AAPCHO

SECOND EDITION 2014

Stories and Lessons Learned from Hurricane Sandy

AAPCHO EMERGENCY PREPAREDNESS COMPENDIUM

Highlighting Emergency Preparedness, Response and Recovery in Asian American, Native Hawaiian and other Pacific Islander Communities

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CONTRIBUTING SITES

Community Health Care Association of New York State

Matthew J. Ziemer, MPA, Emergency Management Program Director

Charles B. Wang Community Health Center

Lynn D. Sherman, MBA, Chief Financial Officer

Christopher A. Mei, MPH, Assistant Administrator

AAPCHO

Jeffrey Caballero
Executive Director

Nina Agbayani
Director of Programs

Stacy Lavilla
Director of Communications

June Kim
Program Director of Technical Assistance

Tuyen Tran
Program Coordinator

Beverly Quintana
Communications Assistant

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ABOUT AAPCHO

Established in 1987, the Associations of Asian Pacific Community Health Organizations (AAPCHO) is a national association of 34 community health organizations dedicated to promoting advocacy, collaboration and leadership that improves the health status and access of Asian Americans, Native Hawaiians and other Pacific Islanders (AA&NHOPIs) in the U.S. and its territories.

In recent years, emergency management has become an increasingly key element in public health. Natural disasters and other public health emergencies in the past decade have made it clear that improved coordination of emergency management efforts between health care providers, and with local, state and federal partners, are needed. These events raised the awareness of the importance of community engagement and the key role health centers play in effective emergency preparedness, response and recovery.

AAPCHO's 2007 Emergency Preparedness compendium highlighted successful emergency management strategies utilized by AA&NHOPI-serving Community Health Centers (CHCs) in the aftermath of events such as the attacks of September 11, 2001 and Hurricane Katrina in 2005.

In light of recent events and to continue to assist potential and existing CHCs in improving their performance in emergency management, AAPCHO developed this second edition of its emergency preparedness compendium entitled, *Stories and Lessons Learned from Hurricane Sandy*.

THE ROLE OF AA&NHOPI-SERVING CHCS IN EMERGENCY MANAGEMENT

For over 45 years, CHCs have provided comprehensive, culturally competent, quality primary health care services to medically underserved communities and vulnerable populations. As community-based and patient-directed organizations that serve vulnerable populations with limited access to health care, CHCs have proven to be essential in states of emergency. CHCs response to disasters like Hurricane Sandy in 2012, demonstrate their vital role as links to local communities and as an important component of the larger emergency response network. As champions of the communities they serve, CHCs foster a level of community engagement and trust necessary for effective emergency management efforts. In providing culturally and linguistically appropriate services, CHCs fill a critical gap in the services offered by traditional first responders and other emergency service providers.

While nearly all CHCs face difficult circumstances when responding to emergencies and disasters, those serving AA&NHOPIs encounter unique challenges. The AA&NHOPI population is the fastest growing and

most diverse racial group in the U.S., representing over 56 ethnic groups[1] and 100 different languages and dialects[2]. The challenges of providing culturally and linguistically appropriate care to meet the needs of this extremely diverse and fast growing AA&NHOPI population are often magnified during disaster response. For example, preparedness tips and disaster warnings disseminated on major media outlets and in English do not reach these and other limited English proficient (LEP) communities that depend on local ethnic media for information. Additionally, AA&NHOPI-serving CHCs are located in communities with high concentrations of medically underserved AA&NHOPIs, and are at the forefront of efforts to provide community-based linguistically accessible and culturally appropriate primary health care services to this diverse and growing group. While many traditional emergency service providers solely focus on providing trauma or triage care during disasters and emergencies, AA&NHOPI-serving CHCs play a critical role in offering culturally and linguistically appropriate social and enabling services, such as counseling, eligibility assistance, mental health counseling, and translation and interpretation.

The lessons learned from the first edition of our compendium highlighted the value and need for sharing best practices that are sensitive to the specific needs of AA&NHOPIs in emergency management efforts. The purpose of this second edition is to highlight the role of AA&NHOPI-serving CHCs within the larger emergency management community. To do this, AAPCHO reached out to an AA&NHOPI-serving CHC in New York, Charles B. Wang Community Health Center (CBWCHC), and the Primary Care Association (PCA) of New York, Community Health Care Association of New York State, in order to capture stories and lessons learned from Hurricane Sandy.

1. Centers for Disease Control and Prevention, *Asian American & Pacific Islander Heritage Month*, http://www.cdc.gov/minorityhealth/observances/AAPI.html (June 19, 2014).
2. One World Nations Online, *Official and Spoken Languages of Countries in Asia and the Middle East*, http://www.nationsonline.org/oneworld/asian_languages.htm (June 19, 2014).

This compendium spotlights the emergency preparedness, response and recovery efforts of:

- Community Health Care Association of New York State (CHCANYS)
- Charles B. Wang Community Health Center (CBWCHC)

As a PCA, CHCANYS serves as the major link between CHCs, their satellite sites, the Bureau of Primary Health Care of the Health Resources and Services Administration, Department of Health and Human Services, and state and local governments. As the only CHC in the Manhattan and Flushing Chinatown neighborhoods, CBWCHC provides high quality, affordable, and culturally and linguistically appropriate health care to Asian Americans and other medically underserved populations in NYC, a large majority of whom are low-income, uninsured or under-insured, and limited English proficient (LEP) Chinese Americans. Both CHCANYS and CBWCHC are in areas that were impacted by Hurricane Sandy. CHCANYS monitored and immediately responded to a dramatic increase in requests for assistance from health centers in New York, while ensuring that local, state and federal decision makers were aware of the impact Hurricane Sandy had on all of the health centers in New York. CBWCHC referred to lessons learned from past disasters to implement a smooth and nearly seamless response to Hurricane Sandy, using proven strategies such as working with local ethnic media to disseminate culturally and linguistically appropriate information to the community.

Through this second edition of AAPCHO's emergency preparedness compendium entitled, *Stories and Lessons Learned from Hurricane Sandy*, we hope to provide up-to-date, useful information for CHCs, PCAs, hospitals, state departments of health and other stakeholders in the area of emergency management, and to demonstrate the vital role health centers play in emergencies and disasters.

On October 29, 2012, Hurricane Sandy made landfall in southern New Jersey, impacting the entire eastern seaboard of the U.S. and leaving behind some of the heaviest damage in New York. Dubbed "Superstorm Sandy" by the media, Hurricane Sandy presented some of the greatest emergency management challenges from a natural disaster in recent years, and is the second costliest hurricane in U.S. history–second only to Hurricane Katrina[3]. Battering the coast, Hurricane Sandy destroyed 230 homes and severely damaged 8,500 more in NYC alone[4]. Heavy rain, strong winds and record storm surges, flooded roads and tunnels, blocked transportation corridors and deposited debris along the coastline. CHCs and other community-based organizations provided immediate response services, including culturally and linguistically appropriate health care and supplies, to AA&NHOPIs and other vulnerable populations.

3. Blake, E., Kimberlain, T., Berg, R., Cangialosi, J., & Beven II, J. (2012). *Tropical Cyclone Report Hurricane Sandy. National Hurricane Center*. Retrieved October 7, 2013, from http://www.nhc.noaa.gov/data/tcr/AL182012_Sandy.pdf.
4. Gibbs, L. & Holloway, C (2013). *Hurricane Sandy After Action: Report and Recommendations to Mayor Michael R. Bloomberg*. The City of New York. Retrieved April 2, 2014, from http://www.nyc.gov/html/recovery/downloads/pdf/sandy_aar_5.2.13.pdf.

The Role of Health Centers in Emergency Management: Perspectives from a Primary Care Association

ABOUT THE COMMUNITY HEALTH CARE ASSOCIATION OF NEW YORK STATE

Established in 1971 to give a voice to the state's network of CHCs as leading providers of primary care, Community Health Care Association of New York State (CHCANYS) is New York State's Primary Care Association (PCA) and is the oldest statewide PCA in the U.S. As a PCA, CHCANYS serves as the major link between CHCs, their satellite sites, the Bureau of Primary Health Care of the Health Resources and Services Administration, Department of Health and Human Services, and state and local governments. CHCANYS addresses the needs of CHCs by providing Training and Technical Assistance (T/TA) that enables CHCs to improve patient care and outcomes, strengthen their operations and finances, meet reporting obligations, and address regulatory changes. From clinical excellence to health information technology, and from emergency preparedness to eliminating health care disparities, CHCANYS' goal is to provide CHCs with the resources needed to provide high quality, community-based primary care to anyone in need, regardless of their ability to pay. CHCANYS works closely with the more than 60 CHCs that operate approximately 600 sites across the state. These health centers serve 1.5 million New Yorkers annually and are central to New York's health care safety net.

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PREPAREDNESS

Emergency Management T/TA

In line with the organization's mission to provide CHCs with the resources they need to ensure that all New Yorkers have continuous access to high quality community-based health care services, CHCANYS provides the preparation assistance, tools and agency connections New York CHCs need to respond to crises. CHCANYS assists CHCs in their efforts to establish and implement effective emergency management plans by providing T/TA that "helps CHCs to do the disaster planning that they need

to do, so that they can respond and recover from emergencies well, and so they can remain open or open up quickly following a disaster," said Matthew Ziemer, who was the emergency management program director at CHCANYS during Hurricane Sandy.

A lot of CHCANYS emergency management work with CHCs comes before the disaster in the preparedness phase, conducting T/TA to make sure the CHCs' emergency management plans are up-to-date. To help CHCs achieve their highest level of preparedness possible, CHCANYS offers resources including an Emergency Preparedness Manual Template, an editable guide to help CHCs in preparing, training, and responding to any potential emergencies; an Emergency Preparedness Online Course; and other emergency preparedness education materials.

CHCs face a multitude of issues during disasters, ranging from responding to internal emergencies (ensuring the safety of patients, visitors and staff, and protecting facilities and vital equipment) to providing mass reception and triage care (serving as points of convergence for injured, infected, worried, or dislocated community members and likely playing the minimum role of providing triage, reporting, stabilization and holding services) and coordinating the reception of hospital overflow (serving people with minor injuries to relieve the pressure on surrounding hospitals overwhelmed with cases requiring high levels of care). On top of these issues, CHCs must also maintain ongoing routine patient care and continue to serve as a conduit of information in languages spoken by the communities they serve.

CHCANYS' emergency management resources help CHCs in developing and maintaining an emergency management plan to guide their response to these and all hazards, and may be used to both initiate and maintain emergency management programs. These resources include template policies, procedures, and forms needed to create a comprehensive plan such as: facility checklists, volunteer/staff registration/credentialing forms, incident action plans (e.g., evacuation and response plans for natural disasters, bioterrorist attack and other emergencies), crisis communications message forms, and patient tracking forms.

During disasters, CHCANYS plays a coordinating and information-sharing role between state or city Departments of Health (DoHs) and Offices of Emergency Management (OEMs), and CHCs. For

example, prior to Hurricane Sandy during the H1N1 pandemic in 2009, CHCANYS constantly relayed information (e.g., vaccine in-language fact sheets and brochures) from DoHs at the state and city level to CHCs. CHCANYS then gathered feedback from CHCs (e.g., H1N1 cases and incident reports on the ground) and relayed it back to the DoHs and OEMs. As the PCA for New York, CHCANYS is able to be a conduit for information that the DoHs benefit from whenever they need to have quick two-way communication with multiple CHCs.

After states of emergency, CHCANYS works to ensure that decision makers at state and local levels are aware of the needs that CHCs have and how these needs can be best met. For instance, after Hurricane Sandy, CHCANYS did a lot of work to make sure that decision makers at the state level were aware of how severely impacted CHCs were in New York, if they experienced physical damages (i.e., flooding, power outages) and/or infrastructure and operational damages (i.e., loss of revenue due to closures), so that they could adjust their federal request for disaster funding appropriately, to be able to provide financial assistance to the CHCs of New York.

> **"During disasters, CHCANYS plays a coordinating and information-sharing role between state or city Departments of Health and Offices of Emergency Management, and CHCs."**

RESPONSE & RECOVERY

Information Sharing and Coordination

During Hurricane Sandy, CHCANYS played a coordinating and information gathering and sharing role between CHCs and New York's state and city DoHs and OEMs. A year prior to Hurricane Sandy, CHCANYS' data gathering and information sharing efforts were seen as one of the strengths of the organization during Hurricane Irene. The PCA was able to collect information on which CHCs were damaged, shut down, or lost power and was able to pass the information to state and local partners with relative ease. In passing along this information to DOHs and OEMs, CHCANYS advocated for aid and resources to be sent to CHCs impacted by the storm. This was not the case with Hurricane Sandy.

Due to Hurricane Sandy being a much broader storm and affecting a wider area, the damage it caused was so much greater, which made gathering information from CHCs more challenging for CHCANYS. Over a course of about a month, CHCANYS developed a needs assessment survey, which it sent out to CHCs to help identify the

issues they were experiencing after the storm hit. With the responses they received, CHCANYS was able to develop a needs assessment and an impact assessment, which they brought to state and local decision makers to demonstrate the impact of the storm on CHCs.

Additionally, Ziemer described a day in the life post-Sandy at CHCANYS as starting early in the morning checking for responses to the survey, which consisted of questions like, "Are you guys (CHCs) out there? Do you have damages? Do you have power/ water? Are you seeing patients? If you are seeing patients, how many are you seeing and is that a big change from the ordinary? Are you seeing any needs in your community that we can pass along to OEM or DoH?" He then would compile these responses and pass along a "snapshot" to OEM or DoH, all while addressing ongoing need requests from CHCs. To ensure that the organization had the capacity to continue to dedicate attention to such efforts, CHCANYS sought funding from a Non-Governmental Organization (NGO) called AmeriCares, to develop a comprehensive information gathering toolkit.

Aside from monitoring CHCs' needs through the needs assessment and daily check-in calls to CHCs, CHCANYS also worked to ensure that much needed appropriate resources from DoHs and OEMs reached the health centers. For example, when resources geared towards consumers came through (incl. resources on location of family assistance centers, guidance on what to do if your home has been flooded, etc.) CHCANYS made sure that if translated versions (e.g., Spanish, French, Chinese, Russian) were available that they were sent to the appropriate CHCs.

In addition to information gathering and sharing, CHCANYS also played a coordinating role between CHCs and other partners during Hurricane Sandy. CHCANYS "coordinated the meeting of organizations so they can figure out how they can help each other" said Ziemer describing the PCA's role in linking CHCs and with other organizations that could provide assistance or resources. For example, the Beacon Christian Community Health Center (BCCHC) in Staten Island, did not experience any damages and did not have problems getting employees to come into work but also did not have much to do in their surrounding area since patients were unable to travel to their clinic. BCCHC reached out to CHCANYS to see if there was anything they could do to help and at the same

time AmeriCares also reached out to CHCANYS letting them know they had a mobile medical van but no one to staff it. CHCANYS connected AmeriCares with BCCHC, resulting in BCCHC borrowing AmeriCares mobile medical van to provide care to their community, including flu and tetanus vaccines.

Demonstrating the Impact and Funding Assistance

After Hurricane Sandy, CHCANYS played a critical role in ensuring that local and state decision makers were aware of the key role CHCs played during the storm, and of the needs CHCs faced because of the storm and how such needs can be best met. For instance, Ziemer shared a story of how the William F. Ryan Community Health Center, operating only with a generator, had no power to some of its exam rooms and yet continued to operate using lanterns to provide services to the vulnerable populations it served. Ziemer also set up meetings with city and state DoH and OEM leaders, as well as local policymakers saying, "This is something you need to look at. These are health centers that really got hit hard by the storm and their communities are relying upon them for their medical needs. If we don't help out these health centers, then this is really going to impact the way that these underserved communities are going to get their health care." With Ziemer and other CHCANYS staff present at these meetings championing CHCs, they were able to raise awareness of the important role CHCs played and the challenges they faced during the storm.

> **"Based on survey responses that CHCANYS gathered, CHC loss of revenue tallied up to $18M"**

Using the data it gathered from its needs assessment survey, CHCANYS was also able to demonstrate the huge impact loss of revenue had on CHCs. Based on survey responses that CHCANYS gathered, CHC loss of revenue tallied up to $18M, which Ziemer described as, "[adding] up quickly for CHCs already operating at low margin to begin with." AA&NHOPI-serving CHCs operate at a low margin and face challenges similar to other CHCs that provide culturally and linguistically appropriate care to the vulnerable populations they serve. However, AA&NHOPI-serving CHCs also face the added challenges of serving a multitude of languages represented by this fast growing and extremely diverse group, and of providing an incredible amount of enabling services for the LEP patients within this population, often further burdening their operating

margin. Ziemer demonstrated that without financial assistance, CHCs would have no way to cover the loss in their revenue and would have difficulty paying their basic operating bills, including paying staff. In addition to loss of revenue, CHCANYS also helped to demonstrate the need for CHCs to be reimbursed for their emergency response activities including providing basic supplies like water to the communities they served, immediately after the storm hit before the Federal Emergency Management Agency (FEMA) and government aid arrived. In addition to talking with federal, state and local partners, CHCANYS also helped to connect CHCs with other funders including AmeriCares and Direct Relief USA.

Knowing that not every health center is able to have a full time emergency management staff, CHCANYS's goal was and still is to make it easier for CHCs to incorporate emergency management in their existing daily routines. Whether it is in providing the preparation, tools or agency connections, CHCANYS works to help all CHCs in New York achieve the highest level of preparedness possible.

LESSONS LEARNED

- Stronger collaborations between CHCs and local, state and federal agencies are crucial to the success of emergency response efforts. Establishing these stronger partnerships and collaboration in all aspects of emergency management–preparedness, response and recovery–helps to ensure that the needs of CHCs and the underserved communities they serve are not overlooked.

- Organizations should also consider partnering with other emergency service providers organizations, including NGOs, in order to pool resources that can be beneficial to all communities.

Providing Culturally and Linguistically Appropriate Care During a Disaster: Perspectives from a Community Health Center

ABOUT THE CHARLES B. WANG COMMUNITY HEALTH CENTER

For more than 40 years, the Charles B. Wang Community Health Center (CBWCHC) has provided high quality, affordable, and community-driven comprehensive health care to Asian Americans in NYC. A large majority of CBWCHC's clients are low-income, uninsured or under-insured, and limited English proficient (LEP) Asian Americans with no sources for basic health care. As the only CHC in the Manhattan and Flushing Chinatown neighborhoods, CBWCHC is unique among other health care providers not only because it ensures that the services it provides are linguistically and culturally appropriate, but also because it is located within and is more physically accessible to the community it serves. In addition to providing comprehensive primary care services, CBWCHC promotes the health of the community through various activities that include health education and advocacy programs, and by recruiting and training bilingual health care providers. In addition to its clinical services, CBWCHC also nurtures professionals in health, social services, and other fields for community service through its training and internship programs.

> ***"As the only CHC in the Manhattan and Flushing Chinatown neighborhoods, CBWCHC is unique among other health care providers not only because it ensures that the services it provides are linguistically and culturally appropriate, but also because it is located within and is more physically accessible to the community it serves."***

PREPAREDNESS

In addition to providing quality and culturally competent primary care, CBWCHC, which serves primarily Chinese Americans, has a proven track record of developing and implementing culturally and linguistically appropriate emergency management strategies. As an important component of the larger emergency response network, CBWCHC serves a population whose needs are not fully addressed by traditional first responders and other emergency service providers. While many of these traditional emergency service providers solely focus on providing trauma or triage care during disasters and emergencies, AA&NHOPI-serving CHCs like

CBWCHC play a critical role in offering culturally and linguistically appropriate social and enabling services, such as counseling, eligibility assistance, mental health counseling, and translation and interpretation.

> **"As an important component of the larger emergency response network, CBWCHC serves a population whose needs are not addressed by traditional first responders and other emergency service providers."**

Prior to Hurricane Sandy CBWCHC played a key role in serving the Chinese American community following the attacks of September 11th. As a result of the attacks, CBWCHC experienced an influx of individuals visiting the CHC for mental health disorder treatment and consultation services. As the only CHC in NYC's Chinatown neighborhood, CBWCHC expanded its mental health services to accommodate this need. CBWCHC's now nationally renowned mental health program helped to reduce stigma attached to mental health illness within the Chinese American community, and provided its patients with services that put them on the road to recovery. CBWCHC ensures that it maintains this culture of continuous emergency management planning, implementation and review through the efforts of its Emergency Management Committee.

Emergency Management Committee

CBWCHC's preparations for Hurricane Sandy began a few days before the storm made landfall on October 29, 2012. These initial efforts were taken on by CBWCHC's Emergency Management Committee, which is a multi-disciplinary team charged with handling the CHC's emergency operation plans and securing necessary resources to ensure a prompt, coordinated and effective response during an emergency or disaster. In addition to the health centers' executive staff (i.e., Chief Operating Officer, Chief Medical Officer, Chief Financial Officer), CBWCHC's Emergency Management Committee consists of heads from many of the health center's departments, including members from the clinical (i.e., Clinical Director), administrative (i.e., Director of Human Resources), and IT team (i.e., Director of IT). From the outset of Hurricane Sandy, the mayor's press office issued updates on the storm's progress through multiple channels, and was helpful in informing CBWCHC's Emergency Management Committee of necessary action steps. Due to the leadership and diverse experiences of the Committee, the decisions regarding site closure for the CHC and the duration

of those closures, were made before the storm hit, and earlier in the emergency management process compared to past disasters.

The decision on whether to close a site is a challenging step in any provider's emergency management plan but oftentimes moreso for an AA&NHOPI-serving CHC like CBWCHC. Being the primary and often only source of health care for the Chinese American community in NYC, CBWCHC goes beyond what other emergency service providers may take into consideration when deciding whether to close during disasters and emergencies. Factors that CBWCHC take into consideration during the decision-making process include their low-income and LEP patients' transportation and access to care. "The biggest challenge is balancing between being there for the community and deciding when to open," said Lynn Sherman, chief financial officer at CBWCHC and member of the Committee. Weighing revenue versus expense Sherman added, "We've been open during certain disasters and no patients came in. Then for some emergencies, we opened and served 20 people who would've otherwise not have received the care that they need. Schools and subways may be closed but there might still be some people who come to us, who might need us and we should be open."

Having the diverse experiences of all of the members of CBWCHC's Emergency Management Committee helped to inform the decision on when and for how long to close the health center, but having a clear decision maker within the Committee also proved to be extremely critical during Hurricane Sandy. While the Committee convenes to exchange ideas and suggest possible solutions, the role of making the ultimate decisions in the Committee has been given to Betty Cheng as the Chief Operating Officer and Dr. Perry Pong as the Chief Medical Officer, because according to Sherman, "they're closest to our patients' needs." The Committee decided to close the health center's sites down before the storm made landfall on October 29, 2012, with its Flushing site opening just two days later on October 31, 2012 and its Manhattan sites opening four days later on November 2, 2014.

Communicating with Staff

Also key to CBWCHC's emergency planning efforts was consideration of the organization's internal communications protocols. To ensure effective communication with its staff during disasters and emergencies, CBWCHC continuously fine-tunes its phone tree process to better serve the needs of its multilingual and multicultural staff. "I'm the biggest proponent of the basics," Sherman said referring to CBWCHC's regular notification drills with its staff, which tests and evaluates the health center's phone tree system. "It's not just getting the notification out, it's also closing the loop and tracking your employees to make sure they received the information. Most people say they have a phone tree but they never test it. We randomly test it all the time," she continued, giving examples of when the phone tree did not work. "For example, I called one of my supervisors and no one in her house spoke English. We never had any problems reaching her before, but this time she just wasn't home and I couldn't leave a message. That caused me to change the order of who I called and I changed it so that a Chinese-speaking staff called her instead." This example also serves as a reminder to health centers to consider the linguistic needs of not only their patients, but also of their employees and families.

To highlight why "closing the loop" is a key part of CBWCHC's phone tree system, Sherman shared another story saying, "One year, we closed the health center for a snow storm. We activated our phone tree, everybody called but] we still had a staff member travel to the clinic for two hours, only to arrive there when it was closed. The reason she traveled was her supervisor left her a message, which she didn't receive because she had already left her house." The lesson the health center learned from this instance was that "closing the loop," or having the caller confirm that the staff member received his/her message, is just as necessary as placing the initial call. During emergencies, having good communication with staff is extremely critical, and regular testing and evaluation of their phone tree system enabled Sherman and other CBWCHC management staff to see what worked best for them and their teams.

And lastly, the Emergency Management Committee evaluated the CHC's electronic communication. As a part of this process, the

Committee refined its protocols for email: if an email is sent to staff for a tentative closure, the email should include a clear time frame of when a final decision regarding closure can be expected. Overall, CBWCHC's extensive emergency management experience, and strong consideration of linguistic and cultural appropriateness, enabled the health center to anticipate the importance, of this and other preparedness considerations related to communicating with its staff.

RESPONSE & RECOVERY

Power Outages

In the immediate aftermath of Hurricane Sandy, all of CBWCHC's sites were closed. The health center's Flushing site was the first to open just two days after the storm hit, while its remaining three sites in Manhattan took longer to re-open due to power outages. From October 31, 2012 to November 2, 2012, CBWCHC's Flushing site immediately served more than 670 patients. When the health center's sites in Manhattan opened on November 2, 2012 to November 5, 2012, the sites served over 2,200 patients combined. A large majority of these patients were Chinese Americans from the surrounding Chinatown neighborhood who, if it were not for CBWCHC being open, would have likely had to wait to receive services from FEMA and other government aid, which arrived days later after the storm.

"A large majority of these patients were Chinese Americans from the surrounding Chinatown neighborhood who, if it were not for CBWCHC being open, would have likely had to wait to receive services from FEMA and other government aid, which arrived days later after the storm."

One of the biggest concerns for a CHC during a power outage is the loss of patient data, which would lead to a longer disruption in the health center's operations and services. Although CBWCHC experienced two to three days of downtime in providing services due to power outages, the center was able to resume operations quickly after the power came back on due to the fact that center now completely operates on Electronic Medical Records (EMRs). EMRs are more beneficial than paper records because it allows providers to more quickly track and identify information key to a patient's care,[5] which is especially critical during emergencies and disasters. Another issue that CBWCHC had to consider during

5. HealthIT.gov, *Benefits of Electronic Medical Records,* http://www.healthit.gov/providers-professionals/electronic-medical-records-emr (June 18, 2014).

these power outages related to patient data was the location of their main EMR server and what to do if that location had no power. A lesson learned in this instance was the need for the center to evaluate different scenarios, including hosting their EMRs virtually on a cloud-based system.

CBWCHC's phone system was also impacted by the power outages caused by the storm. With some of their sites down due to power outages, CBWCHC redirected the closed sites' phone lines to their open site. Phone lines were smoothly redirected to the Flushing site via their telephone company, but it took a few days for them to restore the lines back to their Manhattan sites due to the telephone company being overwhelmed with similar requests from other organizations. A lesson learned from this instance is that when necessary (i.e., when phone lines are down at one site due to power outages), phone lines can and should be redirected to an operating site in order to continue to provide services to patients who may be trying to get care from a closed site.

Outreach and Media

During Hurricane Sandy and other emergencies, CBWCHC served as a "conduit of linguistically appropriate information to the community," said Sherman. Learning from past disasters, the health center knew that culturally and linguistically appropriate outreach was important in reaching the population it serves. Although the city pushed out information through multiple channels, including major television networks, social media, and NYC.gov sites, many of NYC's Asian American communities still referred to CBWCHC and other community-based organizations for in-language updates about the storm. Since CBWCHC had the capacity to provide information in languages such as Cantonese, Mandarin and Korean, it partnered strongly with local ethnic media, "doing a lot of radio broadcast and television interviews," said Sherman, before, during and after the storm.

"Although the city pushed out information through multiple channels, including major television networks, social media, and NYC.gov sites, many of NYC's Asian American communities still referred to CBWCHC and other community-based organizations for in-language updates about the storm."

CBWCHC also made sure to update its website with the latest information including when and what hours the health center would be open, as well as tips for patients on what to do after Hurricane

Sandy hit. If CBWCHC wanted to put any information on the website or relay information to the community through other channels (via Chinese language radio and newspapers, flyers, etc.), the center would disseminate the information through its Health Education Department, which is charged with making sure the information was communicated and translated accurately.

LESSONS LEARNED

- AA&NHOPI-serving CHCs like CBWCHC, which serves primarily Chinese Americans in NYC's Chinatown neighborhood, play a vital role in larger response and relief efforts, providing culturally and linguistically competent care and outreach traditional first responders and other emergency service providers may be unable to provide, including enabling services, such as counseling, eligibility assistance, mental health counseling, and translation and interpretation.

- Culturally appropriate outreach is important in reaching the Chinese American community of NYC and other LEP AA&NHOPI communities during a state of emergency. In-language approaches are most effective, including working with local ethnic media to disseminate critical information to the community.

- Clear and prompt internal communication with staff is just as important as external communication with patients and the larger community. CHCs should ensure that emergency policies and procedures are in place, and are continuously tested and evaluated.

CONCLUSION

CHCs play a vital role in serving AA&NHOPI and other vulnerable populations during emergencies and disasters. The challenges of providing the culturally and linguistically appropriate care necessary to meet the needs of these populations are often magnified during times of crisis. The stories and lessons learned highlighted in this compendium demonstrate the role of CHCs, particularly those serving AA&NHOPI and other vulnerable populations, within the larger emergency management community and the importance of improved coordination of emergency management efforts between CHCs and other health care providers, as well as with local, state and federal partners. We hope that CHCs, PCAs, hospitals, state departments of health and other stakeholders in the area of emergency management, find the information highlighted in this compendium useful in their local emergency management efforts and use the lessons learned to continue to incorporate CHCs in regional emergency management plans in order to ensure that all communities have access to the critical care that they need, especially in times of crisis.