Global Health at Your Doorstep

By Claire Hutkins Seda, Associate Director of Communications, Migrant Clinicians Network

In a climate-altered and migration-rich world, clinicians in rural areas across the United States are witnessing global health issues in their own small communities. Simultaneously, clinicians continue to grapple with the rapidly changing landscape of COVID-19 and seasonal infectious diseases. Here are updates on long COVID, Paxlovid, RSV, US-Mexico border demographics, Valley Fever, and climate change, each of which impact agricultural workers and other vulnerable members of our communities.

COVID

Weekly deaths from COVID have declined dramatically, but numbers remain high. By mid-December 2022, an average of over 2,000 people were still dying of COVID each week in the United States alone. As data are compiled, researchers are gaining an improved understanding of the impact of long COVID, treatments like Paxlovid, and the effectiveness of the bivalent vaccine. Here are brief updates on some leading COVID-related concerns for clinicians to understand to better serve their migrant agricultural worker communities and other underserved populations.

Long COVID

Also known as post-COVID conditions, long COVID affected roughly 16 million working-age adults in the United States as of summer 2022, with between two and four million unable to work because of the condition. Additionally, a new cohort study out of Germany found that children and adolescents had a similar rate of long COVID as adults – with children and adolescents 30% more likely than the control group to experience health issues in line with long COVID, compared to 33% for adults. However, long COVID affects certain groups of people more than others. People with severe acute COVID, those with comorbidities like diabetes, unvaccinated people, and those who experienced multisystem inflammatory syndrome (MIS) during or after acute COVID are more likely to develop long COVID. Early and severe racial inequities in acute COVID infection have dissipated as vaccines and health interventions have succeeded, yet inequities in long COVID linger, as long COVID falls disproportionately on adults already experiencing other health, work, and social disparities. For example, those who work from home and/or at a seated location like a desk may be able to rest or recuperate during work hours, whereas those who cannot work from home and/or work in a more active job may not be able to rest or take additional needed breaks. Additionally, lower-income jobs may lack paid time off or sick leave. In one study, 20% of Latinx adults reported long COVID symptoms after COVID infection, compared to 10% of Asian adults and 14% of white adults. This may further “exacerbate health, employment, and income disparities among this group, who were already harder hit by the pandemic,” one report concluded.

Paxlovid

One promising medication to prevent long COVID is Paxlovid (ritonavir-boosted nirmatrelvir), a treatment for acute COVID which has been shown to reduce the risk of hospitalization and death from COVID by 89% in unvaccinated patients with a higher risk of disease. A pre-print release of a study from the Veterans Health Administration found that Paxlovid treatment may reduce the risk of the development of long COVID symptoms like heart concerns and breathing irregularities after the acute phase of the virus has concluded. These findings were evident among vaccinated and unvaccinated patients. Research limitations include the population studied, which is predominantly male and white.

Paxlovid is now available without cost at pharmacies across the country. Despite early efforts to promote Paxlovid in low-income and underserved communities, however, a CDC Morbidity and Mortality Weekly Report from October 2022 found that, between April and July 2022, the percentage of Hispanic COVID patients receiving Paxlovid was 30%

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lower than among white and non-Hispanic patients. Media reports on “Paxlovid rebound” or “COVID rebound” in which patients experience recurrent but milder COVID symptoms after initial recovery, and/or viral detection after a negative test, may discourage patients from requesting Paxlovid; however, patients should be informed that “rebound” occurs in a small percentage of cases and does not appear to be associated with a progression to severe COVID.10

RSV and Other Seasonal Viruses
An early-season increase in respiratory syncytial virus (RSV) is placing additional stress on health care systems, as other respiratory and seasonal viruses similarly ramp up. RSV in particular is sending more pediatric patients to hospitals around the country. By November 2022, increases in RSV, flu, and rhinovirus/enterovirus (RV/EV) were much higher than usual, particularly among children, the Centers for Disease Control and Prevention reported. By early December, hospitals were experiencing “the highest flu admissions in a decade this early in the season.”11 Simultaneously, many hospitals across the country are at capacity with RSV pediatric patients. Fortunately, families are now well versed in prevention measures including mask-wearing and frequent handwashing. Other COVID-prevention techniques like increased ventilation in shared spaces, or quarantining and isolation, can further protect at-risk family members like young children (particularly from RSV) and older adults.

Demographic Shifts at the US-Mexico Border
In 2022, the demographics of asylum seekers at the US-Mexico border changed, and policy shifts may once again cause significant demographic shifts. Political and economic instability have driven Venezuelans to make the dangerous migration across Central America and Mexico to request asylum in record numbers. In fiscal year 2018, US authorities had 162 encounters with Venezuelans; that number increased to 189,520 Venezuelans in fiscal year 2022.12,13 However, following a policy shift in October, Venezuelans asking for asylum are being turned away under Title 42, a health policy used to prevent the spread of

REFERENCES


5 Health Equity Tracker. Available at: https://healthequitytracker.org/explored ata?gclid=CjwKCAiAG6ebBh8-EiwALVC-NlQjVI-iLCtclP3Q9uS-U-EAHh91_615phanUWpWPl_zNnxoC3XYOqVqD_BwEms=1&covid=3.00. Accessed 5 December 2022.


7 Ibid.


16 Ibid.


Hui Hoaka: One Health Center’s Response to COVID Reduces Food Insecurity, Builds Community

By Claire Hutkins Seda, Associate Director of Communications, Migrant Clinicians Network

When COVID hit Honolulu, Hawaii, the team at Kōkua Kalāhi Valley Comprehensive Family Services (KKV) knew what they needed to do. “We were already doing it,” noted Megan Kiyomi Inada, DrPH, MPH, BS, Research Coordinator. “We were always addressing food security. We were always looking at building relationships. We’re always looking at providing wrap-around care. But, in a strange way, the pandemic allowed us to do it in a bit more urgent way. All of a sudden, everyone’s focus was on COVID, and making sure our families were safe. It just helped us to really push harder.”

The team called this new urgent acceleration of care Hui Hoaka, with the goal of increasing community resilience both with patients as well as their own health center staff as the pandemic pressurized the workplace.

Now, three years into the pandemic, Dr. Inada believes that Hui Hoaka reflects the changes in their organizational culture, of increased connection with the community, and reaffirmed why KKV exists in the first place: to serve their diverse community.

Increased Outreach Leads to Food Deliveries

The 2020 stay-at-home orders prompted Hui Hoaka to begin with outreach. “If you’re asking people to stay home, then you’ve got to make sure they have a home to stay in and enough food so they don’t have to leave the house,” asserted Dr. Inada. The team began their outreach to the elders, who were at highest risk for mortality from COVID, may suffer from chronic diseases, and also may be precarious in their access to food. “It was a social determinants of health and medical needs assessment. But, really, what it was for elders was, ‘Someone remembered me. I thought I would be forgotten. Thank you.’” These early calls alerted KKV staff to the level of fear in the community, food insecurity, and rising unemployment, particularly among the hospitality industry. Hui Hoaka responded with home deliveries.

Over the course of the next two years, Hui Hoaka provided over 12,000 “prevention deliveries,” boxes of food for elders and other high-risk members of the community to ensure they could meet their food needs while avoiding COVID exposure. When COVID began to hit their community, they augmented those deliveries with deliveries of food to families and individuals in quarantine or isolation, eventually providing about 2,000 additional deliveries to a total of around 6,000 people.

As the world begins to ease away from COVID restrictions, Dr. Inada hopes the relationships formed with local farmers, the stronger connections with the community, and the push for integrated care with clinicians and community health workers will help KKV transition this aspect of the Hui Hoaka program into a standard practice of care. “People are still food insecure, right now,” Dr. Inada emphasized. “Before, doctors were hesitant to open Pandora’s box and talk about food insecurity in the exam room when there was nothing they could do to help the situation,” but once the food delivery program started, providers quickly began making referrals, Dr. Inada said. “All of a sudden, our doctors felt confident to talk about social determinants of health (SDOH) in the exam room because they knew they could do something about it, they knew they weren’t alone. That’s what We know that SDOHs aren’t just a check mark that we put on the chart. If we’re going to be asking about it, it means we need to address it… Food security is part of health care.”

Dr. Inada is part of a team who is dedicated to advancing SDOH-integrated care – but the challenges ahead are large. “What does it look like when we’re not in an emergency? What are the things we learned? And what are the costs attached to that, and how can we make it part of our standard of care? We’re still trying to figure that out,” Dr. Inada said.

Culturally Safe Communications

One of the other lessons learned from early outreach was that many community members lacked quality health information from trusted sources. In the gap, rumors and misinformation were spreading. The community
that KKV supports is diverse, and their outreach needed to be equally diverse. Early on, KKV found that generalized communication efforts were unsuccessful, so they shifted gears to create culturally safe COVID and community-building communications— including brochures, videos, and posters. “We believe these tailored health education materials, provided in multiple languages, helped to increase community engagement with our services,” said Dr. Inada.

**Staff Support**

Hui Hoaka was also inward-facing: how could their organization support staff so they could continue to serve the community? Instead of furloughing the entire dental department, for example, the team decided to provide pathways for the dental staff to engage in outreach and other mobilization needs that were growing because of the pandemic, which was a surprising success. “Our dentist department had to shut down… so they were the ones taking the bags of rice to our community,” Dr. Inada said. “During the pandemic, a lot of people’s gifts were highlighted in a different way,” she added. “We learned that our dental assistants are the best at talking about really hard issues,” like eviction and food insecurity. In this way, KKV did not have to lay off or furlough any staff. They also increased their support of staff members in less conventional ways as well; recognizing the increase in stress around possible infection, Hui Hoaka began cooking family meals that staff members could take home to their families after work.

The KKV staff is currently around 250 people spread over seven sites— but the pandemic brought them closer together. “The bigger you get, the more you start to feel siloed in your own department and expertise, and, really, COVID helped remind us that we’re all working together,” Dr. Inada said. “We need to be able to communicate and share data really effectively if we want to provide care — and I think those lines of communication are much more well traveled,” as a result of the pandemic.

Many providers, Dr. Inada said, may feel they are working independently, as the only one who can effectively serve the patient, but KKV wants them to feel supported — something that was emphasized through Hui Hoaka. “[The clinician] doesn’t have to figure out food security and housing, all the things that affect health. We want to make sure that there are people there to support them, so they can focus on what they went to school for and what they are good at,” Dr. Inada said. The clinician holds a very special relationship with the patient. “Through deep listening and caring, our providers build trust over time. And when this happens, they can hear what is really going on in a patient’s life. But that can be taxing, because many of our patients have complicated lives, with complicated issues,” she said. When asked what she would want clinicians to know, Dr. Inada concluded, “It’s important to know that you’re not alone.”

### Hui Hoaka Wins SDOH Academy’s Innovation Showcase First Prize

In early 2022, the SDOH Academy launched its very first competition for health centers, asking them to highlight their unique projects to tackle COVID in their communities, with a $5000 prize to the best presentation. The SDOH Academy is a training series for clinicians at health centers who serve special and vulnerable populations, with the goal of enhancing population health by addressing social determinants of health (SDOH) like affordable housing, availability of healthy food, and access to health care. The trainings are collaboratively organized and delivered by several national training and technical assistance partners funded by the Health Resources and Services Administration, like Migrant Clinicians Network. But COVID presented new challenges in providing effective technical assistance. “We saw increasing difficulty in getting health center staff to engage in webinars, but especially in learning collaboratively,” noted Bethany Hamilton, JD, the Co-Director of the National Center for Medical-Legal Partnership and a primary organizer of the SDOH Academy. “This was a time when all of us were facing challenges because of COVID… so we thought, ‘we have got to create an incentive.’” Hamilton and her team decided to “gamify” the training experience by launching the Innovations Showcase Competition.

The Innovations Showcase was not just a competition, however. In addition to a kickoff webinar that presented core concepts delivered by an inspirational keynote speaker, participants were required to complete three mini-training modules of about 20 minutes each in order to proceed to the next phase of the training experience. The first module covered economic, environmental, and educational SDOH factors. The second helped health centers understand how age, race, nationality, and gender are SDOHs. The last module covered the role of data and technology in SDOHs. Quizzes were built into the learning platform to provide participants with the gratifying experience of seeing the immediate results of their knowledge attainment. Once they completed all three modules, they received a certificate of completion and were eligible to submit an abstract for the competition. Participants were eligible for national recognition through the showcase closing webinar and, to their surprise, the $5,000 grand prize sponsored by UnitedHealthcare.

For the showcase, participants developed a short presentation highlighting their health center’s solution to an unmet need. For most participants, this meant showcasing their programs to address SDOHs during the pandemic. Hamilton says she told participants, “We know you’ve been doing amazing work during the pandemic and before then. Let us provide an opportunity to showcase what you’re doing,” she recalled. Some health centers were hesitant, but Hamilton encouraged them to participate. “Everything was innovative when addressing the novel coronavirus. No one on Earth has lived through this before,” and many health centers were working hard to address the “other needs” beyond COVID-19 infection relating to SDOHs, like housing instability, food insecurity, and the increased risk of domestic violence, Hamilton added.

Eight health centers submitted their work to the Innovations Showcase. Hui Hoaka, Kūkua Kalāi Valley Comprehensive Family Services’ innovative program to serve their diverse community, won first prize. Two runners-up were also recognized. AlohaCare presented on A Promise of Hope, an SDOH intervention to address low educational levels among Native Hawaiians. The Center for Health Equity Transformation, with the Northwestern University Feinberg School of Medicine presented on Reimagining Patient Navigation, where they reviewed their remote coaching navigation model to build a sustainable health system to improve health outcomes for their medically underserved populations.

In recognition of their work, all eight entries are featured on the Innovations Showcase webpage on SDOH Academy’s website. At a closing webinar, KVV presented their programs and was awarded the prize. Among the entries, KVV’s work, says Hamilton, stood out to the reviewers. “Their presentation painted a compelling and inspirational picture of community-based culturally competent services, [and] not just health care but broader services for their community during the pandemic,” Hamilton noted.

Learn more about the Innovations Showcase: https://sdohacademy.com/innovations-showcase-competition
Watch the Innovations Showcase Kick-Off Webinar: https://www.youtube.com/watch?v=61rRWNAsFY
Take the mini-training modules: https://cme.bu.edu/SDOH#group-tabs-node-course-default2
Watch the Innovations Showcase Closing Webinar, including a presentation on Hui Hoaka: https://www.youtube.com/watch?v=5PV4xP24d4l
Visit the website of United Healthcare, who sponsored the $5000 prize: https://www.uhcommunityandstate.com/
Children of migrant agricultural workers are difficult to study. Migrant families may be wary of or disconnected from points of health care provision or other formal avenues for study. Of course, migration itself disrupts the ability to participate in research, as families move before completion of studies. Consequently, little is known about their mental health, despite the heightened risks due to their mobility. However, two new studies shed some light on the mental health risks and needs of children of migrant agricultural workers.

In one 2022 article, a group of researchers conducted a systematic review of studies on suicidal ideation, self-harm, suicide attempts, and death due to suicide among young migrants. The researchers found limited data on migrant youth, consistent with a lack of research on migrants overall. The few studies meeting their criteria stated that young migrants experience higher rates of self-harm and suicide attempt compared to other age groups, but there were no major differences in suicidal ideation and suicide death compared to non-migrant young people.

A second 2022 study examined the mental health of children of Latinx migrant agricultural workers to determine whether acculturative stressors – conflicts the children may experience between their receiving community’s culture in the US and their family’s culture of origin – contributed to mental health issues. Migrant agricultural worker children in the study reported encountering numerous stressors of this type including educational disruptions and dislocation, and the social and educational barriers that result; low levels of English proficiency, which contribute to poorer academic performance; discrimination and marginalization; and legal status. Additionally, the majority of youth in the study described feelings of loss from separation from family members because of their migrations. After reviewing child self-reports, teacher reports, and qualitative interviews, the researchers concluded that there was an association between acculturative stressors and poor mental health in these children.

Despite these strains, however, the researchers found that supportive, involved, and nurturant migrant agricultural worker parents – particularly mothers — seemed to buffer against some of the negative stressors related to migration. In qualitative interviews, a majority of youth stated that they rely on their mothers during challenging times. Almost all of the youth participants in the study “described their families as exemplars of how to overcome adversity,” the researchers noted. “My mom has been through hard times, [yet] she’ll always keep her head up. I’ll always be there for her. Like she’s one of my, like, my [role] models cause she, even though she’s gone through hard times, she’ll always keep her head up,” explained one 12-year-old female participant.

Both studies seem to point to a high resilience among young migrants, despite significant educational and social disruption, marginalization, severe poverty, and numerous other profound barriers. There has been increased attention to the mental health problems affecting youth during the pandemic, even though the data suggest the trend in increased anxiety, depression, and suicidal ideation in youth has been a growing problem stretching back years before 2020,” noted Kaethe Weingarten, PhD, Director of Migrant Clinicians Network’s Witness to Witness program. “Migrant youth seem to be no exception.”

Witness to Witness offers monthly newsletters with updates on the program’s new resources, and news and insight on the health needs of marginalized populations and the health care providers who support them: http://www.migrantclinician.org/w2w.

References
What Is Justice40, and How Does It Affect Agricultural Workers?

By Claire Hutkins Seda, Associate Director of Communications, Migrant Clinicians Network

The Justice40 Initiative commits 40% of federal investments in climate and clean energy to underserved and disadvantaged communities, to help reverse decades of underinvestment and extreme environmental injustice in those communities. With the passage of laws such as the Infrastructure Investment and Jobs Act in 2021 and the Inflation Reduction Act in 2022, billions of dollars will flow into projects to help communities with critical infrastructure efforts, to bolster their protection from climate-intensified natural disasters like megafires and supercharged storms, to remediate legacy pollution, and to ensure access to clean water and green electricity, among other goals. The wide-ranging initiative invests in seven categories: climate change, clean energy and energy efficiency, clean transit, affordable and sustainable housing, training and workforce development, remediation and reduction of legacy pollution, and the development of critical clean water and wastewater infrastructure. Agencies across the government will participate, including the US Department of Health and Human Resources and the US Environmental Protection Agency.

The Justice40 initiative spotlights and attempts to reverse longstanding racial and environmental injustices that plague agricultural worker communities, like underinvestment, lack of clean water, exposure to air pollutants, and risk from climate-related disasters like flooding or fires. Many rural agricultural communities are identified as “disadvantaged communities that are marginalized, underserved, and overburdened by pollution,” and eligible for Justice40 investments, on the Climate and Economic Justice Screen Tool. Many rural communities where agricultural workers and their families live and work are eligible for these funds — and many of the categories of investment will bolster the efforts of health center clinicians and other advocates in improving the health of agricultural workers. For example, investments on the remediation and reduction of legacy pollution may include efforts to reduce agricultural worker exposure to pesticides. Investments to lessen the impact of climate change on underserved communities could reduce vulnerability to flooding and fires.

“The potential for investment in disenfranchised communities is unprecedented,” said Amy K. Liebman, MPA, Chief Program Officer of Workers, Environment, and Climate. “We need to ensure that these investments are carried out justly and benefits farmworkers and their families as well as other immigrant workers.”

Access the Climate and Economic Justice Screening Tool that identifies Justice40 communities at: https://screeningtool.geoplatform.gov/

References

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COVID-19. A November 2022 court ruling to vacate Title 42 may once again affect border crossings. In the meantime, 24,000 Venezuelans under a new policy may apply for refugee status, for those with a US-based sponsor. Additionally, Ukrainians have arrived as refugees at the US-Mexico border, as have tens of thousands of migrants from Cuba, Nicaragua, Haiti, Mexico, and the Northern Triangle of Guatemala, Honduras, and El Salvador, with a record total of over two million encounters in fiscal year 2022. A third of those encounters were repeat encounters, inferring that at least a third of people who are turned away at the border try again. At least 853 migrants died crossing the US-Mexico border during fiscal year 2022, yet another record, and a reminder for clinicians across the country of the precarious, dangerous, and traumatizing migrations that many newly arrived immigrants and asylum seekers have endured. Trauma-informed, culturally attuned care at health centers will continue to play a critical role to ensure community health.

Valley Fever, Heat, and Climate Change
Climate change continues to increase the health risks of agricultural workers and other low-income and poorly protected workers. Valley Fever, or coccidioidomycosis or “cocc”, is a fungal infection from the inhalation of Coccidioides spores in disturbed soil or dust. The fungus lives in the soil in many parts of the southwestern United States, particularly in southern Arizona and California’s San Joaquin Valley, as well as parts of Mexico and Central and South America; it was also recently discovered in the soil in Washington state as well. Agricultural workers are particularly at risk when tilling or using equipment that disturbs the soil and causes dust to circulate in the air. Symptoms include fever, cough, shortness of breath, rheumatism, rash, and fatigue. Most illnesses occur one to three weeks after fungal exposure; however, some infections can return months or years after initial infection. People with weakened immune systems; people with diabetes; pregnant people; and people who are Black or Filipinx have a higher risk for developing the severe form of Valley Fever. Valley Fever should be on the differential diagnosis when a patient presents with possible pneumonia or COVID-19, and has been in the geographic region where the fungus is present. As Valley Fever is prominent during drier months, many cases do not coincide with the flu season, but as the West has fewer winter rains, the possibility of winter Valley Fever is increased. Valley Fever is reportable in many states.

The number of cases each year is increasing, from under 2000 cases in the year 2000, to over 20,000 cases reported in 2019. The CDC believes this is a vast undercount, with estimates of true case numbers in the hundreds of thousands; additionally, the potential range of the Coccidioides may be larger,
A Pregnant Asylum Seeker Finds Prenatal Care, with Health Network

By Robert Kinnaird, Communications Project Coordinator

Health Network, Migrant Clinicians Network’s virtual case management program, seeks to assist migrants, immigrants, and asylum seekers to navigate the complex US health care system while they are migrating, by providing: records transfer to new clinics; support in enrollment in programs for which they are eligible like sliding scale fees; and connection to services they need to ensure continuity of care, like linkages with local community-based organizations to arrange for transportation to a clinic.

In 2022, Health Network served over 1,000 pregnant asylum seekers after they were released from detention, and as they traveled to their receiving communities to await their immigration hearings. Many prenatal patients, however, are turned away from community health centers, even with a case manager advocating for them. Some rejecting clinics express concern that these patients are in their third trimesters and have had limited to no previous prenatal care. Some clinics, however, recognizing the critical need that they can fill, in alignment with the health center program mission, by accepting a pregnant asylum seeker. In these cases, finding needed prenatal care is a streamlined process for our case managers and the prenatal patients enrolled in our program.

Health Network Associate Joshi Covarrubias encountered one of these uniquely smooth cases recently. A woman named Mariana* arrived twelve weeks pregnant at a respite center in McAllen, Texas. After a long journey from Central America, she crossed the US-Mexico border and asked for asylum. After processing at a detention facility, she was released to the respite center, where she could recuperate for a day, have a hot meal, and shower, and receive assistance in coordinating her journey to her final destination within the US. At this respite center, a small medical staff triages asylum seekers to ensure they are healthy enough for their journeys. Those who require non-urgent care are enrolled in Health Network to assist them in finding a clinic at their next destination, along with any other services they need to ensure they can access care.

Mariana was enrolled in Health Network so she could find prenatal care in her new town. Shortly after enrollment, she got in contact with family she had in the Mid-Atlantic region that was waiting for her, and they were reunited in a short time. She did not have a job waiting for her here in the US and lacked a cell phone, but her brother was able to provide for her immediate needs and act as a point of contact for Covarrubias. The state she is now living in is one that has consistently rejected prenatal patients, making the work of Health Network Associates handling cases in that area an ongoing struggle, with hours spent on the phone, calling multiple clinics and health centers in order to provide the patient with basic prenatal care. This case was different.

The very first call Covarrubias made resulted in a promising start. “They scheduled an appointment with their financial department to have a phone conversation with her about her finances and try to set up this financial program for her,” he said. “They were able to contact her literally the day after I spoke with them.”

It took only 17 days from her enrollment in the Health Network program before she was seeing a clinician for her first prenatal appointment at a price point that she could afford.

Cases like this straightforward are few and far between. In less than three weeks, Mariana was given the opportunity to enter the country as an asylum seeker, enroll in our program, reunite with her family on the East Coast, and finally, see a doctor. Her prenatal care and the associated screenings and treatment will lower the risk of a low birth weight and preterm birth, along with the risk of fetal demise and neonatal death. Because of her relationship with the health center, Mariana can avoid using emergency services when she goes into labor, which would have unforeseen strain on an already-overloaded health care system. When Health Network Associates advocate for better health systems for pregnant asylum seekers, they want to see this level of simplicity for all of those who come to Health Network for help.


*Name and identifying information have been altered to protect the patient.

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encompassing the entire West.20 As a result of climate change, many parts of the Southwest continue to experience drier than average and hotter than average seasons, year after year, resulting in drier soil for more months of the year that is more likely to become airborne when disturbed by industrial farm equipment.

Of course, the rise in global temperatures as well as more frequent and more severe heatwaves increase the risk of heat-related illnesses and kidney disease among agricultural workers. Risk factors include dehydration, breathability of clothing, workload, and piece-rate payment. Without federal heat standards, agricultural workers may be protected by state-level heat standards, or not at all. Heat standards can implement critical preventative measures like access to water, rest, and shade. These climate-related concerns are only some of the many health risks that agricultural workers and other vulnerable populations face as the climate crisis deepens. Social risk factors like poverty, migration, unsafe and unprotected working conditions, unsafe and insufficient housing, access to health care, language, and literacy can amplify vulnerabilities when a climate-fueled extreme or disaster occurs. US island territories like the Marshall Islands, on the other hand, are battling saltwater intrusion on freshwater sources, and sea level rise impact on agricultural lands. As the climate crisis progresses, entire island communities may be displaced; many are already migrating to agricultural areas like Hawaii.

In addition to the recognition of these increased risks, clinicians must serve agricultural workers’ daily needs during climate-fueled crises and their short- and long-term recovery from climate disasters. A health center-wide commitment to emergency management plans can begin to account for and center the community’s most vulnerable.
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**January 17, 2023**  
Data, Social Determinants of Health, and Migration  
MCN Online Seminar  

**January 17 – February 5, 2023**  
Como manejar el estrés en tiempos difíciles  
MCN Online Four-Session Learning Collaborative  

**January 24 – March 7, 2023**  
Screening for Social Determinants of Health  
Farmworker Health Network Online Four-Session Learning Collaborative  
https://bit.ly/3iMUP8G

**February 2, 2023**  
Health Network: A Care Coordination Program for Patients Who Move During Treatment  
MCN Online Seminar  
https://bit.ly/3FeU93v

**February 14-16, 2023**  
Western Forum for Migrant and Community Health  
Long Beach, CA  
https://www.nwRPCA.org/

**February 24-26, 2023**  
Midwest Stream Forum for Agricultural Worker Health  
Austin, TX  
http://www.ncfh.org/regional-stream-forums.html

**April 27-30, 2023**  
National Hispanic Medical Association Annual Conference  
Chicago, IL  
https://www.nhmamd.org/2023-conference