

Heat-Related Illness: An Increasing Burden Among Agricultural Workers

By Claire Hutkins Seda, Senior Writer and Editor, Migrant Clinicians Network

ofia* worked in a nursery tending ornamental plants in Homestead, Florida. Homestead is an agricultural region just south of Miami, and to the east of Everglades National Park. Idyllic and tropical, Miami-Dade County grows a diverse set of crops year-round. To protect herself from the strong sun, Sofia wore a hat and long sleeves to work. One typically warm day – it was around 90 degrees – Sofia's vision began blurring. Soon after her vision blurred, she began to vomit. After resting at

* Patient story is a fictional account based on actual patient stories.

home that evening, she recovered, and headed back to work the next day. Later that week, however, it happened again – Sofia's vision blurred, and she felt nauseous. Sofia was experiencing heat-related illness, one of the thousands of agricultural workers who experienced a heat-related illness in 2020.

Extreme heat kills more people each year than hurricanes, floods, tornadoes, and lightning combined.¹ Climate change will push more days into dangerous heat events, and it is predicted that heat-related illness and deaths will increase substantially. At the end of the last century in Miami-Dade County, agricultural workers like Sofia typically

worked through 41 days of heat per year above 100 degrees Fahrenheit. By the middle of this century, Miami-Dade County is predicted to hit above 100 degrees on 134 days per year, over a third of the year, with 88 of those days above 105 degrees, as compared to just seven days per year historically. Heat-related illnesses for agricultural workers often occur at temperatures under 100 degrees. Consequently, the current path of climate change, unless drastic and quick action is taken, will have dire consequences on agricultural workers. For community



Learning from the Past: Measles and Vaccine Confidence

By Claire Hutkins Seda, Senior Writer and Editor, Migrant Clinicians Network

n 2017, Minnesota public health authorities were alarmed by an uptick in pediatric cases of the measles, which appeared to be the start of a second outbreak in a decade. Almost 20 years prior, the highly contagious disease had been declared eliminated in the United States because of an effective vaccine coupled with strong childhood vaccination programs. However, by 2008, misinformation and disinformation campaigns had begun to sow distrust among many communities across the country, leading to declining vaccination rates. In Hennepin County, the most populous county in Minnesota and home to a large Somali-American community, vaccination rates for US-born Somali two-year-olds had been above 90% until 2004, when they began to slide.1 By 2011, just 54% of two-year-olds had received the measles-mumps-rubella (MMR) vaccine. That is when the region

experienced its first outbreak, when a young child contracted measles abroad, and spread the infection on return to Minnesota. By 2017, the MMR vaccine rate among two-year-olds had increased to 73%.² Despite the increase, a second outbreak began. This time, however, the health community had learned its lessons.

Hinda Omar is a Health Educator Specialist with the Minnesota Department of Health, in a team specifically working on vaccine-preventable disease education and partnerships. She joined in 2014, and had already worked closely with the Somali community for three years before the second outbreak began. "We were more prepared, because the data we had showed a low rate of children who were vaccinated with the MMR vaccine from ages two to three, and we created an outreach program to educate and inform people about vaccines," Omar

explained. They discovered that parents were worried about an incorrect correlation between the MMR vaccine and autism, and they also had religious concerns. Omar reached out to faith leaders to begin dialogue around vaccines, and to reassure parents. Her team also went to community centers and elsewhere to give information in person, to address misinformation about the vaccine.

"[Parents] won't believe the message we send through paper or email. Being there in person built the trust we needed to stop the outbreak before it got out of hand," Omar said. They also educated childcare staff and school administrators, provided daily updates to the community, and leaned on community partnerships to inform the community and ensure that misinformation was countered by facts. "Collaborating with the Minnesota Minority Childcare Association really helped

This publication is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling \$1,505,225.00 with 0 percentage financed with non-governmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement by HRSA, HHS or the U.S. Government. For more information, please visit HRSA.gov.

spread the message to all the childcare [facilities]," Omar noted as an example. As a result, the 2017 outbreak was small. By late June, 70 cases had been reported. "Were it not for an effective state and local public health response, that number could have easily been in the hundreds," noted a Centers for Disease Control and Prevention (CDC) article on the outbreak. The study concluded that the health department's reliance on cultural liaisons to do home visits, matched with engagement with local media, resulted in effective dialogue with the local Somali community to dispel vaccine myths and provide measles antibody injections to curtail the spread of the measles.3 While current figures of vaccination are unavailable, the efforts of the group have yielded positive results in the quick end to the 2017 outbreak and the lack of any outbreak since. Nationally, the vaccination rate for two-yearolds who have received at least one MMR dose is 90.8%.4

Sowing Distrust Isn't the Same as Believing in Misinformation

Highly educated and less educated parents alike were declining the MMR vaccine. Many had heard from other community members that the vaccine caused autism. Autistic spectrum disorder, some community members reported, was so rare in Somalia that a word did not exist for the health condition. By 2017, a large "anti-vax" community – those

who rejected vaccines out of concern for health consequences – was connected across the US through social media and word-ofmouth, and was still touting Andrew Wakefield's 1998 article in the Lancet, which linked the MMR vaccine to autism, despite the article's retraction in 2010 because of falsification of data.5,6 Many studies following the 1998 article were unable to find a link between the MMR vaccine and autism, which confirmed the vaccine's safety.7 Yet, doubt around the safety of the vaccine from the article continued to be sown. "Being told that MMR does not cause autism was not satisfactory for many parents because no one could tell them what does cause autism," Lynn Bahta, RN, MPH, CPH, a public health nurse from the Minnesota Department of Health, noted in an article co-written with Asli Ashkir on vaccine resistance.8

Addressing such resistance requires sustained, culturally relevant face-to-face health education, such as what Omar and her team provided. Empathy and connection are key: "I know how to talk to the Somali community and others," she emphasized. "Being a parent myself, I knew the fear they had... so it was easy for me to calm them down."

Not all who encounter misinformation will initially believe it. An April 2021 study found that "individuals who were more susceptible to health misinformation had less education and health literacy, less health care trust, and more positive attitudes toward alternative

Misinformation vs. Disinformation

Disinformation is erroneous or misleading information that is purposely spread by an individual, government, or organization in order to advance the spreader's particular agenda or to deceive. Misinformation is erroneous information that is spread without known intention to deceive. Read more in the Business Insider article, "Misinformation Vs. Disinformation: What to Know about Each Form of False Information, and How to Spot Them Online," at https://bit.ly/3inqJGg.

medicine." Community health workers and outreach workers like Omar work to improve health literacy and increase trust in the local health care community, two critical factors to reduce susceptibility. Her work also creates linkages to trusted sources of health information, to enable community members to engage with the health community when they encounter new health messages that may be false.

Clinical Authority and Equitable and Empowering Action

During Migrant Clinicians Network's virtual learning session on COVID-19 vaccines and

continued on page 14

Concrete Ways to Build Vaccine Confidence

Structural Strategies: Because vaccine confidence grows with communication with trusted health sources, health centers are encouraged to:

- Build community outreach programs
 that will remain stable during boom-andbust public health funding cycles. Health
 centers are encouraged to commit to
 outreach as part of the core health services that the center offers to the community. This may entail the reassessment of
 funding for the outreach team to ensure
 ongoing funding stability.
- Integrate CHWs and outreach workers into the care team. Especially during rapidly changing situations and disasters, these critical health partners, who often have strong links to the local community, need to be kept abreast of changes in health information, including increases in misinformation.
- Meet patients in the community do not expect the community to come to you. Ensure that outreach programs make inroads and partnerships with community leaders outside of health, including faith leaders. Participate in and

support community events. Make sure mobile units are available to bring the health center to the community, and not the other way around.

Individual Patient Strategies: Once the health center has built trust within the community, a clinician can help reduce hesitancy with a patient through the following strategies:

- Listen: Ask why specifically a patient is hesitant. The patient may have heard a rumor in the community, or have a long-term mistrust of the medical community. Alternatively, the patient may have not had time to schedule a vaccine, or may lack easy access to a vaccination site.
- Reflect back and validate concerns: Make sure you understand the patient's concerns by retelling them in your own words. Ensure the patient understands that hesitation is normal.
- Counter misinformation: As a trusted clinician, you can help patients understand
 why messages that they have heard are
 untrue, and share the information you
 have on the safety of available vaccines.
- Be honest: Sometimes, clinicians lack all

the answers. For example, there is limited information on the COVID-19 vaccine because it is relatively new. However, we have lots of information on the impact of COVID-19 on an unvaccinated population. With the rise of the Delta variant, we have seen that individuals who are vaccinated do not contract the virus with the frequency or severity of those unvaccinated. In early August 2021, roughly 97% of hospitalizations and deaths from COVID-19 were among the unvaccinated, which demonstrates the effectivity of the vaccines. Weigh the pros and cons with the patient, if related to the patient's hesitancy.

- Tailor the message: Each patient's story will be unique and requires a tailored response that indicates the clinician is listening, thoughtful, and empathetic.
- Share stories: Be sure to let patients know that you are fully vaccinated, and let them know of other community figures who are as well. Share your experiences with COVID-19 as a clinician and why vaccination is the way to end the pandemic.



COVID-19 Gave a Glimpse Into the **Occupational** Health Needs of Food and **Agricultural Workers**

Now What?

By Claire Hutkins Seda, Senior Writer and Editor, Migrant Clinicians Network

hen COVID-19 began to rip through the country in early 2020, it spread unevenly. In particular, food and agricultural workers were disproportionately affected. Food system workers, long overlooked and frequently exploited in the workplace, were suddenly deemed "essential," requiring them to work through the pandemic despite the risk of disease. The poor working conditions that left them vulnerable to COVID-19 became front page news.

Work is a social determinant of health (SDOH; see sidebar on SDOHs). Many of the working con-

What is a Social Determinant of Health and how do clinicians address them?

SDOHs are external conditions that play a critical role in the health and well-being of a person, according to the Centers for Disease Control and Prevention (CDC).⁶ This includes the role that homes, neighborhoods, schools, and workplaces have on one's health. SDOH is a popular framing in public health to discuss the backdrop of a person's life that may influence their health and their ability to maintain their health.

With limited time in the exam room and limited resources, clinicians are often ill equipped to address SDOHs in their treatment plans for their patients, despite the significant impacts on health that they may pose. Health centers incorporating multidisciplinary care teams allow for a warm handoff of a patient to a nutrition specialist to access nutrition and food assistance programs. Meeting with a social worker to sign up for housing assistance and enrollment in other programs and social services can improve a patient's health, reduce the overall cost of care for the health center, and allow clinicians to focus on clinical needs, knowing that the patient's social needs are being addressed. For example, a patient experiencing pesticide poisoning that requires ongoing care in many cases is eligible for workers' compensation, regardless of immigration status.⁷ The clinician, in addition to caring for the patient's medical condition and reporting the pesticide exposure to state authorities, should provide referral to either a social worker, a medical-legal partnership worker, or other patient advocate who can help the patient understand his or her basic rights, learn how to access workers' compensation benefits, and help the patient navigate referrals when needed.

ditions that resulted in greater risk for COVID-19 also increase the risk of or negatively affect other health concerns. The pandemic exposed those working conditions.

As of early August 2021, over 91,000 food and agricultural workers - in orchards, fields, meatpacking plants, poultry processing facilities, and more - have been sickened by COVID-19, and at least 465 have died. These numbers are likely a considerable undercount. Numerous barriers exist that prevent food system workers from accessing culturally competent health care for COVID-19 testing or treatment when needed. These same barriers reduce access to vaccines. Examples of access issues include: limited access to transportation; unfamiliarity with community resources and poor community integration, in the case of migrant workers; language and cultural barriers; and fear of exposing immigration status. Limited job data collection at sites of health provision has likely further reduced the accuracy of the count.

None of these barriers to health and wellbeing are new. Work-related determinants of health have negatively affected agricultural workers for generations. Agricultural workers lack some of the basic protections that all other workers are afforded, including the right to organize, minimum wage, overtime, paid sick leave, and workers' compensation, although state-level regulations may address some of these gaps in some states.^{2,3,4} This agricultural exceptionalism, which began in the 1930s with the Fair Labor Standards Act and other federal worker protections that excluded farmworkers and persists today, fortifies cycles of poverty and affects workers' health.5 Without the right to organize, workers have little sway in wages, which remain at poverty level in many parts of the country. Agricultural workers may be unable to afford to take time off work to receive needed care. When working conditions are unsafe, workers often feel disenfranchised and unable to ask for changes to improve those conditions, which may further endanger their health.

As the pandemic wears on, the spotlight on agricultural worker health has dimmed. Yet, most of these work-related determinants of health still exist. However, agricultural workers may be in a better position than before the pandemic in some ways. In many areas of the country, the COVID-19 pandemic boosted the development of numerous partnerships, between health centers, farm owners, agricultural workers, growers' associations, farmworker advocates, state officials, and others. These partnerships developed, often among former antagonists, because agricultural workers needed a safe workplace in order for our food systems to continue operating - a goal on which all partners could agree. These partnerships can



Best Practices in Work-Related Social Determinants of Health

- Make sure the clinic is collecting work information, including asking if patients work in agriculture. Utilize MCN's Environmental and Occupational Health Screening Questions for Primary Care: https://bit.ly/3vCBMPm. Use MCN's algorithm for identification of migrant and seasonal agricultural workers, available in English and Spanish: https://bit.ly/3pYtslq
- Provide low-literacy and culturally appropriate content on common work health risks.
 Offer MCN's comic books, on pesticide exposure at work and home, dairy worker safety, and more: https://bit.ly/3iSAIIT
- Know how to report a pesticide exposure. Use this pesticide reporting map, which
 provides information for each state, developed by MCN in partnership with
 Farmworker Justice: https://bit.ly/3vtVlsL
- Provide warm handoffs to social workers or patient advocates who can assist with workers' compensation and other know-your-rights concerns. Get resources on workers' compensation related to health needs: https://www.migrantclinician.org/ workerscomp
- Consider a medical-legal partnership within the clinic to assist with issues like workers' compensation. Read about one health center's medical-legal partnership: https://bit.ly/3pYX9ZI
- Build partnerships with local workplaces so that farm owners can turn to the clinic should health concerns arise. Learn about how outreach teams grew partnerships with workplaces during COVID-19: https://www.migrantclinician.org/best-practices-in-mobile-team-outreach

continue and be strengthened after the pandemic, to continue to serve agricultural worker health needs.

Clinicians serving agricultural worker communities have a unique opportunity to increase outreach to those communities to build on trust and familiarity that arose from pandemic-related outreach, to grow and strengthen relationships with farm owners and others that were previously untenable, and to continue to increase awareness of agricultural worker health needs through communication with state leaders, growers'

associations, and other partners with a stake in food system efficiency. With greater communication and trust, these partners can more quickly respond to the next virus, wild-fire, hurricane, or other unexpected disaster, to ensure that agricultural workers stay safe on the job, and our food systems remain intact during an emergency. They also will reduce the negative SDOHs that have plagued agricultural workers for decades, which can result in improved health and well-being for this too-often overlooked segment of the workforce.

- 1 Douglas L. Mapping Covid-19 outbreaks in the food system. Food and Environment Reporting Network. Accessed 5 August 2021. Available at: https://thefern.org/2020/04/mapping-covid-19-in-meat-and-food-processing-plants/
- 2 Liebman AK, Wiggins MF, Fraser C, Levin J, Sidebottom J, Arcury TA. Occupational health policy and immigrant workers in the agriculture, forestry, and fishing sector. Am J Ind Med. 2013;56(8):975-984. doi:10.1002/ajim.22190
- 3 Liebman AK, Augustave W. Agricultural health and safety: incorporating the worker perspective. J Agromedicine. 2010;15(3):192-199. doi:10.1080/1059924X.2010.486333
- 4 Fact Sheet #12: Agricultural Employers Under the Fair Labor Standards Act (FLSA). U.S. Department of Labor, Wage and Hour Division. Revised January 2020. Accessed 5 August 2021. Available at: https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/whdfs12.pdf
- 5 Kelker K. When labor laws left farm workers behind and vulnerable to abuse. PBS News Hour. 18 September 2016. Accessed 5 August 2021. Available at: https://www.pbs.org/newshour/nation/labor-laws-left-farm-workers-behind-vulnerable-abuse
- 6 Social Determinants of Health: Know What Affects Health. Centers for Disease Control and Prevention. Accessed 5 August 2021. Available at: https://www.cdc.gov/socialdeterminants/index.htm
- 7 Rhodes J. Court Upholds Workers' Comp judgment for Undocumented Worker. The Society for Human Resource Management. 23 June 2021. Accessed 5 August 2021. Available at: https://www.shrm.org/ resourcesandtools/legal-and-compliance/employment-law/pages/ court-report-workers-comp-judgment-forundocumented-worker.aspx



Emergency Preparedness for Chronic Disease Patients in Puerto Rico: Continuity of Care as a Tool to Protect Health

By Marysel Pagán Santana, DrPH, MS, Puerto Rico Senior Program Manager, Migrant Clinicians Network

uerto Rico is subject to natural events that could result in disasters, such as hurricanes, earthquakes, droughts, heavy rains, and heat waves, among others. Due to the climate crisis caused by carbon emissions and other human behaviors, the projections of the occurrence of natural events related to the climate, such as hurricanes, show that they will be more intense in the coming years. Puerto Rico has faced consecutive weather-related natural disasters for the past five years, among them two droughts and two hurricanes, including Hurricane Maria in 2017. The island is in an area of high seismicity, which gives way to telluric events such as those experienced in the southern half of the island during late 2019 and early 2020. In addition, there have been other public health emergencies such as the COVID-19 pandemic, causing disruption in essential services for individuals. Although the impact of these events has been quantified in economic terms and physical damage such as the loss of infrastructure and basic resources, it is important to also determine the effect that these events have on health.

Climate and Health Events

Hurricane Maria killed about 2,645 people in Puerto Rico. Most of these people reportedly died for lack of medical care or resources to address their health conditions. The impact on those citizens who suffered from chronic diseases was considerably greater than on healthy populations. Dr. José Rodríguez, Senior Medical Advisor for Migrant Clinicians Network in Puerto Rico, witnessed this firsthand, including among patients with respiratory diseases who did not have access to electricity and therefore could not carry out their therapies, or who did not have access to oxygen tank replacements. Researchers found that the majority of excess deaths due to Hurricane Maria were related to chronic disease, including diabetes and heart disease. 23

Dr. Rodríguez, who also serves as Medical Director of Hospital General Castañer in Lares, Puerto Rico, has highlighted on several occasions the importance of preparing patients with chronic diseases for an event of this magnitude. Within the population diagnosed with these conditions, older adults stand out since, according to the Centers for Disease Control and Prevention (CDC) and presented by the National Institute on Aging, 85% of older adults have at least one chronic health condition and 60% have at least two chronic diseases.4 Maintaining good health is particularly challenging when living conditions are altered and resources are not available. Therefore, the CDC considers this population vulnerable when it comes to natural disasters and/or intense weather events.

Sometimes it can be easy to identify those diseases that can be complicated by a weather event or natural disaster. At other times, the impact may not be so obvious.

That is, there are direct impacts and indirect impacts that can alter or destabilize a health condition. An example of a direct impact is a complication of asthma because of the deterioration of the ambient air quality during a wildfire. An indirect impact is not having access to respiratory therapy due to the lack of electricity. Therefore, in addition to paying attention to the numerous environmental events that may have health impacts and warrant caution from health providers and their patients, it is extremely important to focus preparation efforts on how patients will keep their health stable and attend to their conditions during an emergency. This includes determining to which hospital they will go in case of destabilization. It should be noted that patients must consider the closest health care institution to which they have safe road access, as well as consider those institutions close to the places where they could take refuge or relocate during an emergency.

Health Care Before, During, and After a Disaster?

On an individual basis, emergency management agencies recommend that all households have resources for at least 10 days after an emergency. All residents should be prepared, but preparation does not look the same for everyone. Older adult populations that experience chronic health conditions such as diabetes, hypertension, asthma, kidney conditions, and cancer, among others,

must be prepared to attend to their condition independently until the external situation stabilizes and community facilities get back to normal. Considering our recent experience with Hurricane Maria, it is important to make efforts to prepare properly. Similarly, many individuals have additional vulnerabilities such as homes in floodplains or that are not earthquake resistant, leading individuals to be more likely displaced. It is important to identify tools that promote and provide for the continuity of care for this population.

Community-wide strategies are as important as individual and family emergency plans. In Puerto Rico, several communities have taken the initiative to prepare in case another emergency occurs. These communities created strategic emergency preparedness teams whose purpose was to establish a community emergency plan. The effort is part of a project funded by the Bristol-Myers Squibb Foundation and led by Migrant Clinicians Network and its office in Puerto Rico. Community mobilization helps individuals to recognize local resources that were otherwise ignored or not identified in the support infrastructure while updating the emergency plans of the community and its health centers to include them. This process also enables communities to acquire new skills in emergency management and resources to address behavioral health during these events. During the development of community emergency plans, it is advisable to pay special attention to the preparation of community members who have a chronic disease, so that the community can learn how to support this population during periods of crisis. Part of the process of protecting community health includes identifying and building partnerships to help manage emergencies. After encouraging the establishment of a family emergency plan, it is recommended that communities discuss with their members what other things can help them get through these events without regrettable situations. During these discussions, communities can identify special needs within their members, like older adults who require assistance in preparing their roof for an upcoming storm by cleaning downspouts and rain gutters to avoid flooding that may affect nearby homes. It may also identify members of the community who might be able to support other neighbors with their skills, like providing first aid or lending and operating machinery to remove a fallen tree. A community preparedness plan will likely include neighbors who will take responsibility for those actions. Finally, this information when shared with the health center can provide a quicker and more informed response from providers in case a disaster occurs.

Just as communities have tools and strate-



gies for emergency management, there are tools and initiatives that can be implemented in health centers to serve vulnerable populations, such as patients with chronic diseases, during these events. Last month, MCN began its third year of the community mobilization project for emergency management with the participation of four new health centers and communities in Puerto Rico. This year, together with the Patillas Primary Health Services Center, MCN is integrating its Health Network tool with the purpose of providing continuity of care to people who may be displaced within or outside of Puerto Rico due to a disaster or emergency. Health Network is MCN's virtual case management system, wherein patients with ongoing health concerns are assisted by MCN to find care at their next location, have medical records transferred, and receive assistance in applying for services and programs for which they are eligible including sliding scale fees. This health center will perform a risk and vulnerability assessment of the community to identify those patients who are most likely to be displaced or whose health care may be interrupted due to emergencies. Those patients will be preenrolled in Health Network. In the case of an emergency displacement or lack of services in their areas due to disaster, a Health Network Associate will follow up to ensure they can maintain their health during and

following the disaster. The objective of this pilot program is to prevent patients with chronic diseases such as cancer, diabetes, asthma, and hypertension from interrupting their care that cause substantial complications to their health and even death. Learn more at MCN's Emergency Preparedness, Response, and Recovery page: https:// www.migrantclinician.org/issues/emergencypreparedness.html

References

- 1 Seda CH. "Response from the Field: Dr. Jose Rodriguez on Hurricane Deaths in Puerto Rico." Clinician-to-Clinician: Migrant Clinicians Network Blog. 31 May 2018. https://www.migrantclinician.org/blog/2018/may/response-field-dr.-joserodriguez-hurricane-deaths-puerto-rico.html. Accessed 8 June 2021.
- Ascertainment of the Estimated Excess Mortality from Hurricane Maria in Puerto Rico. Milken Institute School of Public Health, George Washington University, https://publichealth.gwu.edu/sites/ default/files/downloads/projects/PRstudy/Acertain ment%20of%20the%20Estimated%20Excess%20 Mortality%20from%20Hurricane%20Maria%20in %20Puerto%20Rico.pdf. Accessed 2 June 2021.
- Cruz-Cano R, Mead EL. Causes of Excess Deaths in Puerto Rico After Hurricane Maria: A Time-Series Estimation. Am J Public Health. 2019;109(7):1050-1052. doi:10.2105/AJPH.2019.305015
- 4 "Supporting Older Patients with Chronic Conditions." National Institute on Aging. U.S. Department of Health & Human Services, National Institute of Health. https://www.nia.nih.gov/ health/supporting-older-patients-chronicconditions. Accessed 2 June 2021.

MCN's Institutional Review Board Opens Path for Safe and Just Migrant Health Research

By Nina Clinton, MEd, Institutional Review Board Liaison, Migrant Clinicians Network

n July 1974, the National Research Act established the existence of Institutional Review Boards (IRBs) to review biomedical and behavioral research involving human subjects. The US Food and Drug Administration was tasked with interpreting the Act and regulating IRBs; they started by defining an IRB as an appropriately constituted group formally designated to review and monitor biomedical research involving human subjects. Per FDA regulations, an IRB has the authority to approve, require modifications in (to secure approval), or disapprove research. This review serves an important role in the protection of the rights and welfare of human research subjects.

The purpose of the IRB review is to ensure, both in advance and by periodic review, those appropriate steps are taken to protect the rights and welfare of humans participating as subjects in the research. To accomplish this purpose, IRBs use a group process to review research protocols and related materials (e.g., informed consent documents and investigator brochures) to protect the rights and welfare of human subjects of research.

Migrant Clinicians Network (MCN) has an IRB within the organization to review research protocols submitted from MCN and outside of MCN. The MCN IRB consists of members who are well versed in the elements of informed consent, institutional processes of research, compliance with relevant regulations, and ethical guidelines. They also have a clear understanding of what is needed to work effectively with a culturally and linguistically diverse study population, emerging research issues, and new researchers. A literature gap exists in research concerning migrant and seasonal agricultural workers, as well as other mobile marginalized populations. MCN as an entity wanted to conduct more research to ensure and promote well-being as well as rights of these vulnerable populations. Since its establishment in 1999, the MCN IRB has contributed to illuminating health concerns that agricultural workers and other underserved patients face in their daily lives. These workers face different challenges from the general public in their work responsibilities, transportation, lack of official documentation, levels of literacy, culture, and language. Today, MCN's IRB is as relevant as ever and continues to advocate for research that attends to the rights, safety, and welfare of agricultural workers and other underserved research subjects.

The MCN IRB is composed of five mem-

bers with doctoral degrees and two with Master's degrees. Of these seven members, there is always a designated Chair and Vice-Chair of the IRB. All seven IRB members are volunteers. The MCN IRB has two IRB support staff members designated to organize and orchestrate communication between the IRB and applicants. All applications are advised to be received at least two months before the start date of a project or research

continued on page 9



MCN's Institutional Review Board Seeks New Members

Migrant Clinicians Network (MCN) is seeking additional reviewers for their Institutional Review Board (IRB). MCN's IRB provides protocol review for six to 12 research protocol applications per year. Each application is reviewed initially by the chair of the IRB to determine the type of review and readiness for a full review. Two members of the IRB provide the full review. IRB members rotate, taking protocol reviews as applications are received. These board positions are non-compensated. Currently, there are five IRB members. You can learn more about MCN's IRB and its critical work in protecting migrant and other vulnerable populations while research is conducted at MCN's IRB webpage: https://bit.ly/3lywRgX.

In this review and oversight role, unaffiliated community individuals appointed as members of the IRB serve an essential oversight role for proposed and ongoing human research projects. MCN IRB members:

- Possess diverse qualifications and backgrounds relating to human subjects' research, including familiarity with vulnerable groups or the community;
- Maintain an excellent working knowledge of federal regulations, MCN policy, and state and local laws about the protection of research participants, and complete orientation, training, and continuing education for their role in protocol review;
- Review proposed and ongoing research projects;
- Suspend or terminate human research projects in which participants are at potential risk, and/or are not being conducted in compliance with federal regulations or MCN policies;
- Disclose any protocol-related conflict of interest which has the potential to impact their consideration of the rights and welfare of participants;
- Function independently in the review and oversight of human subjects' research, free of coercion and undue influence from other entities;
- May observe or direct another party to follow the consent process or any part of the research;
- Commit to attending the IRB monthly meetings. If you are interested in joining MCN's IRB, please contact Theressa Lyons-Clampitt at (512) 579-4511 or email her at tlyons@migrantclinician.org.

MCN's IRB in Action with Nelly Salgado de Snyder, MA, PhD

By Claire Hutkins Seda, Senior Writer & Editor, Migrant Clinicians Network

hy do Mexican men have lower vaccination rates than Mexican women? When Nelly Salgado de Snyder, PhD, MA joined Migrant Clinicians Network as a visiting scholar in 2019, she found an ideal research opportunity to begin to answer that question, through Migrant Clinicians Network's collaboration with the Ventanilla de Salud, a program within the Mexican Consulate in Austin that seeks to increase health access. The project, which Dr. Salgado de Snyder would develop with MCN interns from The University of Texas at Austin, aimed to engage male visitors to the Mexican Consulate around vaccination – and to give the Ventanilla de Salud an opportunity to follow up with targeted education and information, and access to vaccinations. The first step was to develop a research proposal to provide to MCN's Institutional Review Board (IRB).

"Usually, when you write the proposal, you have a very clear purpose of the study, so the IRB is able to evaluate the study," Dr. Salgado de Snyder began. "Then, it's followed by the methods section. The methods include the procedures - how are you going to get there, how are you going to fulfill that purpose, to answer the research question?" In her case, MCN interns, Jessica Calderon (who is now on MCN staff), Dania Diaz, Alondra Morales, and Brenda Perez, with Dr. Salgado de Snyder as a mentor, developed a questionnaire, which was part of their initial proposal to the IRB. "You have to send the questions you're going to ask that way, the committee can review one question at a time and decide whether the question is helping to answer the proposal's research question," she added. "These questions should not just include a direct answer, but they should also ask for information that helps the researchers contextualize or interpret the findings, including asking about social determinants of health." When the researchers provided the questions, the IRB responded. "Some questions were too personal. For example, we asked about documentation status — you cannot ask that," Dr. Salgado de Snyder noted. "We eliminated a couple of questions, and sent it back — and then it was approved."

Another part of the application process was demonstrating methods around informed consent. The researchers provided their consent form, which includes contact information for both the head researcher and for the IRB Board Chair, should a participant have any questions.

After IRB approval, the researchers collected data - that is, they asked male visitors the seven Spanish-language, IRBapproved multiple-choice questions at the Mexican Consulate in Austin for one month. Then, they spent the next several weeks analyzing the data and interpreting the results for their final research report to the IRB. Dr. Salgado de Snyder developed a research paper out of their findings, with her intern co-authors, which was published in 2020 in the Hispanic Journal of Behavioral Sciences. The research has significant implications given the COVID-19 pandemic, during which vaccine confidence among Mexican males has become an important news story.

"It's important to understand attitudes

Photo courtesy of UNICEF

around vaccination among Mexican males," Dr. Salgado de Snyder noted, and she is eager to expand on the data her team collected, to learn more. "At this point, the instrument that we used for data collection was very short – just seven items. But we didn't know why men don't get vaccinated, and now we do! ... This study can be considered a pilot, and constitute the basis for a larger, more comprehensive study on the topic."

Read "Exploring Why Adult Mexican Males Do Not Get Vaccinated: Implications for COVID-19 Preventive Actions" in the Hispanic Journal of Behavioral Sciences: https://bit.ly/3vex9dM.

■ MCN's Institutional Review Board Opens Path for Safe and Just Migrant Health Research continued from page 8

activities. Once an application is submitted, the request will be reviewed by an IRB liaison, then sent to the IRB for a thorough review. The MCN IRB meets monthly and a response to the applicant is typically available within 45 days of acceptance of the application. Typically, institutions will have their own IRBs to oversee research conducted within or outside of the institution. As an independent IRB, MCN is unusual in that MCN's IRB is not part of an institution such as an academic medical center or hospital. MCN can provide IRB services for single and multisite studies within the United States and Puerto Rico. MCN's IRB tailors its procedures to serve

both experienced researchers and organizations that may be new to the research world.

In 2012, MCN's IRB received a Certificate of Merit for Best Practices from the Health Improvement Institute. In the intervening years, the IRB has enabled researchers to effectively recognize the health conundrums facing underserved populations while ensuring that research subjects' unique needs, safety, and rights are top priorities. In 2020, the MCN IRB reviewed 12 different applications for research projects. Of these 12 projects, three of them were regarding the COVID-19 pandemic and its impact on vulnerable populations. Additionally, of these 12

projects, seven were submitted by MCN. Most of the 12 projects were related to issues surrounding marginalized populations and people of color. The average amount of time reviewing a protocol can vary, but the IRB members usually contribute three hours every month to reviewing protocols. This past year, the IRB members spent 294 hours reviewing, responding, and meeting to discuss protocol submissions.

Learn more about MCN's IRB including submission guidelines and profiles of our IRB members: https://www.migrantclinician.org/services/research/institutional-review-board.html



Special and Vulnerable Populations Diabetes Task Force:

Innovative Collaborations to Cover Many Populations' Needs

By Claire Hutkins Seda, Senior Writer & Editor, Migrant Clinicians Network

n 2016, Migrant Clinicians Network reapplied for a grant from the Health Resources and Services Administration (HRSA) to continue providing training and technical assistance to health centers across the US as a National Training and Technical Assistance Partner (NTTAP - see text box for more information). MCN is one of 14 NTTAPs, 13 of which are funded by HRSA to assist health centers in meeting the health needs of patients who are part of "special and vulnerable populations"—segments of the US population that have increased health needs due to their particular circumstances. These populations are migratory and seasonal agricultural workers; individuals experiencing homelessness; Asian Americans, and Native Hawaiians and other Pacific Islanders; residents of public housing; older adults; school-aged children; and lesbian, gay, bisexual, transgender, queer, intersex, asexual, and all sexual and gender minority people. These populations have special health needs, social determinants of health, and access issues that require unique strategies on the part of the clinician and health center. NTTAPs support health center staff through training and technical assistance

to inform clinicians and other staff, share best practices, remove barriers to care, and, ultimately, to improve the health of patients.

As one focus area included in the new round of funding in fiscal year 2017, HRSA requested that the NTTAPs help health centers improve patients' diabetes health outcomes by improving hemoglobin A1c testing and glucose control. The hemoglobin A1c is a test that indicates a patient's average blood sugar level over a period of three months. This test is used to diagnose prediabetes and diabetes, and monitor diabetes control among those who are diagnosed with diabetes. Diabetes is a disease that affected 34.2 million US residents in 2020¹ and 2.5 million health center patients in 2019,2 and hits some special populations particularly hard. HRSA not only requested a focus on diabetes; it also required collaboration among the NTTAPS on the topic.

Migratory and Seasonal Agricultural Workers, Asian Americans, and Native Hawaiians and other Pacific Islanders: Unique Populations, But All Need Diabetes Focus

Through its HRSA funding, MCN focuses on

migrant and seasonal agricultural worker health. Due to a lack of data, migrant and seasonal agricultural workers have an unknown burden of diabetes, but approximately 83% identify as Hispanic or Latinx; therefore, data from self-identified Hispanics often serve as a proxy. Self-identified Hispanic people are 1.3 times more likely than non-Hispanic whites to die from diabetes and Hispanic adults are 70% more likely than non-Hispanic whites to receive a diagnosis of diabetes from a clinician.3 Migratory and seasonal agricultural workers are at an additional risk of diabetes due to exposure to certain pesticides, which have been shown to increase the risk of diabetes.4 Further, poverty, rural locations, transportation issues, and food deserts limit agricultural workers' ability to access healthy foods. Even those who plant and harvest fruits and vegetables every day at work may struggle to access or afford those same foods for their homes. Consequently, MCN has focused on diabetes for decades to support clinicians who serve migrant and seasonal agricultural worker patients with diabetes and who encounter additional struggles like migration

and poverty that limit patients' ability to continue their diabetes education, maintain health regimens, or consistently access insulin prescriptions. MCN's popular low-literacy, Spanish-language diabetes comic book, released in 2020, is an example of materials developed with the agricultural worker in mind. (See link to the downloadable comic book in Resources.) Additionally, MCN has regularly collaborated with other NTTAPs that have a focus on agricultural workers through the Farmworker Health Network to address diabetes (FHN; see sidebar). Yet other vulnerable populations beyond migrant and seasonal agricultural workers struggle with diabetes as well. AAPCHO (Association of Asian Pacific Community Health Organizations) focuses on Asian American and Native Hawaiian and other Pacific Islander populations, of which there are numerous subpopulations with unique health needs and risks. AAPCHO began its work on diabetes in the early 2000s, when the World Health Organization first reported the high prevalence of diabetes among Asian Americans, and Native Hawaiians and other Pacific Islanders communities and issued a call to action.

"The diabetes outcomes are really out there in terms of uncontrolled diabetes," noted Albert Ayson, Jr., MPH, Associate Director of Training and Technical Assistance for AAPCHO. One way that AAPCHO is working with health centers on diabetes is to encourage the screening of Asian Americans at a body-mass index of 23, instead of 25, to better meet the needs of Asian Americans who may have different body morphology and require the adjusted screening. Ayson said AAPCHO is working closely with Pacific Islander communities to determine which screening methods are better for that population. "'Asian American' is not a monolith," he said, and appropriate screenings must be developed accordingly.

Like MCN and AAPCHO, many of the NTTAPs had already provided training and technical assistance around diabetes related to their subpopulations. When the HRSA priority on diabetes was announced in 2017, AAPCHO and MCN joined forces to bring all the NTTAPs together to build a Special and Vulnerable Populations Diabetes Task Force (henceforth referred to as the Diabetes Task Force), despite each group's unique subpopulation foci, with the goal to provide clinicians with comprehensive in-depth diabetes content across diverse patient communities. "MCN and AAPCHO have coordinated this task force since it began - and they have done a fantastic job of not just bringing all of us together, but also having us become invested in the work," said Alexis Guild, MPP, Director of Health Policy and Programs for Farmworker Justice.

Special and Vulnerable Populations Diabetes Task Force in Action

After initial meetings on collaboration, the nascent Diabetes Task Force set out to provide national webinars developed by a cross-section of the NTTAPs. Every year since, the Diabetes Task Force develops a National Learning Series, consisting of four webinars with a minimum of three NTTAPs that coordinate each of the webinars. Each webinar is followed up with a Learning Collaborative taking a deeper dive into the topic at hand, and from there a relevant resource compendium is developed.

"It's been a very thoughtful process in terms of how we engage health centers, and we've reached a huge number of people," said Jillian Hopewell, MPA, Director of Education and Communication for MCN. "We look at diabetes care from individual, community, and systemic points, and it's very multidisciplinary."

Additionally, the NTTAPs have fortified relationships among each other, allowing for greater collaboration and for cleaner and more thorough offerings to clinicians. Instead of five webinars about diabetes, offered from five different organizations, which may duplicate some information or encourage a clinician to pick and choose, the Diabetes Task Force lays out a holistic approach covering multiple populations that a clinician is likely to encounter, and efficiently providing training to serve those populations. "I thought it would be a saturation of diabetes training and technical assistance opportunities, but working together has helped our community health center audience to navigate the learning opportunities, since we can have them fit together less to parse through, easier to navigate," said Emily Grace Kane, MPA, Senior Program Manager at the National Nurse-Led Care Consortium (NNCC). The working relationships also allowed for easier collaboration on other technical assistance and training efforts, both funded by HRSA and outside of HRSA, added Guild. Critically, it has encouraged NTTAPs focused on different populations to find common ground. "There's a lot in common... [and] similar challenges across populations, and similar strategies that are successful across populations," Guild noted. "What's great about the Task Force is that because we work together, these silos have broken down."

In the first four years of webinars, the Diabetes Task Force has covered numerous topics. Broader topics like the popular "Heath Center Strategies for Diabetes Screening and Prevention for Children, Adults, and the Elderly" were followed by population-specific webinars like, "Housing Instability and Diabetes Outcomes in Agricultural Workers and LGBT Communities." Each of the

NTTAPs participated and collaborated as speakers and experts.

In 2020/2021, the Diabetes Task Force presented Diabetes Continuum of Care, with four webinars on bridging the health literacy gap to improve diabetes outcomes; increasing patient technology and digital health literacy; raising the pillars for community engage-

continued on page 14

What is an NTTAP?

NTTAPs – National Training and Technical Assistance Partners – are HRSA-funded organizations that provide training and technical assistance to health centers on a wide range of topics. Each NTTAP is funded to provide their expertise around the health needs of a particular "special or vulnerable population," as defined by HRSA. In 2021, there were 14 NTTAPs serving on the Diabetes Task Force. Here are each of the NTTAPs, with the special population that they support through their HRSA grant funding, and their websites. Association of Asian Pacific Community Health Organizations, serving Asian American, and Native Hawaiian, and other Pacific Islander communities, www.aapcho.org. Corporation for Supportive Housing, serving people without stable housing, www.csh.org. Farmworker lustice, serving agricultural workers, www.farmworkerjustice.org. Health Outreach Partners, serving all lowincome, vulnerable, and underserved populations, www.outreach-partners.org. MHP Salud, focused on Community Health Workers serving underserved Latinx communities, www.mhpsalud.org. Migrant Clinicians Network, serving migratory and seasonal agricultural workers, www.migrantclinician.org. National Center for Equitable Care for Elders, serving older adults, ece.hsdm.harvard.edu. National Center for Farmworker Health, serving agricultural workers, www.ncfh.org.

www.nchph.org.

National Health Care for the Homeless
Council, serving people without stable
housing, www.nhchc.org.

serving residents in public housing,

National Center for Health in Public Housing,

National LGBTQIA+ Health Education Center, serving LGBTQIA+ people, www.lgbtqiahealtheducation.org.

National Network for Oral Health Access, focused on supporting safety-net oral health programs, www.nnoha.org.

National Nurse-Led Care Consortium, provides nurse-led community health services, www.nurseledcare.phmc.org.

School-Based Health Alliance, serving schoolaged children, www.sbh4all.org.



MCN's Diabetes Project ECHO: Spanish-Language CHW Series Marks Five Years of Trainings

By Claire Hutkins Seda, Senior Writer & Editor and Martha Alvarado, Program Manager of Online Education and Evaluation, Migrant Clinicians Network

n 2016, Migrant Clinicians Network (MCN) began formulating an online Spanish-language learning series for Community Health Workers (CHWs) on diabetes using Project ECHO, an educational model to reduce health disparities in underserved regions. ECHO, which stands for Extension for Community Healthcare Outcomes, was developed by the University of New Mexico School of Medicine, and uses a 'hub and spoke' knowledge-sharing approach to help primary care clinicians enhance their knowledge of and ability to treat health conditions of increasing complexity. Expanding on this concept, MCN decided to try this model for small groups of CHWs from health centers. The CHWs gather on Zoom to receive trainings, talk through their most challenging situations, gain new insights and connections, and get feedback from colleagues and experts around the country. As MCN's Project ECHO series are often in Spanish, these learning sessions are among the few of its kind in the country and are highly popular.

Alma Galván, MCH, Senior Program Manager of Environmental and Occupational Health, and Martha Alvarado, Program Coordinator of Education and Online Training, had developed the initial curriculum and coordinated the speakers for the pilot year. The first year was quite successful, although, like any piloted project, it had room to improve.

"The first year we implemented the ECHO Diabetes series, it was very well received by the participants," recalled Alvarado. "I don't think any of them had ever been engaged in a learning series that was not only provided in Spanish, but also provided them access to clinical experts who speak Spanish. I think it was even more shocking to them that our experts offered the CHWs their expertise beyond the series, encouraging them to reach out for consultation or with questions or concerns regarding their own patients." The graduates of the series have developed into a community of health care professionals who are able to better serve special populations that have unique challenges and barriers when it comes to understanding and managing diabetes, Alvarado added.

Participants in the first year showed a 43.3% increase in knowledge overall, with the highest change in knowledge about treatment options for diabetes. "The most difficult part of that first year was getting the participants to feel comfortable with open dialogue between themselves and the clinical experts -- getting used to a dynamic

where they were running the sessions, not the presenters," recalled Alvarado. "The clinical experts were there to meet their needs, so they could meet the needs of their communities. Innovation at its best!"

When Lois Wessel, DNP, FNP-BC, joined the team (see sidebar on Wessel), MCN was preparing for its second year, with these difficulties in mind. "There was a huge learning curve - and we're still getting better at it," Wessel noted. Over the next few years, "we learned how to engage the learners more, make them more interactive." They also more closely tailored the education to the questions and knowledge gaps of the participants, which can vary widely. Frequently, Wessel finds that CHWs do not respond well to the highly medicalized language that ECHO in general is based around. For example, "the training for CHWs has never been to 'present a case,'" the language that ECHO uses. "It's just changing the language - 'would you like to share a story of a challenging patient?' We're not talking about sharing a case. We learned that." Many are unfamiliar with the participatory model, having received only didactic education in the past. The ECHO model emphasizes short didactic sessions followed by interactive sessions. To ease into the model, however,

MCN decided to allow for longer presentations at times. "Some of our CHWs are so hungry for information that is given in their own language, that they like these 45-minute presentations," Wessel admitted. Such minor accommodations encourage greater participation as the course progresses, Wessel said.

The team also developed measurement tools to ensure that participants are leaving the ECHO project with the intended goals and knowledge. "Every year, we discuss healthy eating habits, the importance of exercise, possible complications, and the role of insulin," Alvarado said. "In the second year of the series, we also focused on using Motivational Interviewing as a tool to help CHWs engage with their patients in a way that empowered them to be proactive when it comes to management of their own diabetes." At the end of the second year of the series, participants gave the series a rating of 4.9 out of 5.0 on the applicability of concepts learned and/or reinforced.

The next couple of years were more heavily focused on complications due to improper or a lack of management. The participants were given more detailed information on how vision, renal, heart, and foot complications develop, a progression of the disease that many of them were unfamiliar with in detail other than knowing consistently high glucose and hemoglobin A1c numbers can potentially lead to severe complications. "One of the most highly praised sessions provided a very comprehensive training on how to properly conduct a foot examination, what should be asked, and why," Alvarado said.

Another big emphasis that has been incorporated in the last couple of years is the mental health aspect of living with a chronic disease. "It's an effect of diabetes that many of our participating CHWs have had little to no experience with, but now that is has been incorporated into the curriculum, they are able to learn how to apply tools that will help them address the mental health needs with their patients," explained Alvarado.

Over the years, the series has seen an increase in overall knowledge transfer rates from around 20% to almost 45%, with an increase in knowledge of specific diabetesrelated topics approaching 70%. CHWs have joined from health centers from across the country -- including Washington, California, New Mexico, Kansas, Colorado, Kentucky, Pennsylvania, New York, North Carolina, Florida, Maryland, Puerto Rico and elsewhere.

"As the facilitator, I've found that one of the most fascinating aspects of MCN's ECHO Diabetes series is the incredibly diverse backgrounds of the participants. Some have been working in health care for little more than

one year, and some have decades of experience under their belts," Alvarado reflected. She also related that some were born and raised in the United States, while others come from Mexico, Nicaragua, Honduras, and other Latin American countries. Participants may be medical doctors in their country of origin but not formally educated here, or have no formal education in their country of origin, but have earned a high school diploma, completed a two-year degree, or received on-the-job training in the US. "Despite these differences, they come with such dedication to their communities and willingness to learn from the experts and each other -- any and all information and skills that have the potential to benefit those that have been consistently overlooked by the health care system that was not developed to accommodate their specific needs," Alvarado said.

There are limitations to the ECHO model. "ECHO, like many things, works best if everybody has their camera on, but [participants] might be in a clinical setting where they don't want to have their camera on, or the technology needs for ECHO might not be available to all people," Wessel said. The COVID-19 pandemic has resulted in a reduction of technology issues, as more people are familiar and comfortable with online education.

This year's series, which began in May, was once again very popular. MCN received close to 100 applications, only accepting around 30 (a number that is considered to be on the high end for the incorporation of the ECHO model). In addition to the standard ECHO series, MCN restructured its offerings in early 2021 to provide diabetes trainings specifically to clinicians from health centers in Puerto Rico, where multiple disasters – Hurricane Maria, earthquakes, and COVID-19 - have compounded health needs. CHWs are an integral part of reaching the most vulnerable and hardest-to-reach community members to help them prepare for a future crisis while managing their diabetes. The series, sponsored by the Puerto Rico Primary Care Association, had over 60 applications from nine health centers. The content was adapted to include Puerto Rico's specific quality improvement goals around diabetes. "We had a lot of epidemiological data on which centers have high A1cs... what documentation you need to do, how to use the electronic health record to pull up your goals," Wessel said. Several CHWs who completed the course have signed up for the standard Diabetes ECHO, indicating their interest in taking it a step further to gain tools specifically to work face-to-face with patients with diabetes.

As for future years, Wessel is confident that MCN will continue to refine its Diabetes ECHO offerings to meet the needs of future



Lois Wessel, DNP, FNP-BC: **Bringing Expertise to MCN's Diabetes ECHO**

Part of MCN's success with the ECHO Diabetes series can be attributed to the contributions of expert faculty and course developer, Lois Wessel, DNP, FNP-BC. For Wessel, joining Migrant Clinicians Network's Diabetes ECHO as a Clinical Specialist was an easy decision. Wessel had evaluated MCN's previous Project ECHO series for her doctoral research, giving her insight into MCN's approach as well as close familiarity with the ECHO model. She also speaks Spanish fluently and has trained CHWs previously in the US and in Latin America. Wessel ran a diabetes clinic in a mobile van serving day laborers for Mobile Medical Care, Inc., and additionally has extensive experience in battling diabetes as a family nurse practitioner at CCI Health and Wellness, a community health center in Maryland. "It's hard to be a primary care provider and not have experience in diabetes, because there's so much of it," Wessel noted. She also has previous clinical experience in mobile medical care and has worked closely with uninsured patients. So, when Migrant Clinicians Network's Director of Education and Communication, Jillian Hopewell, MPA, MA, asked her to join as faculty, she could hardly say no.

"Working with Lois was an obvious choice for us," said Hopewell. "We have known one another for years and I've always been impressed with her clinical skills, commitment to health justice, and her understanding of the critical role that CHWs bring to health care."

CHWs and their patients with diabetes. "MCN does a good job connecting with people who work in the community," she said. "I think we're getting even better at it."

MCN's Project ECHO page is available in English and Spanish: https://www.migrant clinician.org/project-echo

■ Special and Vulnerable Populations Diabetes Task Force continued from page 11

ment; and building successful teams during the COVID-19 pandemic. The recorded webinars, accompanied by slides and resources, are archived on the Diabetes Task Force website: https://chcdiabetes.org/nls. Continuing education credits are also available.

The offerings continued to be popular in 2020, despite the pandemic shifting foci for most health care providers. "Diabetes has not been the priority this year – it's been COVID," admitted Kane. "We as the Task Force have talked more about being a group of technical assistance organizations who provide guidance around all kinds of chronic conditions as they relate to special populations." The group recognizes that the close relationships they have built across organizations through the

Diabetes Task Force will lead to better trainings and technical assistance in the future as well. "The trainings we do are agnostic in terms of the disease states we talk about. They cross comorbidities," Kane added. "The topics are always evolving, but the need for technical assistance to address those challenges is going to be the same."

For 2021/2022, the Diabetes Task Force will shift gears operationally as AAPCHO and MCN reduce their national coordination roles and other NTTAPs step in to provide that coordination role, which reflects the ongoing highly collaborative element of the project. This year's topics will be announced on the Diabetes Task Force website, www.chcdiabetes.org.

The Farmworker Health Network

The Farmworker Health Network (FHN) is a network of the five NTTAPs that have a focus on migratory and seasonal agricultural workers plus the National Association of Community Health Centers. MCN, Farmworker Justice, MHP Salud, Health Outreach Partners, National Association of Community Health Centers, and National Center for Farmworker Health have worked closely for many years to support health centers in meeting the needs of the agricultural worker population. All the members of the FHN are participating in the Diabetes Task Force. Learn more about the FHN and access resources that each of the FHN partners has developed: www.migrantclinician.org/FHN

■ Learning from the Past: Measles and Vaccine Confidence continued from page 11

refugee, migrant, and immigrant health, Bahta, reflected that clinicians have a responsibility to push for these community linkages, even if clinicians have performance expectations that are driven by the health system rather than what is effective within a community. This may result in a lack of outreach efforts or less emphasis on Community Health Worker programs. Bahta believes those with clinical authority, particularly clinicians in authority who are not racial or ethnic minorities, are uniquely positioned to use that authority to advocate for and create policies and processes that build health equity.

"Always be asking, how is this information getting to people who don't have immediate access to information? How is this service getting to people who might not know that the service exists?" she questioned. "We have to make every effort for equitable action in what we do."

This in part includes stepping back to allow leadership and decision making by those in public health with greater understanding and integration into the communities being served – including Community Health Workers and outreach workers who are members of the communities themselves, she said.

She added that taking account of past

treatment is important. "Some of the historical and current racial injustices that [communities of color] have experienced make them very suspicious of government entities," Bahta noted. A first step is to acknowledge past injustices, she says.

"Those acknowledgements to our communities are a very important part... to starting a dialogue. The dialogue allows people to expunge their concerns and frustrations with the systems and, by acknowledging that, it allows them to know they have been heard," she continued, which in turn may allow patients into a space where they may be able to receive information from the clinician without or with lessened distrust.

Access MCN's virtual training on misinformation along with resources: https://bit.ly/33Zzyhi

Watch MCN's virtual training on COVID-19 vaccines and refugees, migrants, and immigrants: https://bit.ly/3f18QeD

See our upcoming virtual trainings: https://www.migrantclinician.org/trainings.html

References

- 1 Bahta L and A Ashkir. Addressing MMR Vaccine Resistance in Minnesota's Somali Community. Minnesota Medicine. October 2015. Available at: http://pubs.royle.com/display_article.php?id=2280397
- 2 Fact Sheet: Childhood immunizations. Hennepin County Public Health Assessment Team.

RESOURCES

Visit the Diabetes Task Force website: www.chcdiabetes.org

Download MCN's Spanish-language lowliteracy diabetes comic book, *Mi salud es mi tesoro: una guia* para vivir bien con diabetes (My Health is my Treasure: A Guide for Living Well with Diabetes): https://bit.ly/3crhAJr

REFERENCES

- 1 Diabetes: A Snapshot: Diabetes in the United States. Centers for Disease Control and Prevention. Accessed 12 August 2021. Available at: https://www.cdc.gov/diabetes/library/ socialmedia/infographics/diabetes.html
- 2 National Health Center Program Uniform Data System (UDS) Awardee Data. Health Resources & Services Administration. Accessed 12 August 2021. Available at: https://data.hrsa.gov/tools/data-reporting/program-data/national
- 3 Diabetes and Hispanic Americans. US Department of Health and Human Services, Office of Minority Health. Accessed 12 August 2021. Available at: https://www.minorityhealth.hhs.gov/omh/browse.aspx?lvl=4&Ivlid=63
- 4 Montgomery MP, Kamel F, Saldana TM, Alavanja MC, Sandler DP. Incident diabetes and pesticide exposure among licensed pesticide applicators: Agricultural Health Study, 1993-2003. Am J Epidemiol. 2008;167(10):1235-1246. doi:10.1093/aje/kwn028
 - Accessed 5 August 2021. Available at: https://www.hennepin.us/-/media/hennepinus/your-government/research-data/public-health-data/childhood-immunizations-2017.pdf.
- 3 State and Local Readiness. Centers for Disease Control and Prevention. Available at: https://www.cdc.gov/cpr/readiness/stories/mn.htm
- 4 Immunization. National Center for Health Statistics, Centers for Disease Control and Prevention. Accessed 23 August 2021. Available at: https://www.cdc.gov/nchs/fastats/immunize.htm
- 5 Howard J. Minnesota measles outbreak exceeds last year's nationwide numbers. CNN Health. 2 June 2017. Available at: https://www.cnn.com/ 2017/06/02/health/minnesota-measles-outbreakbn/index.html
- 6 Retraction Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children. The Lancet. 6 February 2010. DOI: https://doi.org/10.1016/S0140-6736(10)60175-4
- 7 Wakefield's article linking MMR vaccine and autism was fraudulent. BMJ. 6 January 2011. 2011; 342 doi: https://doi.org/10.1136/ bmj.c7452 (Published 06 January 2011)
- 8 Bahta L and A Ashkir. Addressing MMR Vaccine Resistance in Minnesota's Somali Community. Minnesota Medicine. October 2015. Available at: http://pubs.royle.com/display_article.php?id= 2280397
- 9 Scherer L, McPhetres J, et.al. Who Is Susceptible to Online Health Misinformation? A Test of Four Psychosocial Hypotheses. Health Psychol. 2021 Apr;40(4):274-284. doi: 10.1037/hea0000978. Epub 2021 Mar 1. PMID: 33646806.

■ Heat-Related Illness: An Increasing Burden Among Agricultural Workers continued from page 1

health workers and outreach workers, heatrelated illnesses are not only critical to address but necessitate a greater focus so that agricultural workers are aware of the increasing risk due to the climate crisis.

Heat-related illness occurs when a body's internal temperature has increased and is unable to cool itself. As the heat of the body increases, the severity of the heat-related illness grows. There are several types of heat-related illnesses:

- Heat rash, cramps, or fatigue: These health concerns typically occur in warm or hot weather but when the body is not at a dangerous heat level. Similar symptoms like rash and cramping may occur with simple exertion on the job. Pain in the stomach, legs, or arms is also common. Heat rash, cramps, and fatigue are warning signs of the body. Workers are recommended to rest in the shade to avoid advancement into more serious states of heat-related illness.
- Heat exhaustion: While the skin may remain cool and moist from sweat, the body temperature is rising to more dangerous levels when a worker experiences heat exhaustion. Heavy sweating, headache, nausea or vomiting, dizziness, light-headedness, weakness, increasing thirst, and a faster heartbeat are common symptoms. Again, the body is pushing the worker to stop and rest, to get the body temperature down before it advances into heat stroke.
- Heat stroke: Internal temperature is at 104 degrees Fahrenheit or higher. At this temperature, workers often experience confusion or delirium. Workers often stop sweating when experiencing heat stroke.
 Seizures, unconsciousness, and death may occur. Heat stroke is deadly and constitutes a medical emergency.

Key factors to avoid heat-related illness at each of its levels include hydration, shade, and rest. Hydration is particularly critical for agricultural workers. A 2017 study indicated that many agricultural workers arrive at work already dehydrated, increasing their risk of heat-related injury at work.3 Further, without a federal heat standard, employers may not be providing sufficient water, shade, and breaks to drink water or use the bathroom. Many resources exist to assist clinicians in training themselves around heat-related illness and to provide education to agricultural workers who may be at risk. Migrant Clinicians Network (MCN) has recently updated its Heat-Related Illness page with new culturally competent and relevant resources. MCN also recently hosted a webinar in English and Spanish on heat-related illness. Finally, MCN and

Who are the most vulnerable to heat-related illness?



Those who work outside, including agricultural workers and construction workers, and those who work in warehouses or other indoor locations without ventilation or climate controls, like restaurant workers, warehouse workers, and meat packers



Those with chronic illnesses or those on certain medications or drugs



Migrants and people from lower socio-economic status



Pregnant women and children

Farmworker Justice partnered to create a new Heat-Related Illness Clinicians' Guide.

New Clinicians' Guide

To assist clinicians with recognizing and managing heat-related illness among agricultural workers, MCN and Farmworker Justice have released Heat-Related Illness Clinicians' Guide. The guide details the causes of heatrelated illnesses including factors beyond temperature like humidity and wind; exposure and exertion; the recognition and treatment of heat-related illnesses; medications and health conditions that can increase risk; and important additional factors for agricultural workers including the social determinants of health, and heat-associated illnesses like chronic kidney disease of nontraditional origin. Finally, the guide provides links to additional resources for clinicians and patient-facing culturally competent materials for education of agricultural workers.

Resources

Access numerous resources on MCN's newly updated Heat-Related Illness page: https://www.migrantclinician.org/issues/heat

Download the new Heat-Related Illness Clinicians' Guide: https://bit.ly/3msC7TO

Watch MCN's archived webinar "It's so hot and it's dangerous! The role of community health workers in preventing heat-related illness" from May and June 2021 on heat-related illness:

- In English: https://bit.ly/3fYhKtK
- In Spanish: https://bit.ly/3x4KCq1

References

- 1 Climate Change and Extreme Heat: What You Can Do to Prepare. Environmental Protection Agency and Centers for Disease Control and Prevention. October 2016. Accessed 7 June 2021. Available at: https://www.cdc.gov/climateandhealth/pubs/ extreme-heat-guidebook.pdf.
- 2 Killer Heat Interactive Tool. Union of Concerned Scientists. 8 July 2019. Accessed 7 June 2021. Available at: https://www.ucsusa.org/resources/killer-heat-interactive-tool?location=miami-dade-county--fl.
- 3 Mac VV, Tovar-Aguilar JA, Flocks J, Economos E, Hertzberg VS, McCauley LA. Heat Exposure in Central Florida Fernery Workers: Results of a Feasibility Study. J Agromedicine. 2017;22(2):89-99. doi:10.1080/1059924X.2017.1282906



Non Profit Org. U.S. Postage PAID PERMIT NO. 2625 Austin, TX



Acknowledgment: *Streamline* is published by Migrant Clinicians Network (MCN). This publication may be reproduced, with credit to MCN. Subscription information and submission of articles should be directed to:

Migrant Clinicians Network

P.O. Box 164285
Austin, Texas, 78716
Phone: (512) 327-2017
Fax (512) 327-0719
E-mail: jhopewell@migrantclinician.org

Eva Galvez, MD

Chair, MCN Board of Directors

Karen Mountain, MBA, MSN, RN
Chief Executive Officer

Jillian Hopewell, MPA, MA

Director of Education and Professional Development, Editor-in-Chief

Claire Hutkins Seda

Writer, Managing Editor

calendar

September 9-11

North American Refugee Health Conference

Virtual Conference — https://www.northamericanrefugeehealth.com/

September 16-17 2021 National Latino Behavioral Health Conference

Virtual Conference — https://nlbhconference2021.com/

September 21-22 19th Rural Health Clinic Conference

Kansas City, MO – https://www.ruralhealthweb.org/events/

September 29, 11am PT/1pm CT/2pm ET
Unique Partnerships and Strategies for COVID-19 Vaccines
and Migratory and Seasonal Agricultural Workers:
National Farmworker Vaccination Assessment Results

Virtual Training — https://bit.ly/3gxom2p

September 29-October 1 Latino Health Summit (Houston-specific)

Houston, TX - https://hispanic-health.org/

September 29-30 2021 Virtual Latinx Health Policy Summit (California-specific)

Virtual Conference — https://lchc.org/

October 24-26

NWRPCA/CHAMPS 2021 Fall Primary Care Conference Seattle, WA – https://www.nwrpca.org/events/