

# Report of an Assessment of Community Perspectives About the Protection of Vulnerable Populations During a Heat Emergency in San Francisco



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# Executive Summary

## Challenges

There are some challenges inherent to the work of preparing to protect vulnerable populations during a heat emergency in San Francisco, including:

- Vulnerable populations are, almost by definition, difficult to reach and engage
- Community organizations that serve vulnerable populations are not already interested in heat preparedness, mostly because it is not a priority issue for them at this time
- San Francisco is structurally disadvantaged when dealing with heat, both because most buildings don't have cooling systems, the population is not keenly aware of the potential dangers of heat, and it is not a city very friendly for people who have limited mobility.
- San Francisco has intense neighborhood identity, meaning that resources to protect vulnerable residents likely need to be based in each neighborhood, not centralized.

## Opportunities

There are also some opportunities at this time, which should facilitate emergency planning:

- In general, interviewees were worried about the effect of cold, and understood that climate change means more extremes on both ends, including heat emergencies.
- There is a real opportunity to raise awareness about the potential dangers of heat – interviewees suggested multiple ways to do this, and it is clear that San Franciscans' awareness of the importance of earthquake preparedness means they are primed for more support around increased preparedness for other issues such as heat.
- The organizations who were interviewed for this assessment are now primed and ready. Not only are they interested, but they were specifically asking to help and to be involved. This is a great time to form partnerships and keep the momentum going, as they will be huge assets.

## Recommendations

As a result of the interviews that informed this report, a series of seven recommendations have been made; more details about the rationale behind these recommendations appears in the report.

1. Partner with key community organizations now to ensure those relationships are productive during a heat emergency.
2. Reach out to Project Open Hand, Meals on Wheels, and any other organizations that serve homebound residents to be sure a plan exists to reach their clients.
3. Reach out now to plan with organizations that have relationships with people who have disabilities related to information receipt.
4. Ensure your planning involves reaching out to young members of vulnerable communities, as they are often the best way to reach older family members. Schools and family agencies are a great resource.
5. Prepare a strategy for going door-to-door in vulnerable communities. Work with those who lease SROs to facilitate that process if possible.
6. Plan a number of reliable, smaller cooling centers in each neighborhood throughout the city.
7. Develop a public awareness campaign that educates San Franciscans about the potential dangers of heat. Distribute materials to community organizations citywide, and actively hand them out at community fairs and places where vulnerable people are likely to congregate.

# Background

According to the Centers for Disease Control and Prevention (CDC), evidence suggests that the average temperature of the Earth's climate is increasing, subsequently increasing the potential for all of us to experience extreme weather events. This type of worldwide shift in climate is known as climate change, which is defined as "any significant variation in temperature, precipitation, wind, or other type of weather that lasts for decades or longer. In 2009, CDC formally established its Climate and Health Program, in recognition of the importance of preparing for climate change and its impact on the health of residents of the U.S. and the world. The priority actions of the CDC Climate and Health Program include identifying locations and population groups at greatest risk for specific health threats, and supporting state and local health departments to implement preparedness measures related to those threats.

In this vein, CDC has provided funding to the San Francisco Department of Public Health (SFDPH), to support the City and County of San Francisco in preparing now for a major heat wave, before one has actually hit the City. One component of this is a plan to protect the City's most vulnerable populations. There are a number of specific actions being undertaken to this end; however, one of these involves interviewing stakeholders in the community who work closely with the very populations the SFDPH has determined to be most vulnerable should a major heat wave hit San Francisco. These interviews were designed to gather advice and insight into the needs of these populations and the strategies best suited toward planning and protecting them during a heat emergency. This report is intended to summarize these interviews and provide a series of recommendations to the SFDPH for use when planning in this arena.

# Methods

An external consultant was hired to contact and interview between five and seven representatives of community-based organizations that serve vulnerable populations, as well as one to two disaster preparedness organizations in the City. The interview guide was developed and finalized with the input and support of staff of the Environmental Health and Public Health Emergency Preparedness and Response Sections of the SFDPH. Interviews were conducted in the months of January and February 2013; very detailed notes were taken during all interviews and these notes were then coded and analyzed for main themes. This report summarizes those themes, and presents a series of recommendations built on the information shared by what were ultimately eight interviewees.

The organizations interviewed through this assessment were as follows:

1. Asian Neighborhood Design (SOMA)
2. PODER (Mission)
3. Providence Baptist Church (Bayview)
4. Glide (Tenderloin)
5. Japanese Community and Cultural Center (Japantown)
6. Chinatown Community Development Center (Chinatown)
7. American Red Cross Bay Area (ARC)
8. San Francisco Collaborating Agencies Responding to Disaster (SFCARD)

# Themes from Interviews

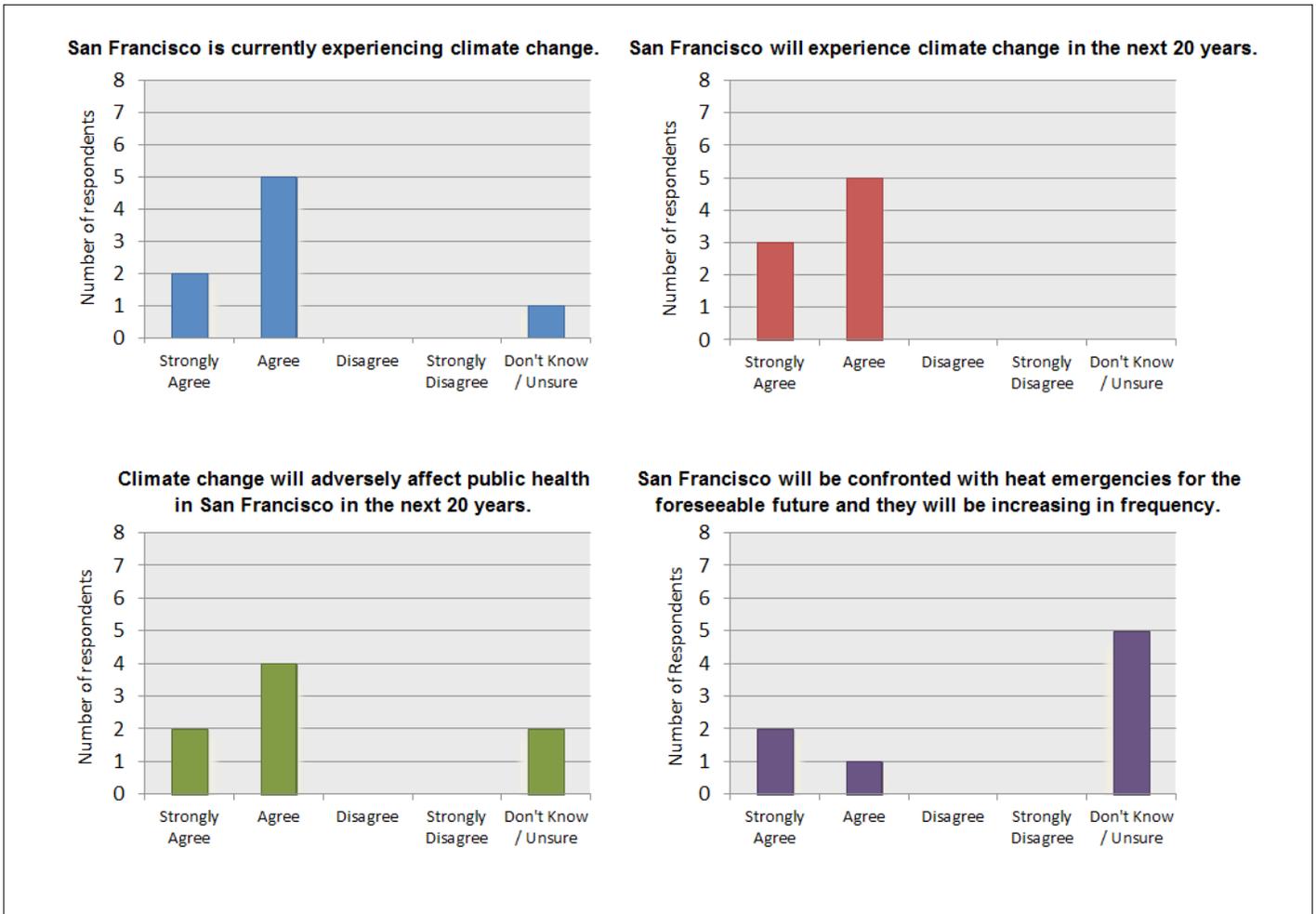
## Disaster Plans

Of the six community-based organizations interviewed for this assessment, three had prior experience working with SF CARD and had clear disaster plans and experience with disaster preparedness, both for staff and clients/members. One said that staff had done NERT trainings years ago and has resources to support members in a disaster, but had no concrete disaster plan or strategy to maintain agency preparedness. Two interviewees said they had no knowledge of any disaster plan at their agency, and no experience with any kind of disaster preparedness. These two latter agencies provide minimal direct services and essentially no services on-site, but rather function in an organizing or technical assistance capacity.

[n = 8 for all figures]

## Perceptions of Climate Change

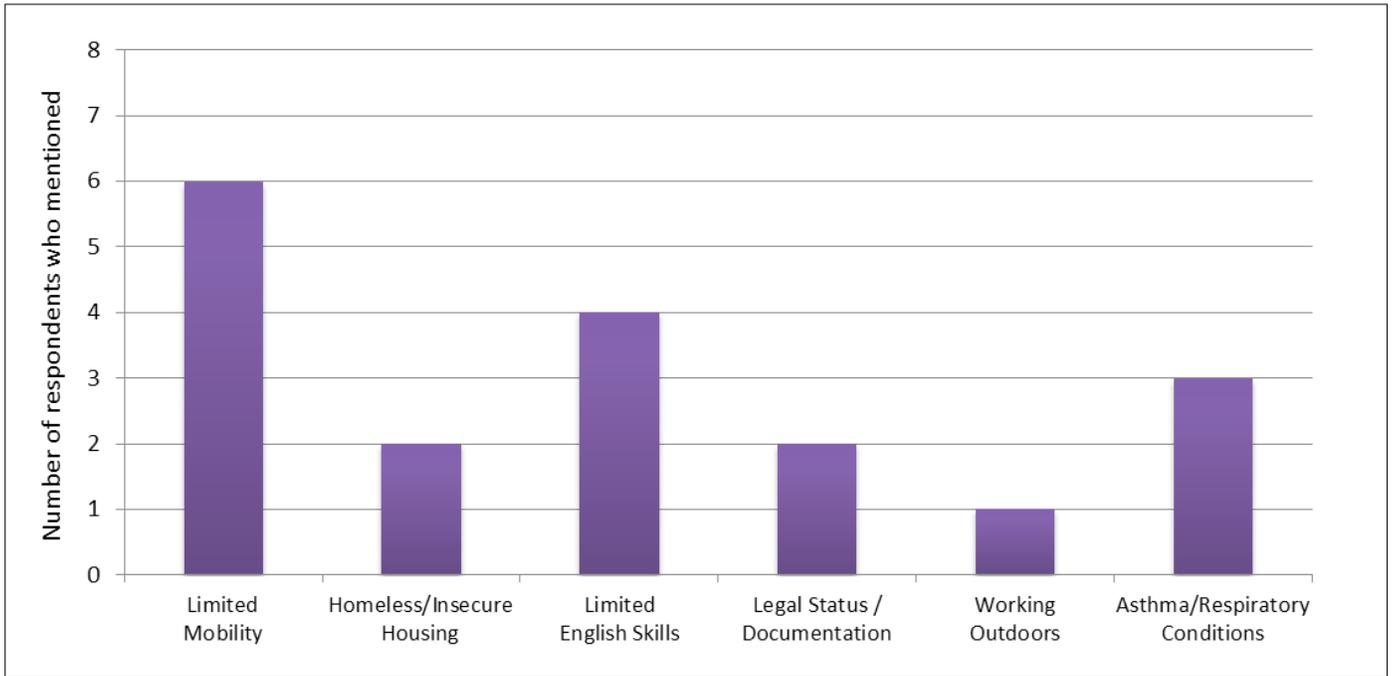
Each interviewee was asked to indicate for a series of four statements whether they strongly agreed, agreed, disagreed, strongly disagreed, or didn't know about the statement. In general, respondents were in agreement; however, it is logical to expect that after participating in a 30-minute interview about protecting vulnerable people related to climate change in San Francisco, people would be more likely to agree, or at least to tell the interviewer they agree. Given that limitation, the following figures show the results of these interview questions:



# Themes from Interviews

## Risk Factors During a Heat Emergency

Each interviewee was asked whether the community they work with has any risk factors which would make it especially difficult to cope with a heat emergency. One representative, even when presented with a list of possible high-risk factors, said, “I can’t think of any unique risk factors that wouldn’t apply to most people....except maybe low-income people have fewer resources to buy a fan.” Among the other agencies, there were some well-known risk factors that were mentioned almost universally, as illustrated by the figure below (n=8):



These common risk factors are not entirely surprising, especially because – as one interviewer expressed, “These are neighborhoods where you already have other environmental impacts. What we’ve learned is that cancer, heart conditions, and respiratory conditions are the top killers in these neighborhoods. These people are being exposed to toxic conditions day in and day out, so their health is already jeopardized.” The respondent in the Bayview also expressed his concern about his community’s limited access to support, explaining that “a lot of the agencies who would be helping to respond to this type of thing are not located in vulnerable or deprived neighborhoods such as ours.”

Two risk factors were mentioned by one of the respondents and may not be obvious, but nonetheless

should be considered during emergency planning:

- People with disabilities related to information receipt, such as being blind or deaf
- People with mental illness, who may not understand what is happening or have the skills to cope with what is happening

And finally, two respondents opined that their populations were at increased risk during a heat emergency because of the following “risks”:

- Lack of food security, because their need for food will trump all other needs
- Middle-age, active adults – “because they’re out doing stuff that they ordinarily would do, even though they should stop (i.e. exercising)”

# Themes from Interviews

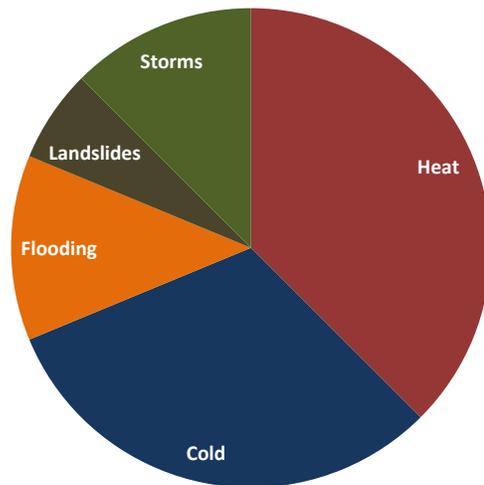
## Concerns About Climate Change

Each interviewee was also asked the question, “What possible impacts of climate change do you think are of greatest concern to your community?” Again, given that this was an interview about protecting their community against a heat wave in San Francisco, it is unsurprising that many respondents claimed to be concerned about heat; unfortunately there is no way to know how many would have said heat without this context. It is important to note that it was exceedingly difficult to garner initial responses to requests for interviews; most respondents only returned calls or emails after repeated attempts at contact (or because they happened to pick up the phone). This suggests that at this time, a heat wave is not of great concern to these stakeholders – as will be discussed in more detail in a later section. Regardless, the figure to the right shows the answers that were provided to this question. The bigger the slice of pie, the more respondents mentioned that particular issue as one of their community’s greatest concerns regarding climate change.

## Communication Strategies

The meat of the interviews focused on gathering information from these informed stakeholders about the best ways to communicate with their communities – both during and before an emergency such as a heat wave. When it came to the most effective ways for reaching vulnerable populations with important information during an emergency, five of the eight respondents specifically mentioned using local or ethnic television or radio stations to communicate. The representative from the Chinatown Community Development Center said, “[You should use] the Chinese media, because we all rely on our radio, or the news for information. People are glued to the news, because there’s only that one hour, two hours a day when they can watch the Chinese news. They get their information from that, and they trust it.” The respondent from PODER also identified neighborhood

newspapers as a good way to reach residents. Four respondents also mentioned the use of more digitally-advanced means, such as mobile phone texting, SF Alerts, or social media (primarily Twitter, but also Facebook).



Beyond reaching people through standard media channels, the next common theme involved flyer and/or direct outreach at common locations where these more vulnerable people are likely to spend time. Specific locations that were mentioned were:

- Neighborhood grocery stores or corner stores
- Churches
- Bus stops or on buses, where people are stuck waiting and looking around
- Parks
- Schools
- Senior Centers or Adult Daycare Facilities
- Laundromats

While churches were mentioned by some as a great place for flyers or outreach, two respondents also heavily emphasized the value of reaching out to faith-based organizations to help reach vulnerable populations during an emergency.

## Themes from Interviews

Faith-based organizations frequently have strong relationships with many of the members of their congregation, and are a very trusted source of information and support. Additionally, leaders in faith-based settings are accustomed and usually skilled at sharing messages effectively. As one respondent related, “You have to get the people who are already connected to the community speaking for you. The people in the pulpits can share your message.”

In addition to connecting with faith-based organizations, every single interviewee offered without hesitation that the single most effective and efficient way to reach vulnerable populations during a heat emergency is through partnerships with the community organizations who already serve them. Many organizations have a strong client or member base and are already offering on-site services that draw these people in. This is especially true for organizations that offer food services, such as the Japanese Community and Cultural Center, Glide, the St. Anthony Food Pantry, and the pantry program at the San Francisco Food Bank.

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### Recommendation:

Partner with key community organizations now to ensure those relationships are productive during a heat emergency.

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Information can be offered to people who come to these organizations for meals or other services, through workshops, information sessions, informal opportunities to speak with an outreach worker, or information tables. The representative from Glide pointed out, “We might serve 3,000 meals a day, and just through that, we could touch that many people, give them information and then they take it back out [and help it spread through the community]. If we want to communicate, we just start talking about it. There’s a huge network of word-of-mouth in our community.”

Besides partnering with food organizations to which vulnerable populations come for food, it is also important to reach out to Project Open Hand and Meals on Wheels to reach homebound, especially vulnerable individuals. Working with community organizations has the distinct advantage of building upon relationships and trust that already exist.

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### Recommendation:

Reach out to Project Open Hand, Meals on Wheels, and any other organizations that serve homebound residents to be sure a plan exists to reach their clients.

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Although the respondent from the Japanese Community and Cultural Center shared her belief that Japanese Americans would take information shared by the SFDPH as important and credible, many other respondents shared the sentiment of the interviewee from Asian Neighborhood Design, who said, “Information coming from [neighborhood groups and community organizations] will be much better taken than that coming from the health department.” In addition to a foundation of trust, community-based organizations also have the best ability to reach out to non-English speaking populations with truly multi-lingual, multi-cultural messages. As the representative of PODER said, “You can just translate information, but that’s not the same. It’s helpful to have relationships with people who understand the true language and cultural-specific strategies and approaches, because they’re often more likely to penetrate a little deeper into a community.” It is also important to remember that in addition to multi-lingual information, you need information for visually and hearing-impaired residents.

# Themes from Interviews

The ARC representative reminded, “You have to make sure you have the means to communicate the information appropriately to all those who need to hear it.” Specifically seeking out community organizations that have relationships with people with disabilities related to information receipt will be critical in this regard.

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## Recommendation:

Reach out now to plan with organizations that have relationships with people who have disabilities related to information receipt.

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A crucial partner in reaching out to these types of community organizations is SF CARD, which has a network specifically designed to help organizations that help vulnerable populations during a disaster. SF CARD is connected to SF Alert, and has the ability to reach out to organizations throughout the city if a situation is occurring that could affect the health or wellness of their target population. The representative from SF CARD was very clear in her commitment to this issue, saying, “Should we face a heat wave, we’ll do everything necessary to coordinate the response of the community through our liaison role, for prompt notification and mobilization of agencies – supporting heat hotlines, alerts via the city notification system, etc.”

In addition to SF CARD, the respondent from ARC also highlighted the importance of learning from systems that already exist and could serve as models or modes of communication during an emergency. These include:

- Messaging strategies currently utilized by the Department of Emergency Management
- The Homeless Outreach Team (HOT) system for reaching out to homeless people during times of extreme cold

- The system used to distribute water to Treasure Island residents when their water system was dysfunctional for an extended period, and
- The OK/HELP sign system currently encouraged in Los Angeles following earthquakes

Three more opportunities for collaboration were described by interviewees:

1. Working with organizations to recruit “ambassadors” – people who could be trained in disaster preparedness and heat response, and would then serve as a recognized and respected member of the community who could reach out personally to address necessary issues among their own people;
2. Community clinics, where staff should be able to review their patient rosters and assess which patients are in greatest danger as a result of heat, then reach out to them in a credible way to share information or encourage proper self-care; and
3. Schools, where there are a lot of already existing networks and communication channels to reach a large number of parents. Working with schools or family-based agencies has the added benefit of reaching young people with critical health messages, which is extremely important in many ethnic communities, especially those where the primary language spoken is not English. As numerous respondents pointed out, children are often essential vectors of information to parents and grandparents who may be far more isolated during an emergency.

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## Recommendation:

Ensure your planning involves reaching out to young members of vulnerable communities, as they are often the best way to reach older family members. Schools and family agencies are a great resource.

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## Themes from Interviews

The most critical take-home message offered by interviewees was this: **the key is to partner with these organizations right from the beginning.** While efforts to reach vital organizations can certainly be undertaken in the throes of a disaster, by far the best way to prepare and ensure that vulnerable populations receive the information and support they need during an emergency is to have a pre-existing relationship, and pre-existing plan for information dissemination. Activating a plan that was working out in advance will help to guarantee that information is very quickly provided to those who need it most, with the least amount of valuable resources from within the SFDPH. Working in advance to build these relationships also has one added benefit, offered by the interviewee from the Chinatown Community Development Center: “[Building strong partnerships] with a lot of people is also building a strong community.” This assessment provided a great starting place for this type of relationship-building, and hopefully can offer a great opportunity to continue developing these connections. As the ARC representative said, “I think after this paper is written, get a committee together to talk about it and meet about it, and do some planning and exercising. Get people involved now.”

Other than partnering with community organizations, there was one other method of communication that every respondent emphasized. **The best – and possibly only – way to reach the most vulnerable residents is by going door-to-door.** Almost everyone interviewed acknowledged that this task was daunting and incredibly resource-intensive; however, they also stressed that it simply had to be done if the most vulnerable San Franciscans were to be reached and protected during an emergency.

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### Recommendation:

Prepare a strategy for going door-to-door in vulnerable communities. Work with those who lease SROs to facilitate that process if possible.

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The respondent from the Japanese Community and Cultural Center explained, “You need to do door-to-door canvassing to really get people, and you need a lot of resources to get that going. Without the resources, though, a lot of people will just be waiting [for the heat to pass] while their lives may be in danger.” Similarly, the Glide interviewee stated simply, “If you’re talking about the elderly man in the SRO [Single Resident Occupancy building] with emphysema who can’t get down the stairs if the elevator’s out...the only way you’re going to get to him is if you have someone who knows where to find him. That’s probably someone knocking on his door.” With this understanding, the Chinatown Community Development Center actually has an existing plan to do this, and uses a door-knocking strategy to do fire safety education and outreach within Chinatown’s SROs. Their strategy is to go to SROs around 5:00 or 6:00pm, when residents are least likely to be working, and knock on doors in an entire floor or building, alerting residents to the availability of a “hallway workshop” where they are invited to a common space for a demonstration or informational session. They have found this strategy to be extremely successful at reaching the most isolated residents of Chinatown. It is a strategy that has application both during an emergency and beforehand, to do health education or outreach related to the health dangers present during extreme heat events.

## Themes from Interviews

As is true with efforts to collaborate with community-based organizations to get information to vulnerable people, with door-knocking it is also critical to plan in advance. This means identifying the buildings where door knocking would likely be important and effective, and determining an appropriate team of people with the skills and availability to provide this service if necessary. The interviewee from Glide reminded, “[You need] people who are seasoned outreach workers in these communities, who know who’s important, where to avoid; how to read the scene.” This could mean organizing a volunteer corps of people from each vulnerable community who can be “activated” to go door-to-door if needed, or using City employees who are Disaster Service Workers to do this type of job, as two potential examples. However, it may also mean building a partnership with the people who run SROs. According to the Glide representative, the leases for the majority of SROs in the city are held by three organizations: Episcopal Community Services, Community Housing Partnership (CHP), and the Tenderloin Neighborhood Development Corporation (TNDC). Especially if planned in advance, it may be possible to contact each of these organizations and ask them to get a health alert to each of their tenants, or to facilitate a door-knocking effort if needed.

### City-Run Cooling Centers

In the event that a heat wave were extremely hot or humid for an extended period of time, it may be necessary to open and run a series of city-run cooling centers, where cool temperatures, liquids, first aid, and electricity were guaranteed, even if blackouts or brownouts were happening throughout the city. While the logistics to plan and implement a city-run cooling center is significant, even the most well-run cooling centers will not be useful if residents are not aware of them or are not willing to relocate to them. To that end, each of the interviewees in this assessment were asked a series of questions about the best ways to alert residents to the locations of cooling centers, how

far they thought members of their community would be willing to travel to relocate to a center, and barriers to relocation. When it came to alerting residents to the location of cooling centers, respondents provided the exact same set of communication methods as were outlined in the previous section: collaboration with community organizations, flyers, outreach in areas where the population may congregate, use of the media, and door-knocking. The interviewee from Asian Neighborhood Design suggested posting signs in key locations throughout areas with vulnerable populations that say “This many feet to a cooling center,” with an arrow pointing people in the right direction.

When asked how far they thought members of their community – especially vulnerable residents – might travel to get to a cooling center, almost everyone emphasized the importance of neighborhood-based stations. “As long as it’s in walking distance, I think it would be OK” was a common thread. This was explained partially as a result of mobility issues, since the most vulnerable populations are least likely to be able to drive or even take regular public transportation to a distant venue. The three respondents who said they thought members of their community would be willing to travel to a more distant cooling center emphasized the importance of extremely easy, direct, and free public transportation to and from the center. The interviewee at SF CARD said, “I really like the idea of having Muni transport them for free, and some kind of schedule so they can come back regularly to their home if needed. More like a shuttle system.” That was echoed by the interviewee from Providence Baptist Church, who said, “In a big emergency, you’ve got to set it up so that you can go somewhere to get the life support skills you need, and then return to your home and make sure you can keep your home safe. No question about it, that’s everything. You can’t abandon your home and migrate – we learned that from New Orleans.”

## Themes from Interviews

When asked about barriers to relocation, each respondent described similar issues: fear of leaving their home vulnerable, or fear of what awaited them at the center itself. This included both a fear of danger, but also just a fear of the unknown. As the Japanese Community and Cultural Center interview described, “They would probably hesitate to leave because they don’t understand, or don’t know what to expect when they get there. They need to know what it will be like when they get there.” Part of this resistance to going to a less familiar place in another neighborhood was also explained as being related to community identity, however. “I know my neighborhood. Why do I have to leave my neighborhood and go to another neighborhood?” was a sentiment relayed by the ARC representative, who described San Francisco’s community identity as “particularly strong.”

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### Recommendation:

[Plan a number of reliable, smaller cooling centers in each neighborhood throughout the city.](#)

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The PODER interviewee explained this as an issue with comfort. Especially for people who are more vulnerable, “it’s helpful if people already have a relationship with the place before the crisis happens.” He suggested that clubhouses in neighborhood parks and libraries would be ideal locations, as they are places with which many residents are already quite familiar. Along those lines, the ARC respondent said that San Francisco Rec and Park has ADA accessible facilities all over the city, and if those were used there would be one in every neighborhood. In order to set up a number of reliable, smaller cooling centers in neighborhoods throughout the city, various options will

need to be explored. This effort is currently underway via a separate San Francisco city shelter analysis.

### Overall Barriers to Reaching Vulnerable Populations

When asked what they thought will be the biggest barriers to reaching vulnerable populations during an extreme heat event, four respondents offered ideas in addition to those that have been previously discussed. The representative of PODER highlighted legal status, explaining that undocumented people are often very hesitant to try to access any kind of support. He suggested that the only way to try to overcome this barrier is to offer services that are local and feel comfortable and familiar (perhaps like their neighborhood libraries or Rec and Park facilities). The respondent from SF CARD echoed that barrier and added people with mental health problems – especially those with mental health problems severe enough that they don’t understand there’s a problem and as a result don’t seek help. The interviewee from Providence Baptist Church said that he thought the biggest barrier would be the digital divide: that too often people assume that everybody’s “connected” and rely on digital means of communication to reach people with important information. This is why having personal relationships with organizations, and being prepared to go into the street and knock on doors is such an important issue for the most vulnerable. And finally, the representative of Asian Neighborhood Design said, “The biggest barrier is pride – especially for older people, who will say, “I’ve lived through heat before, why do I have to go somewhere?” This speaks specifically to the importance of raising awareness in San Francisco about the dangers of heat, which will be explored next.

# Themes from Interviews

## Raising Awareness Early

As was described earlier, it was exceptionally difficult to convince busy employees of these community organizations to take the time for an interview about a possible heat wave. Some potential interviewees rudely refused the opportunity, and others laughed or snickered but begrudgingly agreed. While in the end all of the interviewees were quite polite and forthcoming, this difficulty in finding willing interviewees is a symptom of the larger problem: very few people in San Francisco are concerned about the possibility of a heat emergency here. Of course, this is precisely why the danger of such an event is so high – were it to occur, public awareness of the dangers of heat is very low and the city’s infrastructure to protect health and wellness despite extreme heat is poor.

During the interviews, almost all respondents pointed out their growing awareness of this problem, and emphasized that residents of San Francisco just don’t understand that heat is dangerous or that they should prepare. Despite have excellent disaster preparedness overall, much of this awareness and preparation is geared toward earthquakes or similar disasters, not heat. Given that, the representative from PODER suggested, “Rather than focusing on a severe heat wave, [I think you should] integrate it into other disaster preparedness efforts. It’s just another aspect of disaster preparedness. That will help people feel better that they can be even more prepared, and to take it seriously.” More than half the respondents stressed the need to do work now to educate residents about heat.

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## Recommendation:

Develop a public awareness campaign that educates San Franciscans about the potential dangers of heat. Distribute materials to community organizations citywide, and actively hand them out at community fairs and places where vulnerable people are likely to congregate.

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The interviewee from the Chinatown Community Development Center said, “I think if people are experiencing the heat wave, they will be very responsive in looking for resources to help them – unless they’re sick before they realize it. It’s important to educate them so they know what signs to look for and how to take action.” Along those lines, the representative of the Japanese Community and Cultural Center said, “I think if this is something that the DPH is really interested in doing, create a campaign so people know before it happens. Make them aware of the dangers of heat and what to do. Then when the heat hits, you basically just ‘active’ this knowledge and remind them what to do.”

## Themes from Interviews

This type of educational effort could take a number of forms, offered up by interviewees. It could be as simple as developing a brief public awareness campaign with simple materials that helped people understand that heat can be dangerous, the warning signs to look for, how to take care of themselves, how to check in on neighbors, and what they can expect if a city-run cooling center is opened. These materials could then be shared with community-based organizations throughout the city, and it would be relatively easy for them to share the information with their clients/members. Similarly, materials could be provided along with one trained volunteer who could answer questions at an information table at various key places, such as food lines or syringe exchanges – places where, as the Glide interviewee said, people “come in for things they need (like food or clean needles) and then we give them additional info they didn’t even know they needed.” A few of the respondents also mentioned the value of providing incentives (i.e. small gift cards or food vouchers) to residents who take information or attend information sessions about heat emergencies.

Another way that two interviewees suggested the SFDPH could raise awareness about the dangers of heat waves is preparedness drills. The City of San Francisco has a history of holding well-publicized emergency preparedness drills, including The Great California ShakeOut, a mass smallpox vaccination drill in Bill Graham Civic Auditorium, and more. Holding a preparedness drill – for the general public or even just for people who might be involved in reaching out to vulnerable populations during a heat wave – is a

great way to identify problems and gaps, and begin conversations that result in more solid planning.

And finally, the representative from the Chinatown Community Development Center suggested that the SFDPH develop a fun game or giveaway for a multitude of community fairs that take place throughout the city year-round. “Don’t just hand out pamphlets – bring people into the booth,” she said. “Then leave some materials behind. Something that would help in case of emergency. A water bottle with a salt packet attached to it, to help with dehydration. One of those \$1 cooling ice packs you can get. A little fan with an emergency number on it. Those will help people in an emergency, plus you will be raising awareness as you go.”

Without a doubt, there are many more strategies that could be employed to raise community awareness about heat. What matters is that the issue be addressed now, before it becomes a serious issue. Doing so will not only go a long way to protect the health of vulnerable populations if a heat emergency hits San Francisco, but it will serve to strengthen relationships with community members and organizations in a way that helps improve everyone’s health in the years to come.

# Appendix:

## Questionnaire for Heat Grant Stakeholder Interviews

Hi, my name is Shelley Facente and I am a consultant hired by the San Francisco Department of Public Health to conduct these interviews with key stakeholders in San Francisco in order to identify strategies to reach vulnerable populations in an extreme heat event. I just have a few questions for you today, and really appreciate you taking the time to share your thoughts with me. After I have completed all the interviews, I will be writing up a summary report for the Department of Public Health that explains what you have all said and makes a series of recommendations.

For the purposes of these questions, we are defining a “heat emergency” as weather that is substantially hotter and/or more humid than average for a particular location at a particular time, and therefore has the potential to cause illness or even death in the population, especially for vulnerable people.

1. How do you generally identify members of the community your organization represents? [Prompt: how would you define the target population for your agency?]
2. What types of services does your organization provide to support vulnerable populations (and/or that community you represent)?
3. What possible impacts of climate change do you think are of greatest concern to your community?
4. It's possible for climate change to affect everyone; however some communities have fewer resources to adapt and recover. One result of climate change is more frequent and severe heat waves. Does the community you work with have any risk factors which would make it difficult to cope with a heat emergency?

[Prompt: Some risk factors could include:

- Asthma or respiratory conditions
- Other chronic health conditions
- Limited Mobility
- Limited Access
- Limited English language skills
- Working outside
- Lives or works in a building with air condition
- Other?]

5. In general, what are the ways that you have found to be (or you think would be) most effective for reaching vulnerable populations with important information during an emergency?
6. Similarly, what are the methods that you have found to be most effective for doing outreach and/or health education to these vulnerable populations? What has worked well, and why?
7. During a heat emergency, it will be important for the Department of Public Health to distribute messages about personal cooling strategies and first aid, to try to keep people healthy as much as possible. What do you think is the best way for us to ensure that vulnerable populations hear this message, specifically?

8. What do you think would be the best way to let people in your community, specifically vulnerable populations, know that they should relocate to city-run cooling centers to protect their health?
9. How far do you think members of your community would be willing to travel to relocate to a city-run cooling center? What are some reasons community members would hesitate to leave their homes?
10. What do you think will be the biggest barriers to reaching vulnerable populations during an extreme heat event, to help ensure their health and lives are protected?
11. Do you have any experience with emergency preparedness?
12. Do you have a disaster plan in place?

**Now I want to ask you just four questions about your thoughts on climate change. For each of these questions, I will pose a statement and I would like you to say whether you Strongly Agree, Agree, Disagree, or Strongly Disagree with the statement, and why. You may also answer “Don’t Know” if you don’t know.**

13. So, do you agree with the following statement: “San Francisco is currently experiencing climate change”? Would you say you Strongly Agree, Agree, Disagree, Strongly Disagree, or Don’t Know?
14. How about this one: “San Francisco will experience climate change in the next 20 years.” Do you Strongly Agree, Agree, Disagree, Strongly Disagree, or Don’t Know?
15. “Climate change will adversely impact public health in San Francisco in the next 20 years.” Do you Strongly Agree, Agree, Disagree, Strongly Disagree, or Don’t Know?
16. Finally, “San Francisco will be confronted with heat emergencies for the foreseeable future and they will be increasing in frequency.” Do you Strongly Agree, Agree, Disagree, Strongly Disagree, or Don’t Know?

**I only have one official question left.**

17. Are there any strategies you would suggest for vulnerable communities to work together to prepare for an extreme heat event? [Prompt: How can we work together to ensure that resources are distributed equitably across and within neighborhoods?]

**Thank you so much for your time. Before I go,**

18. Is there anything else you would like to add about your responses above, or anything else I didn’t ask that you think is important for me to know?