY WORKERS

This study highlights the profound structural inequities and environmental injustices that attend temporary migration programs. This is true for all temporary migration programs but, as Lu and Hou (2024) demonstrate, pathways to permanent resident status are particularly restricted for migrant agricultural workers. **We recommend that the federal government act on the recognition that agricultural workers are essential workers and extend accessible pathways to permanent status to temporary workers, including agricultural workers, upon entry to Canada.** RAMA and other advocates, part of the Migrant Rights Network across the country, have been calling on the government for this over the past few years through their Status for All campaign.

REFERENCES

1. British Columbia, G. of. (n.d.). Heat, the workplace and your health (pp. 1-6). https://www2.gov.bc.ca/assets/gov/careers/managers-supervisors/managing-occupational-health-safety/heat_information_health_concerns.pdf Accessed August 12 2024.
2. British Columbia Agriculture Council (2016, October). British Columbia Temporary Agriculture Foreign Workers Housing Guidelines. Retrieved from the British Columbia Agriculture Council website: <https://bcac.ca/wp-content/uploads/2017/10/BC-SAWP-Seasonal-Housing-Guidelines-Oct-2016.pdf> Accessed August 12 2024
3. Canadian Agricultural Human Resource Council (CAHRC). (2022). (rep.). National Workforce Strategic Plan for Agriculture and Food and Beverage Manufacturing . Retrieved from <https://cahrc-ccrha.ca/sites/default/files/2022-12/CAHRC%20-%20NWSP%20Interim%20Report%20-%20Dec%206%2C%202022.pdf>.
4. Caxaj, C. S., & Cohen, A. (2019). "I Will Not Leave My Body Here": Migrant Farmworkers' Health and Safety Amidst a Climate of Coercion. *International journal of environmental research and public health*, 16(15), 2643. <https://doi.org/10.3390/ijerph16152643>
5. Environment and Climate Change Canada. (2009). Historical Data - Climate - Environment and Climate Change Canada. [Weather.gc.ca; Government of Canada. https://climate.weather.gc.ca/historical_data/search_historic_data_e.html](https://climate.weather.gc.ca/historical_data/search_historic_data_e.html)
6. Falconer, R. (2020). Grown Locally, Harvested Globally: The Role of Temporary Foreign Workers in Canadian Agriculture. *The School of Public Policy Publications (Online)*, 13(17), 1-19.
7. Fleischer, N.L., PhD, Tiesman, H.M., PhD, Sumitani, J., PA-C, Mize, T., PA-C, Amarnath, K.K., Bayakly, A.R., MPH, & Murphy, M.W., PhD. (2013). Public health impact of heat-related illness among migrant farmworkers. *American Journal of Preventive Medicine*, 44(3), 199-206.
8. Flouris, A.D., Dinas, P.C., Ioannou, L.G., Nybo, L., Havenith, G., Kenny, G.P., & Kjellstrom, T (2018). Workers' health and productivity under occupational heat strain: A systematic review and meta-analysis. *The Lancet. Planetary Health*, 2(12), e521-e531. [https://doi.org/10.1016/S2542-5196\(18\)30237-7](https://doi.org/10.1016/S2542-5196(18)30237-7)
9. Government of Canada, S. C. (2023, May 17). Farm hands that help work the land. <https://www.statcan.gc.ca/o1/en/plus/3634-farm-hands-help-work-land>
10. Hennebry, J. McLaughlin, J, Preibisch, K. (2016). Out of the loop:(in)access to healthcare for migrant workers in Canada *Journal of International Migration* 17, 521-538.

11. Jackson, L.L., & Rosenberg, H.R. (2010). Preventing heat-related illness among agricultural workers. *Journal of Agromedicine*, 15(3), 200-2015.
12. Lu, Y. and Hou, F. (2024). Foreign workers in Canada: Differences in the transition rates to permanent residency across work permit programs *Statistic Canada Economic and Social Report*. June 26 .<https://www150.statcan.gc.ca/n1/pub/36-28-0001/2024006/article/00001-eng.htm> Accessed August 12 2024.
13. Migrant Rights Network. (2020). (rep.). Decent & Dignified Housing for Migrant Farmworkers. Retrieved from <https://migrantworkersalliance.org/wp-content/uploads/2020/12/MRN-Submission-Decent-Dignified-Housing-for-Migrant-Farmworkers.pdf>
14. Nori-Sarma, A., Sun, S., Sun, Y., Spangler, K.R., Oblath, R., Galea, S., Gradus, J.L., & Wellenius, G. A. (2022). Association between ambient heat and risk of emergency department visits for mental health among US adults, 2010 to 2019. *Jama Psychiatry (Chicago, Ill.,)* 79(4), 341-349. <https://doi.org/10.1001/jamapsychiatry.2021.4369>
15. Novoa Vignau, M. F. (2023). Mexican migrant agricultural workers' experiences of the public health measures during the COVID-19 pandemic in the Okanagan. Unpublished MA Thesis, University of British Columbia.
16. Preibisch, K. (2010). Pick-Your-Own Labor: Migrant Workers and Flexibility in Canadian Agriculture *International Migration Review* 44:2 404-441.
17. RAMA. (2005). Guidelines for the Provision of Seasonal Housing For Migrant Agricultural Workers in BC <https://www.ramaokanagan.org/wp-content/uploads/2015/03/BC-SAWP-Seasonal-Housing-Guidelines-12-05-Final.pdf> Accessed August 12 2024.
18. Riley, K., Wilhalme, H., Delp, L., & Eisdeman, D.P. (2018). Mortality and morbidity during extreme heat events and prevalence of outdoor work: An analysis of community-level data from Los Angeles county, California. *International Journal of Environmental Research and Public Health*, 15(4), 580.
19. Vancouver, C. of. (2023, July 24). Take the indoor temperature survey during hot weather. *Vancouver.ca*. Retrieved June 11, 2024, from <https://vancouver.ca/news-calendar/take-the-indoor-temperature-survey-during-hot-weather.aspx>
20. Vescera, Z. (2023, February 21). Temporary foreign workers hit record levels in BC. *The Tyee*. <https://thetyee.ca/News/2023/02/21/Temporary-Foreign-Workers-Hit-Record/#:~:text=In%202021%2C%20B.C.%20welcomed%20more,them%20were%20of%20arms%20or%20greenhouses> Accessed August 12 2024.

21. Vosko, L., Tucker, T. & Casey, R. (2019). Enforcing Employment Standards for Temporary Migrant Agricultural Workers in Ontario, Canada: Exposing Underexplored Layers of Vulnerability. *The International Journal of Comparative Labour Law and Industrial Relations*, 35(2), 227-254.
22. Western Agriculture Labour Initiative (October 2020). B.C. Temporary Foreign Agriculture Worker Housing Inspection Housing Guide. Retrieved from Western Agriculture Labour Initiative website: <https://walicanada.ca/wp-content/uploads/2020/11/TFW-Housing-inspection-guide-V20-3-October-2020.pdf>
23. Worker Solidarity Network. (2023). Can't Stand the Heat? Get out of the kitchen!: The impact of extreme weather events on food service workers in British Columbia (pp. 1-22). <https://workersolidarity.ca/wp-content/uploads/2023/05/Climate-and-Labour-Report-WSN-2023.pdf> Accessed August 12 2024.
24. World Health Organization. (2019). Heatwaves: How to stay cool. World Health Organization. <https://www.who.int/news-room/questions-and-answers/item/heatwaves-how-to-stay-cool> Accessed August 12 2024.
25. Zhong, J., Xu, L., & Lu, Y. (2024, March 27). Temporary foreign workers in primary agriculture in Canada: Transition from temporary residency to permanent residency and industry retention after transition. <https://www150.statcan.gc.ca/n1/pub/36-28-0001/2024003/article/00001-eng.htm> Accessed August 12 2024.

Notes: Guidelines for acceptable maximum temperature are highly variable and continuously changing, it appears upwards, over time. The World Health Organisation web page in 2023 included the line "Ideally, the room temperature should be kept below 32 °C during the day and 24 °C during the night." However the webpage has since been updated and this recommendation has been removed.

1. BCAC 2016 form: <http://walicanada.ca/wp-content/uploads/2018/03/Sample-2017-TFW-Housing-Inspection-Form.pdf>
2. BCAC 2020 form: <https://walicanada.ca/wp-content/uploads/2020/09/UpdatedHIFWALI.pdf>

LIST OF ACRONYMS AND ABBREVIATIONS

- BC – British Columbia
- BCAC – British Columbia Agriculture Council
- CAHRC – Canadian Agricultural Human Resource Council
- CCJ – Centre for Climate Justice
- RAMA – Radical Action with Migrants in Agriculture/Red de Apoyo para Migrantes Agrícolas
- SAWP – Seasonal Agricultural Workers Program
- TFW – Temporary Foreign Worker
- TFWP – Temporary Foreign Worker Program
- WALI – Western Agriculture Labour Initiative
- WHO – World Health Organization