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School of Public Health

Addressing Disaster Preparedness and Response Training:
Needs and Opportunities in Puerto Rico
Stakeholder Meeting Final Report
September 13, 2018
Universidad Metropolitana
Bayamon, PR

Report date: November 28, 2018

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Introduction

On July 9, 2018, the Governor of Puerto Rico released a preliminary draft for public comment of *Transformation and Innovation in the Wake of Devastation: An Economic and Disaster Recovery Plan for Puerto Rico*. Hurricane Maria caused significant damage to infrastructure, disruption of social systems, significant number of fatalities and health emergencies, and led to increased economic strain on the Island of Puerto Rico.

The report looks critically at recovery efforts so that a transformation of Puerto Rico can occur. The Governor's vision is:

*To build the new Puerto Rico to meet the current and future needs of the people through sustainable economic development and social transformation; transparent and innovative approaches to governance; resilient modern, state-of-the-art infrastructure; and a safe, educated, healthy, and sustainable society.*¹

The purpose of the meeting was to bring together leaders from agencies and organizations in Puerto Rico that have the capacity to identify training needs and gaps so that disaster preparedness and response activities are improved. The focus of the meeting was on the identification of training needs and development of training programs to fill gaps in disaster preparedness and response training in Puerto Rico. The ultimate goal was to initiate the foundations of a road map to help Puerto Rico achieve the Report's primary goals and to address the key short-term key priorities.

The primary goals are:

1. Ground the new Puerto Rico in the needs of its people by promoting a society that is educated, healthy, and sustainable.
2. Enhance Puerto Rico's ability to withstand and recover from future disasters through individual, business, and community preparedness; redundant systems; continuity of operations; and improved codes and standards.
3. Ensure rebuilding and restoration efforts promote sustainable economic growth and social transformation, and contribute to a more vibrant and competitive economy that can provide opportunities for job growth; and promote personal advancement that produces benefits for Puerto Rico's residents for generations to come.
4. Strengthen Puerto Rico's critical infrastructure by rethinking its design and reconstruction to be more modern, sustainable, and resilient than before the hurricanes, and to effectively support people, industry, and the economy.

The following are the most-immediate key priorities in the short-term (1-2 years):

1. Re-establish lifeline systems to provide reliable energy, water, communications, and transportation.

¹ Transformation and Innovation in the Wake of Devastation: An Economic and Disaster Recovery Plan for Puerto Rico, page vi.

2. Improve emergency preparedness infrastructure and develop the government workforce so that all residents and businesses are better protected in advance of a future disaster.
3. Clarify ownership and responsibilities for various infrastructure, assets, and services so that repairs can be completed efficiently and rebuilding reduces risk.

Significant training opportunities and needs are identified throughout the report. These are evidenced throughout the text, as well as in the *Detailed Actions* of the report. Training implications are of the highest concern for Rutgers University School of Public Health (RSPH) and Universidad Metropolitana (UMET), as they provide a significant number of training programs in Puerto Rico, specifically addressing disaster response and preparedness.

Rutgers University School of Public Health is the lead agency funded by the National Institute of Environmental Health Sciences (NIEHS) Worker Training Program (WTP). NIEHS has continually funded RSPH since 1987 to provide health and safety training for workers who conduct hazardous waste and environmental cleanup activities. The Center provides training across Federal Region 2, which includes New Jersey, New York, Puerto Rico, and the US Virgin Islands. In 2003, NIEHS initiated funding for programs to address disasters, both natural and human-made, so that workers would be prepared to work safely in the aftermath of a disaster. UMET has been a training partner with RSPH since 2000, and has provided training to thousands of workers in Puerto Rico. Rutgers SPH is also the lead for the Outreach Core of the NY and NJ Education and Research Center, funded by the National Institute for Occupational Safety and Health (NIOSH). The goal of the Outreach program is to improve knowledge and awareness of work-related safety and health issues.

RSPH and UMET program staff reviewed the Governor's report, and the need to conduct a stakeholders meeting became apparent. The Report includes priorities and key initiatives in the short and long term, and provides detailed actions that will assist in the recovery from Hurricane Maria, and prepare Puerto Rico for future disasters.

The Stakeholders meeting was held on September 13, 2018 at the Universidad Metropolitana in Bayamón, Puerto Rico. An invitation was sent to representatives from Federal and PR agencies, including the EPA, OSHA, FEMA, HHS, NIEHS, NIOSH, as well as municipal responders, community leaders, and others. The purpose of the Stakeholders meeting was to bring these agencies and leaders together to identify training needs and to initiate a plan to address those needs through training.

Addressing Disaster Preparedness and Response Training:
Needs and Opportunities in Puerto Rico Stakeholder Meeting
September 13, 2018

Addressing Disaster Preparedness and Response Training:
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Stakeholder Meeting
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Agenda

- Welcome and Purpose
Introductions
- Overview of EPA Healthy Homes Initiative
- Review of Governors Report
Primary Goals
Short-term Key Priorities
- Brainstorming
- Action items
Next steps
- Adjournment

Welcome and Purpose

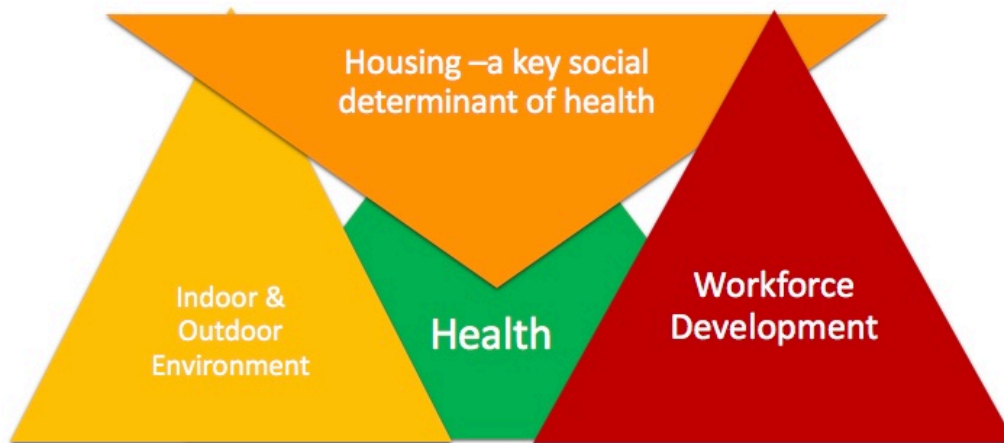
Rafael Caballero, Director of the Institute for Environmental Education at UMET welcomed the participants to the meeting, and provided an overview of the UMET training programs. Dr. Mitchel Rosen, Director of the Center for Public Health Workforce Development, Rutgers School of Public Health, provided an overview of the meeting purpose and a review of the agenda.

The purpose of the meeting was to bring together leaders from agencies and organizations in Puerto Rico that have the capacity to identify training needs and gaps so that disaster preparedness and response activities are improved.

EPA Healthy Homes Initiative

Wendy Thomi, from the US Environmental Protection Agency, provided an overview of the EPA Healthy Homes Initiative (HHI). The HHI provides an intersection of housing, health, and environment issues. The HHI builds capacity on all levels, targets workforce development to create sustainable new jobs, and addresses key health issues in an integrative manner (Figure 1).

Figure 1: Components of PR Healthy Homes/Housing/Buildings Initiative²



Examples of opportunities for rebuilding wisely and for the long-term were presented, and included:

- Need for strategic worker training (mold remediation, RRP, hazardous waste, community health workers, healthy home specialists, lead inspectors, pesticide applicators, health care providers, etc.)
- Implement Energy Star & Water Sense, built Environment and Walkability Institute recommendations

² Puerto Rico Healthy Homes/Housing/Buildings' Initiative, developed by Ameesha Mehta-Sampath and presented by Wendy Thomi on September 13, 2018, UMET, Bayamón, PR.

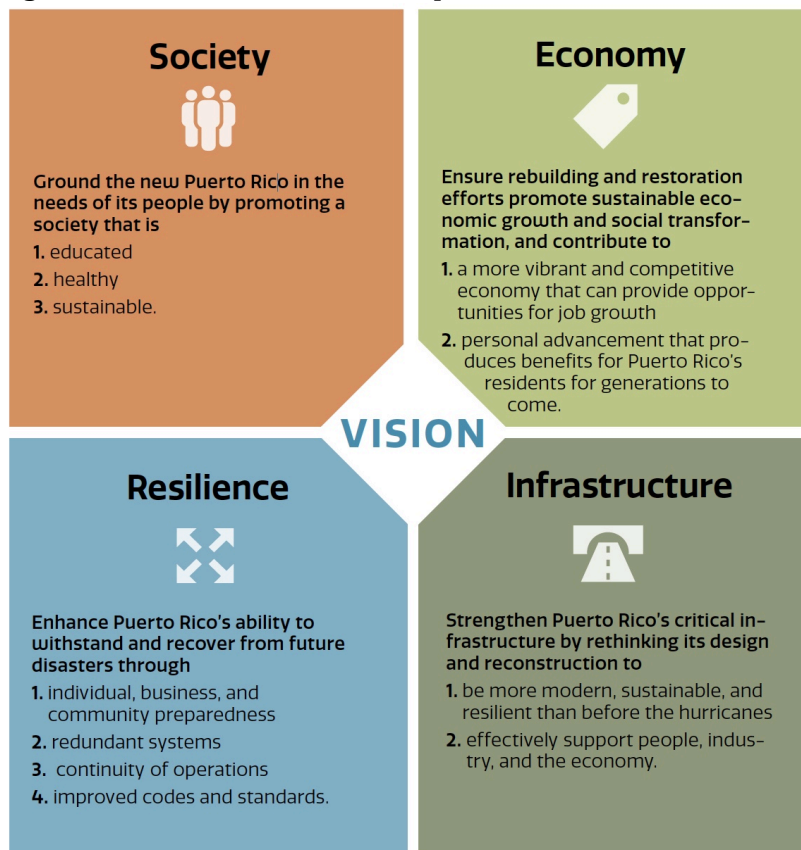
- Increased use of resilient & sustainable building materials; revision & enforcement of building codes
- Integrated approaches to assuring Healthy Homes / Housing / Buildings

The initiatives presented have significance for the development of disaster preparedness and response activities. It is important to incorporate existing or develop new curricula to meet the specific worker training needs identified. It is critical to identify appropriate target audiences to receive the training programs, as well as identifying the appropriate agencies that have the capacity to provide the training.

Review of Governors Report

The goals of the report were reviewed (Figure 2). Several key aspects of the goals were highlighted. Emphasis was put on education, health and sustainability for individuals, businesses, and communities during rebuilding and restoration efforts. These included opportunities for growth and personal advancement that strengthens critical infrastructure so that the people and the Island have increased preparedness and resiliency.

Figure 2: Goals of Governor's Report³



³ Transformation and Innovation in the Wake of Devastation: An Economic and Disaster Recovery Plan for Puerto Rico, page 3.

The lens that was utilized to review PR Recovery Plan four primary goals included:

- What are the needs to achieve the goals?
- What resources currently exist?
- What are the gaps between need and current resources?
- What can this group do to start the process?

Brainstorming

The main portion of the meeting was devoted to brainstorming to identify training needs and gaps so that disaster preparedness and response activities are improved. The following prompts were utilized to initiate the discussion:

- Populations in need of training
- Types of training needed for each of those populations
- Gaps in training available/provided
- Identification of who can fill training gaps
- Capacity development

An opportunity was provided for each of the participants to identify an issue they would like to further discuss or add to the list of topics that should be part of disaster preparedness and response training activities. The main themes that emerged during this session include:

- Communication
- Partnerships
- Resiliency
- Training Needs
- Overarching Issues

Communication

Several key issues surrounding communication were identified. These are expanded upon below, and will be included as part of the action steps to take based on the results of this Stakeholder Meeting.

Unified Command

The use of a unified command during disasters was emphasized. Unified command is defined as “an application of the ICS used when there is more than one agency with incident jurisdiction or when incidents cross political jurisdiction. Agencies work together through the designated members of the UC, often the senior person from agencies or disciplines participating in the UC, to establish a common set of objectives and strategies and a single Incident Action Plan (IAP).⁴”

Same Language

It is critical that the same language is utilized across response and recovery workers. Specific language needs to be defined so that what is requested is provided. The example

⁴ Unified Command Technical Assistance Document, National Response Team, <https://www.nrt.org/sites/2/files/UC%20TAD%201-26-07%20FINAL.pdf>.

used was “what is a 4x4?” This has different meanings for different populations. For nurses, a 4x4 is gauze bandage; for construction workers it is a piece of lumber; and for others it may reference a type of truck.

Information Dissemination

The methods that information can be disseminated during emergencies is critical to understand, and plans need to be developed on how critical information will be provided to various populations. Different methodologies must be utilized so that the essential information can reach people in ways that are available. When power is not available, and messages cannot be disseminated via television, radio, or internet, other media must be incorporated into the communication plans. Developing relationships with various media to disseminate essential information and the messaging that is important for the communities to understand must be established.

Radio Communication

The inability for governmental agencies to be granted a license to operate high frequency radios must be addressed. PROSHA identified that the lack of radio communication was an issue in responding, but did not have the ability to become licensed to operate a HF radio. Identifying ways to improve communication will significantly increase the effectiveness of response efforts when normal communication methods are inoperable.

Partnerships

Establishing partnerships is critical to improve preparedness and response activities in Puerto Rico. Improving the network of partnerships between and within Federal, State, and Local governments, community organizations, private sector, unions, academia, and NGOs will increase the capacity for more successful planning and response for future disasters that will occur.

Community Engagement

Engaging communities across Puerto Rico is essential for improving preparedness and response. Outreach to communities outside of the metropolitan areas is critical to assist with preparedness planning and response, as well as engaging them in training and information dissemination plans. Community engagement must be a multi-faceted approach that includes the identification of community leaders and developing trust of the agency/person(s) delivering the message. It was emphasized that community leaders must be brought together to engage in efforts beyond individual neighborhoods. Community leaders should come together so that they can be part of an overall plan that engages their community in preparedness and response activities that meet the Island-wide goals.

Reaching across Puerto Rico

Partnerships must include the broad scope of agencies and organizations across Puerto Rico. The focus of the preparedness and response cannot lie within the larger cities. Preparedness and response plans must include all municipalities, and must include community based organizations, municipal government, private sector, academia, and other essential elements of the community.

Community Leadership

Partnerships and community engagement should include both bottom – up and top – down approaches. Utilizing both approaches will facilitate engagement on many levels, will help develop trust between groups, and share valuable information that is known both locally and more globally. Engaging community based organizations so that they can provide a local perspective of what is needed, as well as learning more global issues that address preparedness issues before storms are approaching will help to reduce the impact of a disaster. Developing Community Emergency Response Teams (CERT) is one way to engage communities, but other methods needs to be developed. Engaging municipal leaders, including mayors, health departments, planners, and others will provide much needed resources that can be shared throughout Puerto Rico. Engaging Puerto Rico agencies and the Federal government will bring different aspects of leadership and insight into preparedness and response activities.

Resiliency

Resiliency efforts must include personal resiliency and community resiliency. Providing skills and knowledge to individuals about personal resiliency is important so that they can recognize the impact of disasters on them and others in their community. Similarly, communities must be built to be resilient. Ensuring that urban and community planning take into account the issues with storms, and how they impact the physical aspects and infrastructure of a community.

Personal resiliency

Understanding the personal and professional issues that impact resiliency will help improve preparedness and response activities. Disasters impact the mental health of a wide variety of workers, including those working in disaster response, recovery, and rebuilding, such as paid employees, volunteers, and homeowners. Understanding the emotional component of health and providing skills to help alleviate the impact of disasters is important aspect of resiliency. NIEHS has developed training materials to educate and empower those impacted by disasters to recognize signs and symptoms of disaster work-related stress; obtain support through an employer/organization or community resources; and build resilience by understanding stress reduction and coping strategies. Resiliency training should help prepare families of the emergency responders. The situations that could be occurring at home and/or preparation state in the family can affect the performance and personal safety of responders. Also, these families can potentially be affected in unique ways because of the uncertainty of the responder-relative well being.

Community resiliency

Community resilience is the ability of a community to use its assets to strengthen public health and healthcare systems and to improve the community's physical, behavioral, and

social health to withstand, adapt to, and recover from adversity⁵. Community resiliency should be incorporated as the infrastructure across Puerto Rico is rebuilt. Community resiliency includes the mitigation of hazards during the planning and construction phases of the recovery effort. Incorporating hazard controls during these phases costs significantly less than trying to retrofit these controls after rebuilding is started. Additionally, controlling hazards during these phases takes the long-term look to how disasters impact housing, power lines, transportation, and other critical infrastructure.

Training Needs

A breadth of topics were discussed and significant training needs were identified. These include training programs at the awareness through advanced levels. Training on disaster preparedness and response, air, water, environmental, and safety should be initiated in K-12 educational curricula. Training should also be developed for vocational education programs, focusing on specific areas of content, such as green jobs, Energy Star, WaterSense, and weatherization.

Specific content needs identified include:

- Construction focus four (Falls, Caught Between, Struck by, and Electrocution)
- Hazard assessment, control and mitigation
- Heat stress and illness
- CERT training for various populations
- Green jobs, weatherization, and sustainability
- Energy Star
- WaterSense
- Resiliency
- Waste water treatment
- Water filtration and treatment for turning it potable
- Water management at home or business
- Disaster site worker
- Tree hazards and maintenance
- Code enforcement
- Emergency management
- Grant writing
- Environmental and other permitting
- Cultural competency
- Drills and exercises
- Continuity of operations

Training in grant writing was discussed in detail. Communities need to be able to identify grant funding sources, and to be better prepared to write the application. When grants are

⁵ US Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response, <https://www.phe.gov/Preparedness/planning/abc/Pages/community-resilience.aspx>

issued, communities need to be able to manage grant funds and assure that grant deliverables are kept on target and meet the goals and objectives of the funding.

Training must be developed and delivered in a culturally sensitive and competent manner. Discussion included the need for providing culturally competency training. Cultural competency training will help reduce misinterpretation of messages and impacts both the training provider(s) and those attending the training.

Training Populations

There are many populations in need of training, which include the current and future workforce in Puerto Rico, union members, emergency response personnel, community leaders and members, politicians, and the lay public. One specific area for further training development is for youth, focusing on K-12 curricula so that the next generations are better prepared to face the critical needs in Puerto Rico. It is important to link populations to training programs that are currently available, and to identify what programs need to be developed or tailored to meet specific community needs.

Barriers

Barriers to providing training include lack of funding. There are real costs associated with development and implementation of training programs, as well as for those who must pay a registration fee for attending programs. A significant need exists to identify funding that can support training program development and implementation so that registration fees are eliminated or minimized. To put this in context, the average individual income in Puerto Rico is much lower than in the U.S. in general and the cost of living has increased steadily.

The number of qualified trainers need to be increased. There is a significant training need that may not be achieved without increasing the cadre of available trainers. Developing a train-the-trainer model will help alleviate this barrier.

Training programs should not be politicized. The needs for preparedness, response, and recovery are non-political, and the implementation of training programs should be equitably made available across Puerto Rico.

Overarching Issues

There are several overarching issues that were identified that impact the ability to effectively develop and implement training programs. These include basic functions such as transportation needs, and ability post disasters, child and elderly care issues, and health care needs. The other major overarching issue is the financial capacity of Puerto Rico. Specific training may not be developed for these areas, but understanding these issues will help provide context for other training program development. Those attending training programs or responding to disasters need to ensure that the overarching issues are addressed so that they know that their family is cared for during their response activities.

Action Plan

The outcome of the Stakeholders Meeting was to develop a road map for training development and implementation to meet the needs of Puerto Rico disaster preparedness and response. Specific action steps must be taken to address the needs and gaps identified. The action steps are presented here are the beginning of the activities that need to take place to advance the efforts to become better prepared, more resilient, and help lead to a transformation in the way Puerto Rico prepares for and responds to disasters.

1. Develop career pathways in environmental and occupational safety and health (EOSH)

The need to develop pathways for EOSH careers is great. The breadth of topics that can be included is vast, and can range from home and community safety issues, disaster preparedness planning, safe drinking water, clean air, community planning, and others. The opportunity exists to develop creative educational opportunities and programs that will help develop a baseline knowledge of EOSH and disaster preparedness. Embedding these topics into K-12 and vocational education curricula will initiate career pathways in EOSH. These curricula will provide basic environmental and safety/health issues that are essential to understanding how to prepare, respond, and recover from disasters. The career pathways should continue in undergraduate and graduate programs at Universities across Puerto Rico. Graduates of these programs would be candidates for current or new positions needed within the municipal, state, or federal agency jobs in Puerto Rico.

The EPA Health Homes Initiative assists in building capacity, focuses on workforce development, and creates sustainable jobs. The issues addressed in the Healthy Homes Initiative include mold and asthma in housing, schools, public buildings, stress and PTSD, and potential exposure to hazardous materials. Some opportunities that can be explored include developing worker training programs, specifically in mold remediation; Lead Repair, Renovation, and Painting; lead inspectors, and community health workers. An integrated approach is needed to assure homes and buildings are healthy when they are repaired after disasters.

- Identify existing or develop new curricula that can be utilized in K-12 education.
- Develop outreach programs to bring students into EOSH careers and majors within existing programs at universities in Puerto Rico.
- Expand or create new EOSH majors in universities.
- Develop EOSH careers pathways for university graduates at municipal, state, or federal agencies in Puerto Rico.
- Identify ways to integrate this training into Undergraduate or graduate training in EOSH. Provide environmental and occupational health and safety courses as part of undergraduate, graduate and continuing education programs. Programs that lead to certifications, licenses, or other credentials are valuable for developing the workforce.
- The types of courses needed include:
 - Lead Inspector/Risk Assessor
 - Mold inspection and abatement

- Lead Repair, renovation, and Painting (RRP)
- Identification and control of hazards
- Training in cultural competency is needed to help reduce misinterpretation of messages and impacts both the training provider(s) and those attending the training.

2. *Develop green jobs sector to reduce the reliance on fossil fuels*

The need to create a green jobs exists to reduce the reliance on fossil fuels, as well as providing an avenue for jobs growth in this sector. The ILO states that green jobs are a way of creating a meaningful path to help economic recovery, address environmental degradation, and attend to the different social needs will be critical to ensuring long term sustainability in the world ⁶. The Bureau of Labor Statistics categorizes Green Jobs into the following: Water conservation, Sustainable forestry, Biofuels, Geothermal energy, Environmental Remediation, Sustainability, Energy auditors, Recycling, Electric Vehicles, Solar power, and Wind energy ⁷.

- Identify sources of funding to develop a green jobs training program (e.g., NIEHS Worker Training Program Environmental Careers Training Program)
- Work with the PR Government to invest in solar, wind, and other alternative / sustainable energy sources using distributed power generation / micro grids.
- Ensure that training for the green jobs sector includes training in safety and health topics, such as electrical systems, fall protection, and other applicable safety and health standards.

3. *Increase disaster preparedness and response capacity of communities and municipalities across Puerto Rico.*

Emergency response starts with the locality in which it happens. The need to develop capacity of municipal and community response is imperative. Development of and training provided for Community Emergency Response Teams (CERT) will enable coordinated efforts to respond prior to and after disasters occur. There are tens of thousands of citizens trained under the CERT Program; however, there is a small number of organized and active CERT teams in the Island that collaborate with government in different activities where CERT volunteer can potentially get involved. Increasing training directed to municipal emergency responders (police, fire, EMS) in disaster preparedness, incident and unified command, disaster/mental health resiliency, and other areas will be prepare them to more quickly initiate local response and recovery efforts. Preparing municipal and community members will help save lives.

- Develop a campaign to engage community members in CERT teams.
- Integrate CERT teams and municipal agencies so that they work together on community preparedness and response activities.

⁶ <https://www.ilo.org/sector/activities/topics/green-jobs/lang--en/index.htm>

⁷ <https://www.bls.gov/green/greencareers.htm>

- Provide ongoing access to training for CERT members
- Provide training to state and municipal emergency responders (police, fire, emergency management) to make them aware that CERT volunteers can help performing certain tasks that would otherwise be an additional burden for professional responders during emergencies.
- Follow up training for CERT volunteers so that response dynamics (including additional Incident Command System training) are explained in a way that allows fast deployment and communication with the local emergency response agencies

4. *Increase infrastructure resiliency, specifically during the rebuilding phase*

The time to improve infrastructure is during the rebuilding phase after Hurricane Maria, before another disaster strikes. Planning for anticipated future events needs to occur. As damaged buildings are repaired or replaced, resiliency must be part of the plan. Storms will continue to impact Puerto Rico, so the design and building codes must be revised to address the continuing need for stronger and more resilient infrastructure. The Resilient Puerto Rico Advisory Commission has developed recommendations to help rebuild Puerto Rico. They have infrastructure recommendations in these areas: Transport & Communication Infrastructure; Educational and Government Facilities; Water and Wastewater Infrastructure; Dams, Barriers & Flood Control Infrastructure; and Healthcare & Public Health Assets ⁸.

- Identify existing resources, partners, and other initiatives that embrace the ideas of increasing infrastructure resiliency.
- Focus resources on developing funding streams for resilient infrastructure.
- Develop training programs that support resilient infrastructure, specifically including safety and health topics.

5. *Provide disaster resiliency training so that workers are better able to handle work/disaster-related emotional/mental health issues*

Workers, volunteers, and community members are impacted by storms, but not just in their physical environment. Disasters have a significant impact of mental health, particularly when there are multiple exposures to disasters impacting those individuals and communities. Ensuring that workers, volunteers, and community members have access to resources to prepare them to effectively manage mental health needs is important. NIEHS, in conjunction with the Substance Abuse and Mental Health Services Administration, developed three unique sets of awareness-level training materials designed to educate and empower those impacted by disasters to recognize signs and symptoms of disaster work-related stress; obtain support through an employer/organization or community resources; and build resilience by understanding stress reduction and coping strategies ⁹. These programs should be offered to workers, community based organizations, and volunteers across Puerto Rico.

⁸ <http://www.resilientpuertorico.org/en/topics-of-discussion/physical-infrastructure/>

⁹ <https://tools.niehs.nih.gov/wetp/index.cfm?id=2528>

- Create a program where retired health professionals are trained to serve as volunteers in health-care facilities during emergencies
- Develop awareness of disaster resiliency training available from NIEHS, which can be provided through the UMET, INEDA.
- Develop a train-the-trainer model to increase the number of disaster resiliency trainers across Puerto Rico.
- Work with community based organizations, municipal, and state agencies to implement disaster resiliency training.

6. *Develop a cadre of effective and qualified trainers to be able to provide training across Puerto Rico.*

Establishing a cadre of instructors who have the capacity to provide a wide range of training topics, as well as providing training at various levels of education is needed. Content experts need the ability to be able to train different populations, including those in K-12, undergraduate, graduate, professionals, and community members. Also, the need to have trainers who have the capacity to train in the various topics identified above is critical. A way to increase the number of competent trainers is to develop a train-the-trainer model. The train-the-trainer model will develop trainers that can be topic specific and or population specific, and will be able to maximize the number of training programs available.

- Develop a train-the-trainer model to increase the number of EOSH trainers across Puerto Rico.
- Train the trainer programs must include cultural competency training to ensure trainers understand the importance of messaging, and how messages impact those in the training program.

7. *Identify funding sources to implement the action steps outlined.*

Funding is a significant need to implement disaster recovery and resiliency training programs. The diversity of needs identified is vast, and includes specific training topics as well as specific populations in need of training. The New Jersey / New York Hazardous Materials Worker Training Center, lead by Rutgers University School of Public Health, includes funding for training in disaster preparedness and hazardous waste clean-up. The Universidad Metropolitana provides several of the training programs identified above. They have limited existing resources provided through the NIEHS Cooperative Agreement. Rutgers, as the prime recipient of the funds from NIEHS, has committed to provide additional resources as they become available, either from supplemental or additional funding.

- Identify existing funds that are available to municipalities and community agencies (e.g., HUD).
- Develop a training program to teach municipal and community agencies on how to apply for and manage grant funds, and include project management skills.

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- Develop checklists and templates for municipal and community agencies to assist in the development of grant applications.

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List of Attendees

Sharon Acosta	Centro Usos Múltiples, Comunidad Punta Santiago, Humacao
Kedesh Altidor-Dorcely	US Department of Health and Human Services
Rafael Caballero	UMET INEDA
Sergio Caporalli	UPR School of Public Health
Humberto Cavallín	UPR School of Architecture
Alba Costa	PRASA
Lourdes Febres	UMET School of Science, Technology & Environment
Manuel Félix	AMMED Bayamón
Christie Forester	NIOSH, HHS Recovery Support
Katherine González	FEMA Region 2, Disaster Sector Chief, Capacity Building
Cherry Jochum	FEMA Hub of Philanthropic Engagement
Zolyamar Luna	EPA
José Marchand	FEMA Region 2, Capacity Building
Harry Marrero	AMMED Bayamón
Deevah Meléndez	FEMA Municipality Directorate
Schenine Mitchell	EPA
Carlos Morales	UMET School of Science, Technology & Environment
Agustín Mujica	PR Builders Association
Edwin Nazario	PR-VOAD
Elizabeth Nelson	Comunidad William Fuertes, Cataño
Carmen Nuñez	UMET, INEDA
Nitza Ortiz-Pizarro	Centro Usos Múltiples, Comunidad Punta Santiago, Humacao
Carlos Padín	UMET
Luis Pardo	PR-OSHA
Jim Remington	NIEHS
Shehaly Rosado	PREPA
Carlos Rosado	UPR Bayamón
Gisela Rosario	NMEAD
Mitchel Rosen	Rutgers School of Public Health
Vélez Rubio	UPR Bayamón
Jay Rullán	PR-OSHA
Juan Sanchez	UPR Bayamón
Wendy Thomi	EPA
Jackeline Torres	US Green Building Council, PR Chapter