

Promoting Community Preparedness and Resilience: A Latino Immigrant Community–Driven Project Following Hurricane Sandy

As community residents and recovery workers, Latino immigrants play important roles after disasters, yet are rarely included in preparedness planning. A community–university–labor union partnership created a demonstration project after Hurricane Sandy to strengthen connections to disaster preparedness systems to increase community resilience among Latino immigrant communities in New York and New Jersey. Building ongoing ties that connect workers and community-based organizations with local disaster preparedness systems provided mutual benefits to disaster planners and local immigrant communities, and also had an impact on national disaster-related initiatives. (*Am J Public Health*. 2017;107:S161–S164. doi:10.2105/AJPH.2017.304053)

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In dual roles as community residents and recovery workers, Latino immigrants have played important roles after disasters.¹ Following Hurricane Sandy in 2012, Latino immigrant construction and cleanup laborers received federally funded short-term occupational safety and health (OSH) training through several community-based organizations (CBOs) to reduce health risks to themselves and the impacted communities.

PURPOSE

Immigrant male and female Latino laborers form part of an informal disaster response and recovery network with CBOs, homeowners, and private construction contractors that functions alongside a formal network of official disaster-related systems. Creating ongoing ties that connect trained workers and CBOs to this formal infrastructure would improve coordinated disaster response, recovery, and rebuilding efforts.² The long-term goal of IWDRWG to create sustainable partnerships across CBOs to provide better services to these workers and to improve CBOs' connectedness to formal disaster preparedness systems is one facet of building community resilience, defined as a community's ability to

withstand and recover from a disaster.⁵

INTERVENTION

On the basis of this experience, these CBOs received ongoing funding for a community-initiated and –driven intervention project to create the Immigrant Worker Disaster Resilience Workgroup (IWDRWG) to (1) improve the capacity of CBOs to provide ongoing disaster preparedness and OSH training for Latino immigrant laborers and (2) improve CBOs' knowledge about and develop connections to disaster preparedness agencies, thus increasing their sustained participation in local disaster preparedness activities.

PLACE AND TIME

The IWDRWG began in 2014 and included university-based occupational health researchers, a labor union, and 7 CBOs serving Latino immigrant communities in the New York–New Jersey region.

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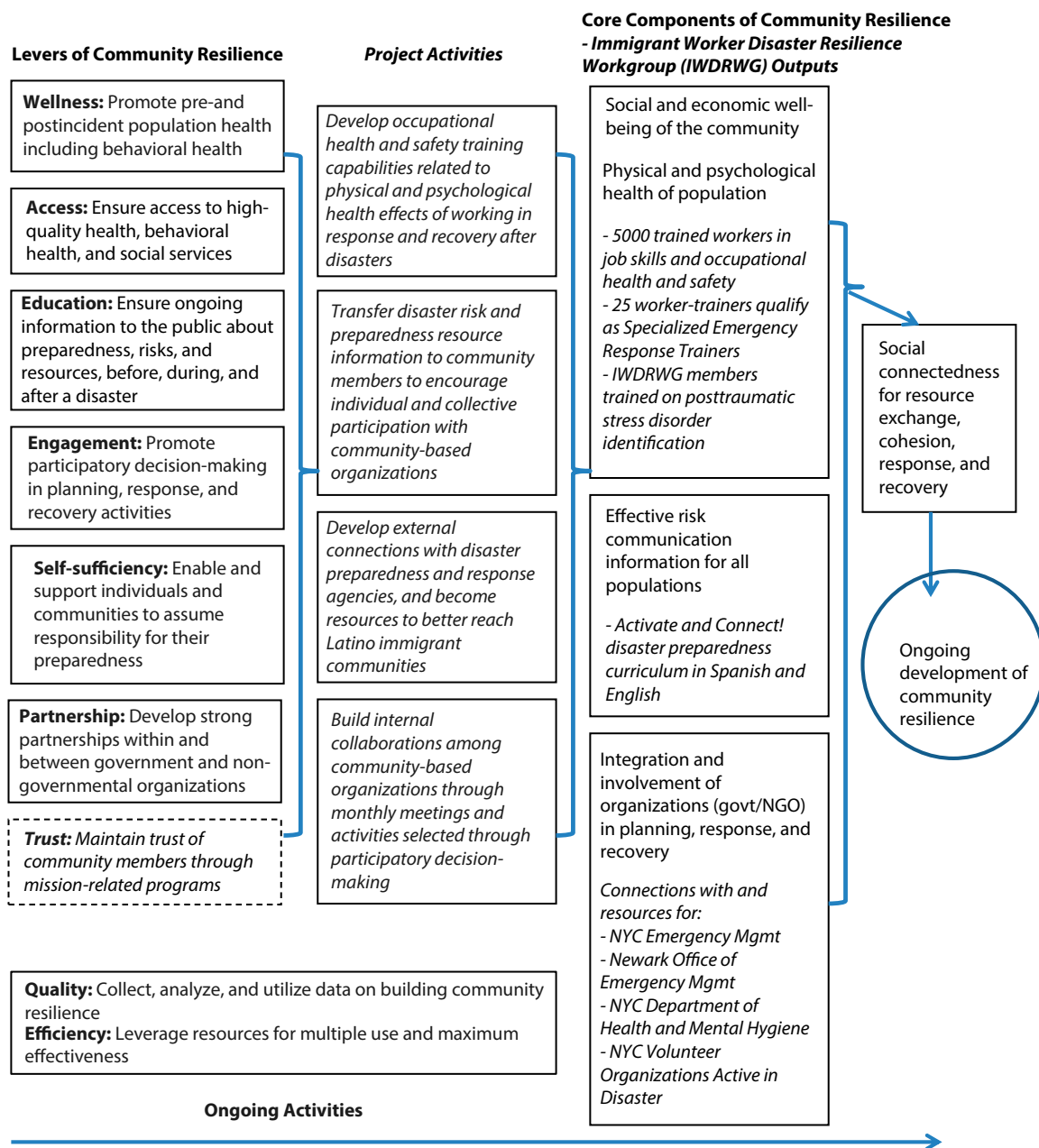
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PERSON

The CBOs in the IWDRWG represent immigrant Latino day-laborers that provided volunteer and paid rescue and recovery services after Hurricane Sandy² and administered OSH training.^{1,2} These CBOs provide services to laborers who are disenfranchised by language, literacy, and insecure employment.^{2–4}

IMPLEMENTATION

The IWDRWG met monthly to coordinate ongoing OSH training, develop disaster preparedness training and outreach materials, and arrange meetings with governmental and non-governmental disaster-related agencies. The IWDRWG reviewed previous approaches to strengthening community resilience and drew from the work of Chandra et al.⁵ who examined approaches local health departments used to build community capacity and resiliency. The 8 levers of Chandra et al.'s conceptual model, or means to achieve the core components of resilience, were deemed useful



Source. Adapted from Chandra et al.⁵

Note. Regular text indicates original model; italicized text indicates Immigrant Worker Disaster Resilience Workgroup project work.

FIGURE 1—Model for Community-Driven Promotion of Community Resilience for Immigrant Worker Communities: New York and New Jersey, 2014–2016

guides to develop activities and generate outputs. We added an additional lever, “trust,” because this is a fundamental principle of CBOs serving immigrant communities (Figure 1).

The academic partners facilitated an iterative consensus group

process. We collected data (semistructured interviews and participant observational field notes) throughout the project to facilitate partnership development and track progress.⁵ Thematic analysis yielded findings about gaps

IWDRWG wished to address (Table 1).

Redefining Community Resilience

Although community resilience was not a familiar term,

IWDRWG members recognized much overlap with the immigrant experience but chose to emphasize the need for collective, systemic changes to reduce underlying vulnerabilities. Reflecting this focus, members generated a new definition:

TABLE 1—Post-Hurricane Sandy Disaster Preparedness and Protection Gaps for Immigrant Worker Communities Identified by the Immigrant Worker Disaster Resilience Workgroup: New York and New Jersey, 2014–2016

Theme	IWDRWG Community-Based Organization Leaders' Quotes
Lack of adequate disaster preparedness and occupational safety and health training after Hurricane Sandy	"From one day to the next, as a small organization . . . without any training in this kind of disaster, we had to basically jump in to do it because no one else was." "We helped clean up . . . and that allowed us to see the need to continue informing workers and organizing them because cleaning took some time . . . in reality to avoid accidents we have to learn to identify [problems]."
Knowledgeable communities not connected to disaster preparedness systems	"Knowing all the local players would help . . . there's bureaucratic channels for emergency response, but there's informal networks that need to get plugged into that, there's always a disconnect." "When it comes to training people, we have this knowledge . . . human [and] social capital that's being wasted . . . day laborers are not coming to the table when it comes to emergency response."
Need for empowerment of worker-resident leaders to provide training	"[Training] needs to be tied to building leadership and skills for members, that they can be the ones that are teaching others . . . really what's more important is the message that you're saying and how're you're saying it and where you're saying it." "The fact that there are workers who can provide these kinds of assistance services I think helps a lot . . . the same kind of worker that speaks their language and knows their life . . . [they] have perhaps double the weight rather than someone else . . . who has no idea . . . of [whom] we are trying to reach."
Intergroup collaboration	"What's good is to be able to be at a table in which each group has the independent ability to try certain activities and . . . to openly share each of our strategies to see how each [one] is working to benefit, first, the workers, the community, and then each organization."

Note. IWDRWG = Immigrant Worker Disaster Resilience Workgroup.

Resilience is not about working to return to the previous conditions after a traumatic event at the individual level, but rather, it should be about taking collective action to advocate for positive change to improve conditions that existed prior to the disaster, thereby reducing its negative impacts and strengthening how a community responds to a future traumatic event.

Activities and Outputs

Improving social, economic, physical, and psychological health and well-being. Central to IWDRWG's mission was expanding OSH training programs initiated after Hurricane Sandy, benefitting construction laborers during disaster and nondisaster periods. These 16-hour Spanish-language trainings by certified worker-trainers using popular education

approaches⁶ increased knowledge and awareness about work hazards and workers' rights and contributed to improved employability and economic well-being by providing a training credential (Occupational Safety and Health Administration 10-hour certification card) required of all New York City construction workers. Between 2014 and 2016, IWDRWG trained 5000 workers, and approximately 25 worker-trainers received command system training to qualify as Specialized Emergency Response Trainers. The National Institute of Environmental Health Sciences also provided IWDRWG members with training to identify possible symptoms of posttraumatic stress disorder in responders.

Promoting effective risk communication about work and community hazards for disaster preparedness. To supplement the ongoing OSH trainings for construction and cleanup laborers, the IWDRWG also designed "Activate and Connect!," a 2-hour training curriculum available in Spanish and English for CBOs to teach workers and residents local emergency preparedness and response strategies and strengthen connections between the communities they serve. The curriculum facilitates communication of knowledge about disaster risks and resources to others (e.g., family members and neighbors). The CBOs in the IWDRWG trained approximately 100 community members to identify assets and gaps through community

mapping, determine collective action steps that address disaster preparedness needs as workers and residents, and enhance connections with constituents.

Developing connections with local disaster initiatives. The IWDRWG established connections with 6 city-level disaster preparedness agencies including New York City and Newark Emergency Management, New York City Department of Health and Mental Hygiene's Community Disaster Resilience initiative, and New York City Voluntary Organizations Active in Disasters. Although agencies were motivated initially to engage with IWDRWG because of its impressive record of training workers, once contact was established, agencies were eager to integrate IWDRWG into existing committees and activities, contributing to partnerships necessary to build community resilience.

EVALUATION

Key informant interview feedback about the impact of IWDRWG from CBO leaders and preparedness agency staff stressed the importance of the information and connections they gained that resulted in their knowing whom to contact and what to do during disasters. Leaders of CBOs expressed positive impacts of OSH trainings on organizational self-sufficiency and the importance of this training for workers whether during a disaster or during their regular work activities.

We tracked actions by others, triggered by IWDRWG activities, that contributed to community resilience. Locally, the Manhattan Borough President's Office and Manhattan District Attorney invited workgroup

leaders to participate in construction safety initiatives. This led to IWDRWG member organizations receiving a \$1.5 million grant from the District Attorney's office to provide ongoing crime victim support services, including for OSH-related violations, to immigrant workers. It also led to funding for additional OSH trainings from the New York State Department of Labor Task Force to Combat Worker Exploitation. Nationally, IWDRWG was invited by local labor unions and CBOs to assist with cleanup and recovery after flooding in Baton Rouge, Louisiana, by providing Spanish OSH training and distribution of personal protective equipment to 400 workers. The expertise of IWDRWG members was requested by National Institute of Environmental Health Sciences in the development of culturally competent educational materials for cleanup workers potentially exposed to Ebola and other emerging infectious diseases.

ADVERSE EFFECTS

As IWDRWG has limited influence over employers, CBOs acknowledged that, despite training, workers might not always have the power to change working conditions or the economic ability to refuse work. Though contextual factors specific to this project may limit generalizability, similar initiatives elsewhere could demonstrate broader applicability by tailoring approaches to individual community needs.

SUSTAINABILITY

Partnering with CBOs to build a cadre of trained worker-leaders to respond to hazardous

working conditions and promote safety, whether during a disaster or as part of daily work, served as a pivotal approach and contributed to the project's sustainability. This dual benefit (efficiency lever Figure 1) of generating ongoing capacity to provide OSH training to Latino laborers contributed to sustainability. The Activate and Connect! curriculum reflects this commitment to integrating community and worker disaster preparedness. As indicated in feedback interviews, our investment in supporting strong, continued internal partnerships among IWDRWG members who redefined community resilience and building external connections to disaster-related agencies improved IWDRWG's sense of social connectedness. The accomplishments and reach of IWDRWG into Latino immigrant communities led to additional financial support from federal, state, and local agencies.

PUBLIC HEALTH SIGNIFICANCE

This demonstration project suggests that CBOs and immigrant workers trained properly in OSH can become resources for community preparedness and recovery, 2 public health preparedness capabilities recommended by Centers for Disease Control and Prevention.⁷ Ongoing programs, such as those created by IWDRWG, can help communities carve their own path toward resilience. *AJPH*

CONTRIBUTORS

I. Cuervo conducted analysis and wrote the first draft and revisions after peer reviews. S. Baron conceptualized the project and provided project oversight and critical review. L. Leopold helped to conceptualize the project. All of the authors provided edits to subsequent drafts.

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HUMAN PARTICIPANT PROTECTION

The City University of New York's Human Research Protection Program judged this project as exempt, as this was a demonstration project that was designed to examine a public benefit or service programs and possible changes in or alternatives to those programs or procedures.

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