Workshop Notes

Climate and Heat Health Task Force Meeting

Meeting Date: 1/25/22
Meeting Time: 10:30 AM – 12:00 PM
GROUP NUMBER: 1
Note Taker Name: Julia

Attendees:
Jane Gilbert
Megan Hennings - Law student (climate and equity mapping, environmental justice)
Natalie Rivas - CLEO program manager, emergency preparedness efforts
Meenakshi - FIU, PhD subjective heat stress and outdoor workers
Alison Higgins - Key West adaptation plan, health and social recovery
Catherine Toms - Public Health Physician, climate health for hospitals
Chelsea Clark - resilience officer at Miami Foundation
Jeanette Ruiz - director for Miami climate alliance, heat/health working group
Lisa - Student learning about heat and emergency preparedness
Robin Yang - Mitigation Planner at OEM
Alicia Horner - Health and medical coordinator, public health emergency, human social services
Anthoni Llau - Epidemiologist at Miami Dade county, previous injury (HRI) epi./mosquito borne illnesses
Gloria Roses - small business owner, previous operator of assisted living facility, CERT team launcher

Discussion Notes:
1. What additional procedures and measures do we need to ensure the safest outcomes in the event of an excessive heat event?
• Coordination with Miami-Dade tourist office to help tourists respond to heat
  ○ Greater Miami Convention, EOC, distributes information out to all tourists/hotels
• Clinicians, automatic warning and information system, make at risk people sign up for warning system
• Weather stamp with people coming into emergency rooms
• Flag system for high temperatures at parks and recreational sites
• OEM can send information out to anyone
  ○ Need to work on sending information to particular groups
• More cooling fountains with heat index on side
• Drinking water fountains with focus on reusable bottles
• Where are the emergency locations? More knowledge on
• OSHA heat index application - current and projected heat index
• Nonprofit partners should be engaged

2. Could real time monitoring and reporting (syndromic surveillance) of heat related illnesses be utilized during summer heat for preparedness and response?

• Health department - essence, all ED visits on a daily basis (almost real time)
  ○ Monitors illness, such as HRI
  ○ Symptoms
  ○ The more clinicians are aware of heat related illness the more likely they are to report it
    ■ They need to know when the heat index is high! To really watch out for HRI

3. What do we know about the current perception of the threat of extreme heat in vulnerable groups?

• AC efficiency for underserved communities
  ○ Highly aware of AC use and closing doors/windows
  ○ Conserve resources as much as possible
• Forge partnerships with AHCA to tap existing systems for planning, education/awareness, emergency alerts, response
• Outdoor work is most distinguishable
Heat stress - physical symptoms, **emotional** symptoms

- Gender differences, women/nonbinary feel more emotional heat stress
- Poor health- they feel more heat stress
- If you have less protection at work, more heat stress

- LIHEAP- energy assistance, financial burden
- CLEO, FPL - no utility shutoffs for 95 or higher
- Floridians think they can handle the heat, bring realtors into the conversation?
- Lack of connection to the emotional stress to the physical stress
  - We should put more emphasis on this
- COVID outreach to vulnerable populations and modeling heat on this outreach

4. **What recommendations do you have for engaging and enrolling more active CERT volunteers in the communities that need it the most?**

- Make training available in Spanish/Haitian Creole
- COVID made cert training hard to attain
- We don’t give people enough to do – give tasks to make sure they stay active
  - Regular engagement operations
- Connect with faith based groups
- Team Rubicon and The Mission Continues
  - See if they are doing something similar
- Be A Buddy with CERT members
- Sports Teams
- Incentivising CERT and giving those involved more recognition
- Rotary Clubs
- Reach out to kids coming out of high school and those interested in a medical careers
- Leadership opportunities through CERT to engage local
- SEEHOT (spelling?), make CERT team of high school and college kids in underserved communities to visit hospitals, climate and health
- Climate Change / Disaster Risk connection made to youth
- Active and Retired medical professionals that want to volunteer in emergency preparedness register via Medical reserve corps which is an initiative via local health department
  - Nurses, physical therapists, MDs
5. Cooling Centers? Are they useful?

- Need to be more than a cooling center, make it a social library – resilience hub
- MCA has established resilience hubs
  - Solar back up
- Cooling centers are important, especially for the homeless, socially isolated people

Climate and Heat Health Task Force Meeting - Emergency Preparedness and Response
Meeting Date: 1/25/22
Meeting Time: 10 a.m. – 12:30 p.m.
GROUP NUMBER: 2

Facilitator: Nichole Hefty
Note Taker Name: Brenda Krebs
Attendees (in alphabetical order by first name):
See Screen Grab at end of docx for ALL attendees (and here for this Group 2)
Nichole Hefty
Brenda Krebs
Deborah Koch – Exec Dir Am Red Cross Greater Miami and Keys, have warming (cooling) shelters in U.S.
Guoyan Zhang - working at Palmer House (?) to help with outbreak in County. LinkedIn lists him as Senior Epidemiologist at MDCHD, having trained at Shanxi Medical University
James Murley
Juanita Ballesteros – Sr Resilience Analyst City of Miami Beach
Luis Pinos - no answer
Marline Monestime - Tech at City of North Miami, FIU grad disaster management
Mikey Gonzalez - no answer
Natalia Brown - Climate Justice manager at Catalyst Miami, work w/ low-income communities
Patricia Gomez - OOR Mitigation
Robert Molleda – Warning Coordinator for National Weather Service in Miami
Tamara Pino – Southeast Fla Regional Planning Council
Instructions/Questions for Discussion
You will have approximately 60 minutes to get through the following questions.
Introductions: Name, Affiliation(s), interest/work in extreme heat emergency preparedness and response
(NOTETAKERS: Be sure to try to include both name and affiliations)
Four Questions for Discussion (repeated below with participants’ input):
1. What additional procedures and measures do we need to ensure the safest outcomes in the event of an excessive heat event?
2. Could real time monitoring and reporting (syndromic surveillance) of heat related illnesses be utilized during summer heat for preparedness and response?

3. What do we know about the current perception of the threat of extreme heat in vulnerable groups?

4. What recommendations do you have for engaging and enrolling more active CERT volunteers in the communities that need it the most?

Discussion Notes:

1. *What additional procedures and measures do we need to ensure the safest outcomes in the event of an excessive heat event?*

   - Deborah Koch – Red Cross finds people don’t like to leave homes due to multiple fears, for their home, for their health. This is a deep educational bridge that we must overcome. Every year in Fla we deal with heat, but this is a VERY different type of heat. We need to get the word out in multiple languages and across cultural divides.
   - NH – not only in multiple languages, but also understand cultural differences. We need to convey that this is REALLY a danger.
   - DK – in Kentucky during winter storm, people just didn’t get it. All they had left was their home. Finally compromised, one family member stay in home one day, rest go to shelter.
   - NH – perhaps the Heat Line – 311 for this?
   - Mikey Gonzalez – Miami-Dade Emergency Mgt – we actually have a standard for this and different heat levels. So we have different email messages for both heat advisories and even cold. This does not preclude other nonprofits from having other standards.
   - Deborah Koch – we wait for OEM to open shelters. We rely on all our partners to help. It takes a village, every corner of the community to do this!
   - Juanita Ballesteros – in Miami Beach, we don’t have a great focus on systems set up since we encourage people to evacuate during hurricanes, so for heat, we don’t have as much of a system set up.
   - NH – when you say evacuation centers, you in this context are speaking in regards to heat, right?
   - Juanita Ballesteros – yes, we do not have enough for heat centers to pull double duty
   - NH – yes, Jane and Task Force are working to ID new places to add stations for heat on Beach, barrier islands
   - Natalia Brown – another barrier is people staying in homes due to no other choice, be it a disability or language barrier. Fortunately, other resources are developing. Tafari for Haitian Creole community. Smiles Trust, Family Action Network Movement, all these are starting to address barriers. How can we use these partners not only to share messages, but also to expand our ability to meet needs? How can we be a complement to what is out there to best meet communities’ needs.
   - Miky Gonzalez – can we have CAHSD reps for?
- NH – yes! They are not in this particular group, but yes! We are working with CAHSD.

2. **Could real time monitoring and reporting (syndromic surveillance) of heat related illnesses be utilized during summer heat for preparedness and response?**

- Guoyan Zhang – we have one person aggregating data for us to help us understand a large outbreak. We consider this our Early Warning system. We have lots of people helping with this.
- NH – do you think ERs and Urgent Care facilities are asking the right questions?
- Guoyan Zhang – there is a form that if filled out before these people come to us. But if there is a hurricane, we don’t have power.
- NH – how is data collection real time monitoring
- Guoyan Zhang – hospital sends us information every two hours to let us know the status of cases
- NH – any thoughts on Citizen Science for people to help us?
- Guoyan Zhang – a call number like 911 would be helpful. We don’t fall under the 911 call center information system
- NH – other thoughts/challenges on real time reporting? Once we start using Resilience Pods as cooling centers, we can collect data there
- Deborah Koch – that data collection might DETER those without documentation. At Red Cross centers, we do NOT require documentation. That is a challenge, collecting data
- Miky Gonzalez – we don’t track anyone but those in our Emergency Evacuation Data Basis, for ex. Those needing dialysis. But at regular centers we do NOT ask for ID
- Deborah Koch – transportation is an issue for many people, even essential workers. And how can outdoor workers protect themselves?
- NH – making sure employers are aware and communicating concerns is very important. Ask them to provide information on how many workers are vulnerable to extreme heat. For ex., they could provide data on how many people needed to take a break due to heat stress?

3. **What do we know about the current perception of the threat of extreme heat in vulnerable groups?**

- Natalia Brown – in 2020, Catalyst surveyed community members. We learned that extreme heat rank highest by a SIGNIFICANT margin
- NH – we hear a lot about SLR, but interesting that extreme
- Natalia Brown – vast response 1. extreme heat 2. housing gentrification
- NH – very interesting to hear that from the community and residents themselves.
- Natalia Brown – that Catalyst survey was with CLEO and FIU
- NH – you are out in community all the time. Do you also hear this in conversations or just the survey
• Natalia Brown – public officials always talk about SLR, but in our communities, heat is BY FAR much more important. Not just the heat but also the MOLD. SLR will come up as a mobility issue, but HEAT is MUCH more important
• NH – Very interesting. Miky, at OEM, do you hear this about heat concerns?
• Miky Gonzalez – extreme heat is not at the forefront right now, but that could be due to COVID. The vulnerable groups are more attuned to this. For now, the libraries are meeting the extreme heat concerns. So perhaps we get the message out in PHCD Senior Housing facilities.
• NH – those of us here for a while are used to extreme heat. Heat and humidity just a few degrees can make a huge difference.

4. **What recommendations do you have for engaging and enrolling more active CERT volunteers in the communities that need it the most?**

• NH – Miky, please let us know the roles that County workers play Community Emergency Response Team (CERT)
• Miky Gonzalez – we get our information from the National Emergency Management Service. We then put this message out and decide if we need our CERT volunteers to assist in their neighborhoods. If so, these people are deployed. They get 20 hrs of training and a backpack with supplies. There are leaders, and these people go out in teams.
• NH – to address Deborah’s question, do these people go out AHEAD of time?
• Miky Gonzalez – it depends on the national alert that is issued. These are NOT spontaneous volunteers. The County trains them, issues credentials, so some stranger is not entering people’s homes.
• Juanita Ballesteros – what kind of incentives are offered to encourage people to volunteer, especially in more vulnerable communities where people cannot take time off from
• Miky Gonzalez – this tends to be young medical people in training, so they want to do this. We offer this Thurs nights 4-9 and Saturdays all day, to make it easy. This helps these people volunteer, so they can network. We need 150 new people each year.
• NH – so on the language needs and cultural needs, is there a way to incentivize more community residents. Are the volunteers already filling this need for diversity? Not necessarily medical professionals, but maybe community members?
• Miky Gonzalez – not all CERT volunteers have medical background. We have people from all walks of life. We have people from all types of background. We ALWAYS are reaching out and getting a good response rate. At OEM, Jessica Vanderval (sp?) has never had a problem meeting the numbers each year of 100 or 150.
• NH – so for right now, we don’t need more volunteers correct? In this question, we also see “in communities that need it most” Take notes here...
• Miky Gonzalez – we look to see where we have gaps and then we look to the next ZIP Code area to get backup.
• NH – any incentives to help with this?
• Natalia Brown – to make sure folks are compensated, even with just a meal, this can really help. It meets gaps in what they need. Building TRUST is a big issue.
People might not sign up for the training, because they have their own practices, such as traditional healing steps. So it can be one individual at a time! This can draw more people into the program, one person at a time. So modeling one on one this new County knowledge with their local knowledge.

- Juanita Ballesteros – I used to live in Oakland, Calif., and the cities partnered with local organizations to which people already had ties. They provided food and childcare to attract a wider group of people to these meetings.
- NH – Mikey, is childcare provided during CERT training?
- Mikey – no. CERT training does not provide food or childcare.

5. **Anything else?**

- NH – what else might be needed? Any other good ways to get this extreme heat information out besides CERT?
- Deborah Koch – County did great job of this with the vaccine. So sometimes when people in community go out, the message is heard better
- NH – yes, we have seen this in our work in the Office of Resilience

Group 2 Chat
In addition to the four questions, in the chat we put this information:

To sign up for CERT, go here: [Community Emergency Response Team (miamidade.gov)](http://miamidade.gov)

**Jane’s summary from her group**
Outdoor workers have not only physical but also emotional stress. The financial burden with utility costs is also a big concern. CERT – from Rotary Clubs to making it cool with young people. As CERT went hybrid, lost some people who needed the sessions in Spanish and CREOLE. We could make it a CREDENTIAL for young people, so people have building blocks to career development. The importance of making our Resilience Hubs social hubs, too.

**Galen’s summary from his group**
Military installations is an example of ways to reach different communities. Also can we partner on Apps, with all these new people coming to South Florida with their jobs. Even if 68% of people know extreme heat is coming, only about 50% of people actually do something about avoiding the heat once they hear these warnings. On CERT, using cohorts would be great. Can also use CAHSD and CUA can also help! Look to Phoenix andPacific Northwest for what they have done.

**Nichole’s summary from her group**
We had many of the same things, but to add to this, community TRUST is important. Incentives such as food and childcare came up in our group. Also informing everyone, as Miami Climate Alliance noted that in their partner survey, heat was the top concern. Barrier islands and Miami Beach might not have as many locations for

**Sandra’s summary from her group**
Data gap of acute incidence vs. long-term exposure to extreme heat. Maybe an app like ISeeChange to share extreme heat event news. Also talked a lot about communication and on best ways to reach people before, during and after. Also make CERT more available at more locations around the County with access to public transit.
ALL ATTENDEES - peaked at 58 at 10:50 a.m.

- Brenda Krebs (Me)
- Chelsea Clark (she/her) (Host)
- Jane Gilbert
- Aida Curtis
- Alex Harris
- Alicia Horner
- Alison Enchelmaier
- Alison Higgins
- Alissa Farina
- Amy Horton-Tavera
- Anthoni Llau
- Beatriz Baldan
- Catherine Toms
- cheryl holder
- Chris Uejio
Climate and Heat Health Task Force Meeting

Meeting Date: 1/25/22

Meeting Time: 10:30 AM – 12:00 PM
GROUP NUMBER: 3

Note Taker Name: Ludovica Martella

Attendees and Interests:

- Pamela Berkowsky. former pentagon official representing South Florida Defense Asset (SFDA). They are interested in being able to assess heat risks for personals since they have three large camps in Florida.
- Shelby Byso. New Chief Resilience Officer for the City of Miami
- Irima Public Health preparedness official for MDC Health department.
- Lynee Turek-Hankins. PHD student at UM
- Alissa Farina. City of Miami office of Sustainability
- Maria del Mar Trejos, Brigaza. Interested in the equity implications of heat
- Motsa Dubois. Interested citizen. She works for MDC. Vice president of an international NGO. Currently working with UN Habitat
- Beatriz Baldan. Architect working in sustainability
- Alex Harris covering climate for the Miami Herald
- Megan Donovan, Grant Program Coordinator, working for UM on affordable housing and heat
- Chris Uejio. Professor at Florida State University

Q1: What additional procedures and measures do we need to ensure the safest outcomes in the event of an excessive heat event?

- Pamela: We should have a very similar structure that we have in place for hurricane preparedness.
- Alissa: transportation around vulnerable populations acknowledge of who the vulnerable populations are infrastructure of homes is important- everything related to insulation and AC is important to consider. it’s important to take into consideration the possibility of the power going out.

- Chris: heat efficient energy policies
- Beatriz: in terms of shelters, can some buildings open up their lobbies?

Q2: Could real time monitoring and reporting (syndromic surveillance) of heat related illnesses be utilized during summer heat for preparedness and response?

- Beatriz: consult with Washington state and California regarding how they prepare for their heat waves.

- Lynee: data about domestic violence and other impacts such as suicide rates that are correlated with exposed heat exposure should be taken into consideration
• Maps should definitely include the health impacts of heat

• Pamela: The military is collecting data on how their operations are impacted by extreme heat. The national guard could be a good partner in terms of mapping.

• Alissa: are there any apps that people use that could help us know where most vulnerable populations are? Perhaps an integration with ReadyMDC app could be considered.

Q3: What do we know about the current perception of the threat of extreme heat in vulnerable groups?

• Studies show that 68 percent of people know when heat is coming but half of them would do something to change their behavior.
• Homeless people and vulnerable populations should have clear communication for emergency preparedness through joint communication efforts by all involved agencies. They are usually left behind without valid resources.

Q4: What recommendations do you have for engaging and enrolling more active CERT volunteers in the communities that need it the most?

• Engaging and expending the CERT volunteers through schools (in order to target youth)
• Alissa: people sign up as individuals but usually teams and cohorts who sign up together are more effective. be mindful of creating teams that are geographically close so that they can coordinate together and be more effective
• Retired or active police officers and firefighters and retired military could be excellent leaders. The original leader of the west grove team was a former firefighter. They understand chain of command which makes the interaction with municipal EM smoother.
• Community organizations, churches and temples. PACT in Miami could be a potential partner. Rachel Prestipino is the local organizer.
• The fitness community. There is already a lot of youth involved (because of summer camps) through the Parks department as well as the Dep of Cultural Affairs.
• We should have a discussion focused on prevention in terms of reducing carbon.
1. What additional procedures and measures do we need to ensure the safest outcomes in the event of an excessive heat event?

Robert Hevia: Better job of preparing the community is possible. Think: Does the community know what risks are? How do we get the message out? We can use geofencing as is used in hurricane preparedness; for a larger scale, preparedness message is not where it could be. So many days of the year are hot - so we need to be clear about impacts of the effect of long-term heat exposure.

Katharine Mach: Given the amount of high heat days in Miami, we should be messaging the risk of chronic heat exposure vs. acute heat illness. Also, considering the timing of heat waves - first of the year, vs in later months, does influence the impact on health. Impacts occur due to timing of heat events and other conditions such as humidity, and the public should be able to understand which conditions are important.

Aida Curtis: We know our most vulnerable time for heat- we should encourage the public to have an idea of ‘heat plans’ and ‘heat kits’ - which items to have in case of heat emergencies, and where to go when cooling is needed, just like in hurricanes.

Mayra Cruz: Lack of heat warnings due to high threshold for excessive heat warning. People know where evacuation centers are and that it’s available - letting people know where cooling centers are available.

Noura Randle: Determining true threshold of heat threat in communities - working with NWS/NOAA to establish more specific thresholds for heat levels and danger associated with each level.

Victor Robles: Messaging is where to start - not just in English but in Haitian Creole and Spanish.

Albert Gomez:

1. Providing mobile cooling stations at resilience pods.
2. Outreach campaigns around heat warning systems through neighborhood meet-ups. At Resilience hubs, or hyper-local level such as neighborhood levels under larger neighborhood trees. Quick, casual tutorials on new alert systems, the danger of heat, benefits of trees in reducing trees, and how they can help others. Also, providing a county-wide map on cooling centers and resilience hubs.
3. Adding a layer to the heat solutions map would be to list all public water features/pools/other areas for water access, as well as generally cooling centers. Hosting tutorial outreaches at these cooling sites would be key.

4. In a post-disaster environment, children in many cases are the most vulnerable. Getting children in the Miami-Dade public school system to drive involvement by families can help access communities and provide awareness at this level.

Omar Leon: Removing trees that have sustained damage/are uprooted should be reconsidered. Many species can be replanted months after the storm. Miami Beach has enacted the policy that if trees are blocking roadways, removal of trees is critical to allow access; however, if trees are uplifted or uprooted in other spaces (ex. parks), the Urban Forestry Team will decide if replant at a later date to retain Tree Canopy as much as possible. Trees take a long time to grow - replanting and reforesting is good, but it is important to protect what we have. Large scale campaign to advise, and enforcement of tree ordinances post-emergency/post-storm to reduce removal of trees is critical.

2. **Could real time monitoring and reporting (syndromic surveillance) of heat related illnesses be utilized during summer heat for preparedness and response?**

Robert: The more information, the better. All the information possible is useful in applying interventions. This has been seen with COVID, more diverse data allows for a more whole picture.

Omar: Current data on tree canopy coverage is helpful in finding areas of high heat risk. Similar to traffic patterns that identify ‘peak hours’, identifying ‘peak paths’ during particularly high heat conditions that pedestrians can re-route to in order to utilize tree-lined streets and use shade.

- Noura: Making sure that these suggestions are reasonable is also key.

Mayra: We do have a lot of gaps in data, so this monitoring would really help bolster existing initiatives. From interviews with long-time residents, they generally know when to go and stay inside. However, they may not go to emergency situations if they are getting sick and staying inside. That’s a major gap in non-emergency HRIs that this syndromic surveillance can help.

Albert: Alerts in real-time are key. For crowdsourcing, his experience related to mapping shows that using the right app and robust community engagement with crowdsources information, the chances for misrepresented temperatures are very low. You can get very specific, surprisingly accurate data and recruit reliable community advocates to promote this monitoring feature helps. Rewarding participants through community businesses and organizations for their input and records could really help. Crowdsourcing this information - such as the ‘I Sea Change App’ - is essential to this type of data.

3. **What do we know about the current perception of the threat of extreme heat in vulnerable groups?**
Mayra - Many elderly people and caregivers do not identify older individuals as susceptible to heat. They may avoid cooling centers for different reasons without realizing - do not want to be around others, or do not like to feel the AC blowing on them - and exacerbate their vulnerability. Communities of color do often perceive themselves as vulnerable to heat - our systems should tap into that perception as an entrypoint for communicating vulnerabilities.

Aida - Many immigrants, especially from Latin America, use their relationship to heat in their native countries to minimize the perception of heat in Miami - “this is just how it is.” There is a need for these communities to recognize that heat, even in their own countries, is dangerous. The same applies for outdoor workers, they may have the mentality that “it’s usually hot when working in the fields.”

Albert - They simply don’t know it’s a thing or pay attention - they may even label these as “First World Problems” and have not connected this to climate change. Hyperlocal outreach is needed to bridge the gap.

Scarlett - Culturally focused PSAs on extreme heat can help.

Dr. Mary Leonce - In our own communities, the idea of heat is well known, but the language of climate change is not as well known. There is the same perception of, “it’s just hot”, without wider perception of where the heat comes from.

Diego Cancel - People often don’t realize the impact of extreme cold either - it was 40 degrees in Coral Gables today. Letting people know when staying in the home is dangerous, and when to evacuate, is important.

Mayra: Even non-hurricane-related power outages are important to recognize as emergencies. From interviews with community members, when power is out and AC is not available, they may be more isolated due to lack of perception of emergency.

4. **What recommendations do you have for engaging and enrolling more active CERT volunteers in the communities that need it the most?**

Aida - Recruiting high school students, and providing incentives through service hours is important.

Dr. Mary - High school daughter has requirement for 120 hours service, this can be a good opportunity.

Mayra - Offering trainings more frequently, and being more flexible. Currently, there are no make-up days allowed and many individual trainings do not happen very often, so it would be difficult to enroll if you are not available. Having training sessions closer to public transportation would allow people to do training more conveniently to them. Many of the CERT volunteers enjoy trainings and their backpacks - the sense of community could be a very big pull for prospective volunteers.
Robert - FEMA has a ‘Team CERT Program’ that can be completed under the age of 18 - this could be an additional opportunity to incorporate heat into emergency training.

For CERT, 2 8-hour days are needed for hands on work, with an additional day being either hands-on or virtual. Different counties have their own CERT programs - recruiting volunteers with booths about CERT is the current plan, but more partnerships between counties and clarity on where to seek training can help recruit volunteers.