Workshop #5: Workforce: Evacuations, Shelter Staffing, Workforce Structure, Capacity, PPE, and Telemedicine

After-Action Report (AAR)

May-June 2020

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WORKSHOP #5 OVERVIEW

Workshop Name	Workforce: Evacuations, Shelter Staffing, Workforce Structure, Capacity, PPE, and Telemedicine
Workshop Date	Wednesday, June 10, 2020
Scope	Workshop conducted virtually through Zoom breakout sessions and asynchronously through Zeetings: www.zeetings.com/wieyusuf/0009-8859-0001
Objectives	Discuss workforce and staffing issues related to evacuation and sheltering, with particular focus on COVID-19 implications, including effects on shelter capacity, demands for staff and volunteers, staffing challenges, and need for specialized resources.
Threat or Hazard	Compound threat stemming from the occurrence of a tropical cyclone during a global health emergency, such as the COVID-19 pandemic.
Scenario	A major hurricane triggers a large-scale evacuation within, across, and beyond a region, requiring county and municipal governments to open emergency shelters and facilitate evacuation.
Sponsor	National Science Foundation-funded Social Science Extreme Events Research (SSEER) Network and the CONVERGE facility at the Natural Hazards Center at the University of Colorado Boulder (NSF Award #1841338)
	CONVERGE COVID-19 Working Groups https://converge.colorado.edu/resources/covid-19/working-groups
Participating Organizations	National, state, and local emergency and disaster planners and responders, public health professionals and officials, policy makers, researchers, nonprofits, advocacy groups, social services, community members, and others.
Point of Contact	Wie Yusuf, PhD, Old Dominion, School of Public Service and University Institute for Coastal Adaptation and Resilience. jyusuf@odu.edu Project website: https://sites.wp.odu.edu/hurricane-pandemic/ Please share comments and feedback on this report here: https://forms.gle/xfFGktLJSNifpdbj8.

EXECUTIVE SUMMARY

Participants in the breakout sessions for the CONVERGE COVID-19 Working Group's *Workshop 5 (Workforce)* identified several issues, including unique staffing challenges for this compound event, needed training revisions to address shelter protocols specific to COVID-19, additional staffing needs based on the unusual use of congregate and non-congregate shelters to address COVID-19 risks, and the increased need for ancillary services for staff and volunteers during and after an event.

Ensuring shelter operations are maintained despite COVID-19 will require adequate staffing. Layoffs, furloughs and hiring freezes have affected base employee numbers, where many jurisdictions rely on county and city employees, along with volunteers, to staff shelters. Shelter staffing could be further limited by the exclusion of employees who may be medically vulnerable because of underlying health conditions or at higher risk based on their age. In addition, staff may be reluctant to report to shelter assignments over fear of exposure to COVID-19; they could opt to stay home or refuse shelter assignments. To mitigate these risks, shelters must implement physical distancing and other specialized procedures to limit potential exposure, which, in turn will lead to greater needs in staffing (e.g., atypical sanitation work to minimize potential exposure to COVID-19) and resources (e.g., personal protective equipment)—not only to ensure the safety of both shelter staff and evacuees, but also to alleviate staff fears and concerns.

In light of the compound nature of this hurricane season during an ongoing pandemic, there will be additional responsibilities and stressors for hurricane shelter staff and volunteers that indicate additional training needs. Many jurisdictions require that city or county employees serve as essential staff during disasters and receive annual training for these roles. However, this training does not address how to respond during a hurricane-pandemic event. Additional training components are needed; however, many jurisdictions have already hosted their annual training sessions.

The use of congregate and non-congregate shelters imposes unusual staffing requirements that affect the logistics of workforce staffing. More congregate shelter locations will be needed to achieve distancing requirements and non-congregate sheltering also may be used to shelter evacuees who are medically vulnerable—both will create additional staffing demands, in some cases, highly specialized (e.g., onsite medical personnel). In addition, further clarity is needed about who will staff non-congregate shelters (e.g., hotel workers or traditional shelter staff).

Participants also identified ancillary resources needed to support and protect staff (e.g., call centers to support individuals seeking information). While technology can be an important resource (e.g., touch-free intake devices and telehealth systems), potential power and internet disruptions create limitation. Staff also will need medical and epidemiological support to monitor symptoms and track outbreaks within the shelters. Ensuring the psychological well-being of shelter staff and evacuees also will require atypical ancillary resources.

1.0 BACKGROUND AND OBJECTIVES

Workshop 5 (Shelter Staffing) had 145 registrants from 22 states and included faculty and researchers associated with six universities from multiple academic disciplines, such as public health, biology, public administration, engineering, human services, engineering, anthropology, public policy, and international studies. Registrant roles included sustainability strategists, disaster project coordinators, emergency coordinators, operations directors, planning coordinators, shelter coordinators, mental health coordinators, exercise coordinators, community volunteer leaders, preparedness planners, and medical directors.

Registrants expressed that their most important goals regarding workforce and shelter staffing during a hurricane-pandemic included ensuring adequate numbers of trained staff and volunteers, protecting safety of staff and evacuees and minimizing exposure to infectious disease, providing appropriate mental health support, and identifying COVID-19 issues that need to be proactively addressed in workforce planning for evacuation and sheltering during a hurricane. Sample statements included:

"Prepare the workforce in order to safely help our vulnerable population at the shelter."

"Ensuring adequate and trained workforce that is well-protected."

"Ensuring there are strategies or safety measures in place to help keep employees working in shelters safe."

"Ensuring that the workforce is properly trained on infection control and hygienic practices in order to prevent the spread of contagious disease (COVID-19 and other respiratory diseases) within shelters."

"To ensure adequate amounts of trained personnel are available to staff disaster shelters, so as to provide an acceptable level of service and care to shelter occupants. To minimize the exposure of staff to infectious disease."

"Ensuring there are strategies or safety measures in place to help keep employees working in shelters safe."

"The most important goal regarding the workforce for the upcoming Hurricane Season is to set up a Mass Sheltering system to accommodation the needs of citizens during a Hurricane that incorporates COVID-19 protection strategies for awareness, education and social distancing etiquette appropriately."

"Understand workforce issues and how they may be proactively addressed through training, selection, etc."

"To ready teams that are confident and comfortable with the "Know-What", "Know-How", "Know-Whys" of their roles and tasks"

1.1 Discussion Topics and Questions

Workshop 5 (Workforce) had 86 registrants. Participants were randomly assigned to four concurrent breakout group discussions. These breakout groups discussed the current status of shelter staffing, challenges due to COVID-19, gaps in staffing and workforce planning, and specialized staffing needs associated with the need for PPE and telemedicine. The breakout discussion ended with a 2-minute question burst, encouraging participants to share concise single issues, pressing concerns, and outstanding questions.

These four concurrent breakout discussions, simultaneously moderated, included four rounds of questions and discussions:

- **Round One:** What are staffing needs of shelters under 'normal' conditions and how might these staffing needs change under COVID-19 conditions?
- **Round Two:** What are some of the current gaps in shelter staffing plans and what are the prospects to fill these gaps this season?
- **Round Three:** What ancillary resources (e.g., personnel, technology, supplies) are needed to support and protect shelter staff?
- **Round Four:** 2-minute question burst

2.0 PRELIMINARY QUALITATIVE DATA ANALYSIS

The workforce and staffing issues that participants are considering, as drawn from discussion across the four rounds, included:

- **Key Consideration 1:** State, city, and county staff are trained to staff shelters under normal conditions, but not for sheltering under hurricane-pandemic conditions.
- **Key Consideration 2:** More shelters are needed, more staff and volunteers are needed to staff the shelters, and specialized training is needed for staff and volunteers.
- Key Consideration 3: Training is needed to uptrain existing and prepare new staff and volunteers. COVID-19-specific training and cross-training for multiple roles are essential.
- **Key Consideration 4:** There remain key questions and issues regarding non-congregate shelters and staffing for these shelters.
- **Key Consideration 5:** Additional resources are needed to communicate with evacuees, protect staff and evacuees, meet demands of special-needs populations, and ensure the well-being of staff and evacuees.
- 2.1 ROUND ONE: What are staffing needs of shelters under 'normal' conditions and how might these staffing needs change under COVID-19 conditions?
- 2.1.1 Key Consideration 1: City, County employees are trained to staff shelters under normal conditions rather than the compound threat of pandemic conditions, not Hurricane + COVID-19
 - City and county employees who staff shelters receive training for hurricane events:
 - o City and county employees are generally required to staff evacuation shelters.
 - Some human resources departments are responsible for assigning staff members to teams to staff evacuation shelters.

"As an [city] employee, we all are required to volunteer at shelters. We're assigned to shelters and go through extensive training every year, and if our shelter is called, we must report. So, at that point, we are considered essential."

• In some jurisdictions, staffing was already a challenge in prior events without the addition of COVID-19 considerations.

"It used to be the Red Cross [staffing the shelters], but it is now the county. The staff has been trained with what to do. The training happens once a year, to make sure you know your role."

"Staffing is a challenge in a non-COVID-19 situation. So, we're assuming that as going to be exacerbated by COVID-19 in terms of the absenteeism."

- Front line staff are already fatigued. People are reporting to duty already stressed out.
- What about long-term staffing of shelters or long-term recovery needs?
- What happens if the shelters need to remain open beyond the storm; will we have enough staff to keep them open for evacuees? This is a struggle every year, and how will COVID-19 exacerbate this issue?

"If staff are exposed at the shelter, they may have to be quarantined afterwards. As we serve in both response and recovery operations, that could impact our abilities to assist in recovery."

- Training, which is an issue for staff during normal times, is now more so, especially
 due to high rates of turnover and fewer staff based on furloughs, hiring freezes, and
 lay-offs:
 - City and county staff members are trained annually, and in some jurisdictions, hurricane training has already concluded.
 - o During the pandemic, staff roles and responsibilities may change, requiring training to help them adapt to their new environments and function effectively.
 - Existing shelter training did not contain information regarding COVID-19 because it was not an issue at the time.

2.1.2 Key Consideration 2: Staffing Complications and Challenges Related to COVID-19

- COVID-19 raises challenges and uncertainty for employees who are required to staff shelters:
 - Adds another layer of complexity (e.g., lower staffing levels because of illness or high-risk status of individual staff). This issue is especially prevalent in specialneeds shelters.
 - Because of fears over the risk of infection and other safety concerns, staff may be unwilling to present themselves at congregate shelters, unless they are essential workers or mandated to do so.
 - Some employees are considered too high-risk for COVID-19 (e.g., those 65 years and older or who have underlying health conditions) and cannot be required to staff shelters.
 - Need to determine who is at risk and identify replacements.

"Everybody in the county is considered a central employee. So, we could pull from any department [to assign to staff shelters] We don't really see an issue with shelter staffing because it's all built into every employee contract. What we are running into currently are the issues with those who are 65 and older and have different medical conditions who you would usually rely on to go to shelters for shelter staffing but now we can't."

"How are others mentally preparing their staff for shelter operations? Many of our staff have indicated that they are somewhat fearful, and they perceive sheltering during COVID-19 to be particularly dangerous."

- Employers and volunteers may need to be incentivized to staff shelters.
 Arrangements should be made in advance to ensure they are effective.
- o Employees may refuse to report for shelter assignments.

"[In the first phase of COVID-19] when we tried pulling volunteers, no agency would touch it with a 10-foot pole. Then, even our county employees that are trained to be shelter workers ... a lot of them, actually, refused."

"... fear that volunteers or employees will be more likely to just take the demerit and not report instead of putting themselves at risk?"

- o How do we respond to staff who choose not to come in because they are scared of catching COVID-19?
- o Employers have the option to force employees to work when there are concerns over absenteeism.
- Need to cross-train staff to prepare for cases of shortages or a key staff member becoming infected or ill.

"To hold staff members accountable in case they do not want to show up they have the possibility to be terminated."

- Challenges for shelter volunteers:
 - There are possible volunteer shortages; they tend to be older and at greater risk from COVID-19 exposure.

"A particular problem with the age group being over 65. Do we have enough PPE for these populations? We can't ask especially at-risk populations to volunteer if we don't have proper protection for them."

"Also means we need to mobilize more volunteers and train them ahead of time. That in itself may pose problems as volunteers fall within the high-risk/older category and may be less willing to volunteer during the hurricane season."

- There is a risk of compassion fatigue among staff and volunteers. These people have been working, and given COVID-19, there may not be as much of a willingness to transition to a shelter staff role if a hurricane hits.
- Many staff members are currently teleworking and will be difficult to assign employees to a shelter when we are still largely shielding them from their regular work sites. How do we ease the immediate transition from work-from-home to staffing shelters?
- Are there legal concerns if an employee or volunteer gets sick while working at a shelter?
 - Volunteer organizations have refused to work during the pandemic because of the risks.
 - Will staff be required to sign waivers?
- Antibody testing for shelter staff may be an impractical solution because of associated costs and waiting periods, especially for repeated testing:
 - What is the legality is of forcing employees to work and testing them under pandemic conditions?
 - Shelters may need to rely on temperature checks of incoming staff, which is easy and inexpensive but may be an unreliable indicator of COVID-19.
- The current social climate may require additional law enforcement staffing at shelters:
 - o Is there a need to employ staff with policing power for security to reduce stressors to the shelter and clinical staff? Most shelters have sheriff's deputies assigned to the locations.
 - o Jurisdictions should consider other security staff and possible alternatives.
 - Concerns were expressed about the possibility for increased violence at shelter locations.
 - Will shelters be able to protect victims of domestic violence and properly screen for sex offenders?

Strategies

• Plan for a certain amount of absentee staff and reduced volunteers.

"We have anticipated staff not showing up or quitting. So, we're trying to look at all the scenarios, both good and bad, just to try to be halfway to prepare."

• Incentivize and reward staff (e.g., hazard pay, additional paid time off, and good food).

"...there should be some type of bonus or something for the people that actually have to do the work, some extra days off or paid leave for doing this. It doesn't happen very often that we do

have to open up a shelter or two, but I think there should be some extra compensation that the city should look at because this is really putting your health at risk other than just being uncomfortable working in the shelter."

2.1.3 Summary of the Round

Discussion in Round One emphasized that government employees are typically assigned to staff shelters during a hurricane and trained to work in the shelters. The training, however, has not incorporated any COVID-19 considerations. Furthermore, staffing is already a challenge without the compound threat of a hurricane and pandemic. Because of recent budget constraints at the local level from the economic slowdown in response to COVID-19 quarantines, current staffing levels are even lower than usual as a result of furloughs, layoffs, and hiring freezes. Staffing and volunteer pools are also affected by COVID-19 illnesses and risks of exposure for medically vulnerable staff and volunteers; in particular, volunteers tend to be older and therefore more vulnerable to COVID-19 exposure. This creates unique staffing challenges for evacuation and sheltering under these compound threat conditions. Fears over exposure to COVID-19 also may reduce employees' willingness to fulfill their shelter responsibilities.

2.2 ROUND TWO: What are some of the current gaps in shelter staffing plans and what are the prospects to fill these gaps this season?

2.2.1 Key Consideration 1: Insufficient Staff and Volunteers for Additional COVID-Related Protocols and Extra Shelter Locations

"To meet social distancing, we will need to open more shelter facilities and, therefore, need more staff to meet the needs of additional facilities."

"The lower density is going to require that we have bigger, more spread-out shelters and we also now need more security and door monitors, and the screening and intake process will require more staff."

"We would not be opening all our shelters, mainly because of staffing. We lost a lot of parttime employees due to cutbacks and they were at least 40% of our staffing."

- Social-distancing requirements will induce added shelter locations and related additional staffing needs while there is an ongoing staffing deficit.
- Staff is needed to address general shelter needs, such as logistics, client escort, security, hygiene and facilities workers, shelter managers, and veterinary technicians.
- The use of non-congregate facilities (e.g., hotels, motels, and resorts) in response to COVID-19 will require additional staff beyond normal staffing levels.

"We have a gap in having enough people. But under COVID-19, more of the same people will be needed."

- More shelter staff needed for screening, testing, and intake:
 - COVID-19 will create the need for more staffing, especially for screening and testing services.
 - The intake/registration process may need adjustments because of COVID-19 hazards (e.g., multiple registration stations and touch-free registration options).
- Employees should be assigned to different shelter locations and different shelter types, isolating some teams so that they can care for evacuees sheltered away from the general shelter populations because they are medically vulnerable to COVID-19:
- Isolation wards are needed to shelter people who are COVID-positive and will need a separate shelter team that cannot engage with the rest of the general population in the shelter to limit the potential spread of COVID-19.
- Additional healthcare professionals are needed:
 - Need more nurses, not only to staff extra shelters but also to increase the numbers of nurses per shelter.

"It's difficult during normal times to staff special-needs shelters, lack of nurses is an issue every year."

- Need clinical coordinator and respiratory therapists to assist clients with use of nebulizers when there is an increased prevalence of asthma and other respiratory issues.
- Need environmental health specialists and epidemiologists to provide additional support.
- Need personnel who are trained to help evacuees with specialized needs. (For example, those with Alzheimer's Disease have difficulty with the face masks because they rely on facial expressions to understand people.)
- How to ensure staff and volunteers are trained for working with persons with disabilities?

"It would be nice to have more respiratory therapists. We are seeing more people on nebulizers, CPAP machines, and there are other questions this year of aerosolization of the virus... What are the implications for staff? Having staff that understand that and who can assist the clients would be helpful."

- Other specialized staff is needed:
 - Need staff who can address the needs of special populations, such as survivors of domestic violence. Some shelters have specific spaces for victims or women.
 Victims should not be sheltered with their abusers.
 - Need translators to help with communications, especially in areas with significant non-English speaking populations. Another option is to have multilingual resources at shelters to bridge communication gaps.

Need additional staff with logistics and operations expertise.

"We need folks that don't necessarily have clinical backgrounds but have logistics backgrounds."

- o The shelter environment should be continuously cleaned and sanitized. *Who has that responsibility? How are folks trained?* Shelter cleaning under COVID-19 is different than cleaning under normal conditions.
- Additional gaps in shelter staffing and operations:
 - How do shelters identify registered sex offenders? Sex offenders should notify the shelter ahead of time or during intake, but they may not. Perhaps this is an opportunity for refinement for pre-screening.
- There are concerns about having enough staff members to rotate if the sheltering process is extended over many days.
- What metrics are used to determine additional volunteer needs?

Strategies

- Seek out new sources of shelter staff and volunteers:
 - Medical reserve corps (MRC).
 - Concert and event staff could be trained as shelter workers; might be able to provide EMTs, general staff, and security, for example.
 - Students seeking clinical hours and internship opportunities, medical assistants, staff of home health agencies, nurse registries, and hospice volunteers.
 - Retired physicians and retired nurses are a great resource, but they are older and more likely to be vulnerable to COVID-19.
- Regional incident teams from other areas not affected may be a solution to staffing shortages.
- Distinguish between lower-risk and high-risk shelter jobs. Staff and volunteers who are also high-risk for COVID-19 may be able to help in different ways (e.g., telehealth and advance preparations in shelters). Shelters should identify no- or low-contact jobs (e.g., advance preparations) and functions that can be done virtually, or at a distance, for staff worried about COVID-19 exposure.

"What can be done virtually? What can we do virtually and what has to be done in person?"

- Distinguish between shelter staffing needs before, during, and after the event. Those
 more vulnerable to COVID-19 could provide staff and volunteer support before or
 after.
- Plan for the shelter location first, then consider what staffing is available at that specific location,

- Recognize that there may be a lot of community volunteers who are frustrated right now because they want to help but feel that they cannot because of the stay-at-home orders and concerns about going out in public. There is an opportunity to recruit these types of volunteers.
- Expand the roles of CERTs (Community Emergency Response Teams), Medical Reserve Corps, and other similar groups in staffing shelters.

2.2.2 Key Consideration 2: Training

"The concern will be around how much training and support [shelter staff and volunteers] receive just around general shelter supports. But then, how do we roll that out with COVID-19, and cleaning, and those extra demands?"

"How do we make sure that everyone who wants training or needs training would be able to get it before the hurricane season?"

- Cross-train shelter staff; staff or their family members becoming ill can cause staffing gaps, particularly if it is for a key role.
- Training will be needed for experienced staff in new roles, settings, and circumstances, and also for any new staff.
- Disseminate training to a wider range of staff.
- Mobilize and train more volunteers proactively, considering atypical groups who could serve as shelter staff with appropriate training.
- Specific training:
 - Just-in-time training should include cleaning procedures given the COVID-19 pandemic (e.g., disposable cleaners instead of mops) and the specific needs of different populations.
 - o Train staff in crisis intervention and psychological first aid.
 - Train staff and provide resources on how to be aware of clients' circumstances (e.g., domestic violence situations and how to access to critical databases, such as sex offender registries), to ensure overall safety.
 - Educating, coordinating, and communicating with evacuees is time-consuming under normal conditions and will be more so under pandemic conditions; staff and volunteers will need adequate training to be effective.
- What roles can universities play? Is there training that could be done at universities to fill some of these gaps that are being created because of COVID-19? Can university faculty and students be a volunteer pool?
 - o There are concerns about what students are able to do (e.g., liability issues).

"One thing for people to consider is non-traditional sources of shelter workers, for example Civil Air Patrol units are allowed to staff shelters if they take the orientation course, but they don't generally do the training because it is rarely asked of them."

"There is an opportunity for churches to become more involved in formal sheltering... faith-based leaders would need to be trained if they are willing to do so."

"We typically volunteered in a call center responding to phone calls from residents throughout the state during hurricane season. We did not receive training for shelter response. Expanding this training to other staff throughout the state could increase available shelter volunteers."

Strategies

• Expanding COVID-specific training for regular volunteers may help staffing. training to other staff throughout the state could increase available shelter volunteers. For example, training call-center employees on shelter responses may help by resolving questions before evacuees arrive at shelters.

"Relying on job aids like written documentation can be a good supplement to training for those 'unusual cases' when protocol slightly differs."

2.2.3 Key Consideration 3: Staffing Logistics

- Can we reduce the staffing footprint to reduce exposure of staff and volunteers to COVID-19?
- Explore strategies to reduce staff fatigue:
 - Shelter staff typically works in 12-hour shifts; administrations should consider ways to allow genuine down-time for recovery. Florida has learned that disasters last longer than anticipated; there is a need to plan for longer time periods.
- Have the staffing needs for different stages during the shelter opening been identified? Consider different staff types and profiles for shelter phases (e.g., opening, during, and closing).
- Staffing requirements are greatly dependent on how large the shelter is and what kinds of services are offered (e.g., food, medical, and security).
- "Rightsizing" staffing needs is essential:
 - Each additional staff member adds to the population of a shelter. Capacity at shelters has shrunk because of social distancing, and if staff are housed at the shelter, they also will reduce available space for evacuees.
 - How do we reconcile limited shelter capacities with staffing needs?

• How is the coordination for shelter staff and volunteers done? This would be needed even before COVID-19, but what additional layers of coordination are needed?

Strategies

- Alter staff schedules to reduce both compassion fatigue and staff exhaustion from overworking:
 - Staggering work shifts and reducing shifts to 4-hour shifts may be helpful; also, could then attract additional volunteers with clinical backgrounds who cannot commit to 12-hour shifts.
 - Have more staff when people are awake and fewer when they are asleep. Consider skeleton crew at night when needs are less because evacuees are sleeping.
 - Larger localities with multiple shelters throughout could think about reducing the number of shelters that they have and making them more centralized, which would also centralize staff and allow for floating staff throughout multiple shelters.
- Create a typology of jobs (e.g., lower and higher risks jobs and lower and higher skills), then assign staff and volunteers accordingly. Could also assign staff based on shelter phases.
- For those highly vulnerable areas, have two separate plans:
 - Plan A that follows all of the Red Cross recommendations and the CDC recommendations for social distancing.
 - o Plan B that is the existing hurricane plans and implements some social distancing.

"We plan our floor plan for staff planning. We take a look at each school we're planning to utilize. We calculate the square footage of each room and then we've divided it based on square footage to meet the needs for the CDC recommendations of social distancing. We also open up additional space in different parts of the school for shelter staff."

Non-Congregate Shelters

- Given the need for additional shelter space, some localities are considering using hotels as shelters (that are not within hurricane zones or evacuation zones). However, the use of hotels as non-congregate shelters has not been completely approved through FEMA yet, so the reimbursement process of that becomes an issue.
- Contracts are needed with the selected hotels. Contracts will determine services and hotel staff to provide services. Hotel staff will also be at risk of exposure using this option. Will hotel staff be trained? Without hotel staff, how will non-congregate shelters be staffed?
- Another concern is that hotels do not want to offer services and some hotels fear the long-term implications of being associated with COVID-19.

2.2.4 Summary of the Round

Key issues raised in Round Two emphasize how COVID-19 introduces additional challenges for shelter staffing. COVID-19 physical distancing requirements will require more shelter locations, necessitating additional staff. COVID-19 health impacts also mean that additional specialized staff, especially healthcare workers, will be needed in shelters. Additional demands on staff and volunteers related to COVID-19 risk minimization also demand extra training for current and prospective staff and volunteers. Participants also raised issues regarding staffing logistics, such as managing the staffing footprint and reducing staff fatigue. The discussions raised specific concerns and challenges regarding the use of hotels as non-congregate shelters.

2.3 ROUND THREE: What ancillary resources (e.g., personnel, technology, supplies) are needed to support and protect shelter staff?

2.3.1 Key Consideration 1: Specialized Resources to Inform and Protect Shelter Staff and Evacuees

- To inform evacuees:
 - Need a way to distribute preparedness messages about what items people need to bring.
 - Establish call centers to answer residents' common questions and conserve shelter staff availability.
 - Ensure ongoing communications and information-sharing with evacuees at the shelters.

"We need to think about providing accurate information and updates to the populations in shelters. This may reduce anxiety ... Having information is reassuring."

"Providing an accurate, regular update on information, that may be helpful."

- To protect shelter staff and evacuees:
 - There should be environmental health specialists and epidemiologists assigned to each shelter location for monitoring and mitigating any potential outbreaks (e.g., norovirus) or environmental health concerns (e.g., maintaining appropriate food temperatures at the shelters).
 - Shelters must have safety plans in place for survivors of domestic violence and registered sex offenders.
 - o Congregate shelters usually mean all space is being utilized. *How is private information kept confidential?*
 - The mental health and communication needs, such as for people with Alzheimer's Disease and other cognitive or disorientation concerns, as well as those under duress must be addressed.

 Shelter daycare may be a viable option; some places are looking at how daycares for emergency response personnel have operated under COVID-19 guidelines as a model.

Strategies

- It would be useful to learn from other communities' experiences with shelters following floods and tornadoes, such as how staffing was handled, how they helped keep people calm, and how the spread of COVID-19 in their shelters was mitigated.
- Durable medical equipment and home health aides are needed for persons with disabilities, in order to maintain their level of independence. Centers for Independent Living could be a good resource for these needs.
- One locality is developing an online registration process for the general shelters, where registration would occur through an online link or by calling 311 when the shelters open. This is distinct from a *registry* (i.e., advanced identification of potential evacues) and would be a registration process.

2.3.2 Key Consideration 2: Technology Needs

- Need technology for various purposes, such as tracking inventory in shelters and for contract tracing.
- Do shelters have information technology (IT) support?
- Telehealth requires IT support, protection of data via passwords, and coordination with primary-care physicians; cannot be done haphazardly.
- Special-needs shelters have fewer populations and telehealth can be useful but must strategize technology infrastructure in advance.
- Need laptops (with internet access) for shelter staff.
- Law enforcement agents assigned to shelters can use their equipment to run background checks.
- Limit contact during shelter intake process by providing tech-friendly ways to check in (e.g., smartphone apps).
- Be mindful that technology could fail if there are internet or power outages.

"Telehealth requires physical equipment, IT support, whole other layer of folks to manage equipment. Dealing with health information so need to keep equipment secure ... a lot of other people who have to be involved to make sure it runs smoothly. Doing telehealth on the fly in a dynamic environment - one little glitch and it doesn't really work."

2.3.3 Key Consideration 3: Ensuring Psychological Health and Well-Being of Staff and Evacuees

"We have shelter staffing under normal condition — it's more personal. There's more connection with greeting people at the door, getting them registered, checking on them... with COVID-19 and the distancing, that personal touch is going to be gone and people would probably feel lonely either in a shelter or in a hotel. So, you're going to lose that compassion that you normally have in a crisis, so that's one of our concerns."

- Important to keep staff and evacuees and staff "happy, healthy, and calm."
- Psychological health is central; proactive psychological first aid is necessary.
- Beyond securing essential supplies, some are working to anticipate additional staff needs based on identification of potential stressors related to the compound threat.

"If you can provide regular, by-the-hour, accurate updates to ensure calmness for both staff and clients."

- Communication through reading faces: some populations may not hear as well and read lips, and face masks and PPE could change the dynamics of communications within an already stressful environment.
- Restricted movements within shelter: maintaining social distance could cause feelings of isolation and stress.

"We are confining folks to cots because of COVID-19; restricted movement about the shelter; this has an impact upon the psychology."

- Staff morale must be maintained; front lines have been working for months with no end in sight. How do we take care of those people who will be transitioning into a sheltering role in the event of a hurricane?
- How do we prevent burnout in shelter staff?
- There should be activities to reduce stress in shelters:
 - o Pre-event stress levels are already high for staff and evacuees.
 - Need stress management tools (e.g., reading materials or headsets for people to listen to music) but objects will need to be sanitized between uses.
 - o Magicians and musicians may help with entertainment.
 - Providing these activities may be challenging given COVID-19 and social distancing requirements.

"Music seems like the best option for entertainment during COVID-19 because it could be broadcasted over speakers."

• Are considerations being made for staffing shelters with mental health counselors or other relevant professionals to provide mental health services as needed to evacuees and shelter staff?

Strategies

- Create dedicated spaces at the shelters for staff and volunteers to have privacy and decompress.
- Consider partnering with local clinical psychology graduate programs to offer psychological first aid to shelter staff; could make advance arrangements for the service to count toward required clinical hours in their degree programs.

2.3.4 Summary of the Round

Discussion in Round Three identified several additional resources and needs, including those to:

- Ensure ongoing communication and information sharing with shelter evacuees.
- Protect shelter staff and evacuees.
- Meet the demands of special-needs populations.
- Ensure the psychological health and well-being of staff and evacuees.

Specific technology needs to support shelter operations and telehealth services also were identified.

2.4 ROUND FOUR: 2-Minute Question Burst

- Are there other ways (e.g., telehealth and backpack medical teams) that we can support folks who remain at home?
- What is the plan to respond to those with specific medical needs when their power goes out?
- How will latecomers be handled?
- How do we respond in the event of an outbreak among staff or evacuees? Is there an established plan and is it well-communicated for the physical and psychological safety of the staff and evacuees?
- Are there example MOUs that are currently being used that can be shared with others?
- What liability does the county government have when recruiting students or any volunteer? Are there certain legal parameters that must be considered?
- Is enough being done to involve experienced frontline shelter staff to brainstorm new and different ways to deal with these new challenges?

3.0 References and Resources

The following resources and documents were identified by participants in Workshop 5 or may be relevant to the discussion topics. Some are more localized than others. Additional resources can be found at the CONVERGE NSF Working Group website (https://sites.wp.odu.edu/hurricane-pandemic/resources/).

Federal Emergency Management Agency (FEMA)

COVID-19 Pandemic Operational Guidance for the 2020 Hurricane Season

https://www.fema.gov/news-release/2020/05/20/fema-announces-operational-guidance-2020-hurricane-season

Occupational Health and Safety Administration (OSHA)

COVID-19 Guidance for Nursing Home and Long-Term Care Facility Workers

https://www.osha.gov/Publications/OSHA4025.pdf

Administration for Community Living (ACL)

Coronavirus Disease 2019 (COVID-19)

https://acl.gov/COVID-19

American Flood Coalition (AFC) and American Public Health Association (APHA)

Dual Disaster Handbook: Six Recommendations for Local leaders Responding to Floods during COVID-19

https://assets.floodcoalition.org/2020/05/451ab8498c7012af81a15fb50f3a2898-American-Flood-Coalition-Dual-Disaster-Handbook-5.19.2020.pdf

Southeast ADA Center and Burton Blatt Institute (BBI) at Syracuse University

The ADA and Face Mask Policies

https://www.adasoutheast.org/ada/publications/legal/ada-and-face-mask-policies.php

contraCOVID

contraCOVID has multilingual online resource guides (in English, Spanish, Haitian Creole, and Portuguese) compiled for several U.S. cities that may be useful. These guides are regularly updated. Although originally created for people to access social services available during the COVID-19 pandemic, they may be useful for the hurricane season, too.

https://en.contracovid.com/

4.0 Project Team

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