

# Community Health Worker Activities in Public Health Programs to Prevent Violence: Coding Roles and Scope

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In multiple and related forms, violence is a serious public health issue with lasting impacts on health and wellness in the United States. Community health workers (CHWs) are frontline public health workers and trusted members of communities.

We aimed to analyze recent examples of CHW activities in violence prevention public health programs with a goal of informing future programs and research. We collected more than 300 documents published between 2010 and 2020 to identify public health programs to prevent violence including CHW activities. We used an iterative process to develop and apply a coding scheme to the CHW activities.

We identified 20 public health programs to prevent violence which included CHW activities. CHWs most often addressed community violence, youth violence, and family violence and played an average of 8 of 10 core roles per program. Fewer than a third (i.e., 6 programs) reported community-focused CHW activities to address upstream and structural determinants of health inequities. This first examination, to our knowledge, of the intersection of the CHW and violence prevention literature shows that CHWs have played many of their core roles in public health programs to address multiple forms of violence. (*Am J Public Health*. Published online ahead of print June 23, 2022:e1–e11. <https://doi.org/10.2105/AJPH.2022.306865>)

In the United States, violence, in multiple, related forms, is a public health issue with lasting impacts on health and wellness.<sup>1,2</sup> Social and structural marginalization can also position certain populations and communities to experience greater exposure to and risk of violence.<sup>3</sup> For example, homicide is the leading cause of death for African American males aged 15 to 34 years.<sup>4</sup> In addition, a study of Chicago neighborhoods in 2013 showed that Hispanic and Black youths were 74% and 112% more likely to be exposed to violence than White youths, respectively.<sup>5</sup>

Violence prevention can include intervention to avert violent events,<sup>6</sup> as well as addressing the risk and protective

factors (e.g., adverse childhood experiences, such as experiencing violence in the home or community) that contribute to multiple forms and intergenerational transmission of violence.<sup>7,8</sup> Violence prevention also requires a focus on addressing the upstream and structural and intermediary determinants of inequities.<sup>9</sup> According to the World Health Organization's (WHO's) *Framework for Action on Social Determinants of Health*, upstream determinants of health inequities include

structural mechanisms that generate stratification and social class divisions in the society and that define individual socioeconomic position

and are rooted in the key institutions and processes of the socioeconomic and political context.<sup>9(p5)</sup>

The intermediary determinants of inequities derive from the upstream and structural determinants and include factors such as material circumstances, psychosocial and behavioral factors, and the health and social service system.<sup>9</sup> Lastly, the cross-cutting determinants (e.g., social cohesion and capital) are related to collective efficacy to modify upstream and structural determinants of inequities,<sup>10</sup> such as structural racism,<sup>11</sup> and to prevent the inequities created by existing hierarchies.<sup>9</sup>

As a workforce with the recognized potential to promote health equity,<sup>12</sup> community health workers (CHWs) played a critical role during the COVID-19 pandemic,<sup>13</sup> with the Centers for Disease Control and Prevention (CDC) and Health Resources and Services Administration investing more than \$480 million in programs to engage CHWs in pandemic response efforts.<sup>14,15</sup> The development of a national infrastructure to support CHW engagement in the public health response to COVID-19, along with an increased national focus on addressing violence,<sup>16,17</sup> has created a window of opportunity to support the natural extension of CHW roles to include violence prevention.

CHWs have existed in the United States since the 1950s, but they have been receiving increased attention as the workforce has become more professionalized.<sup>18</sup> In 2009, just before federal policy included CHWs as a strategy for improving health outcomes, CHWs led the American Public Health Association (APHA) in creating a standard definition for a CHW that is widely accepted now in the field:

A community health worker is a frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served. This trusting relationship enables the worker to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery. A community health worker also builds individual and community capacity by increasing health knowledge and self-sufficiency through a range of activities such as outreach, community education, informal

counseling, social support, and advocacy.<sup>19</sup>

During the past decade, CHWs' organizing and advocacy at the local, state, and national levels have further established a CHW professional identity, including creation of a national CHW association, and advanced workforce development through the development of core roles.<sup>20,21</sup>

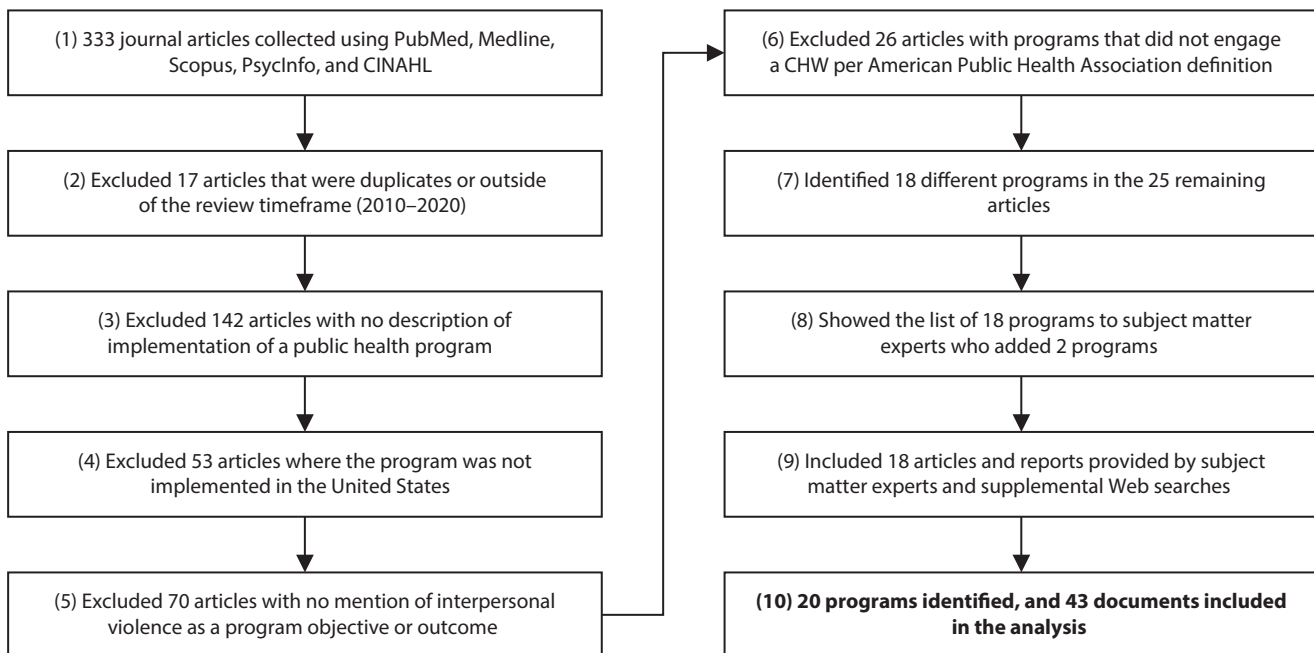
The CDC has supported CHW programs and research related to chronic disease prevention and management for more than a decade.<sup>12</sup> Systematic reviews during this time have also provided support for interventions engaging CHWs to prevent and manage chronic diseases.<sup>22</sup> However, to date, the peer-reviewed literature has given little attention to the intersection of the topics of CHWs and violence prevention. We aimed to review recent published literature to identify and analyze examples of CHW activities related to violence prevention, including CHW activities to address upstream and structural and intermediary determinants of health inequities. We use gaps and limitations from our review to identify potential next steps for supporting CHW leadership in programs and research to prevent violence.

## METHODS

In January 2021, our team of 9 authors, including 2 CHWs (A. H. B. A. and D. J.) with experience working in violence prevention, led by the CDC Division of Violence Prevention, consulted with 10 additional subject matter experts to conceptualize the topic, develop search terms, and define a document and program inclusion and exclusion process. We (the author team) searched PubMed, Medline, Scopus, PsycInfo,

and CINAHL for articles in English published between January 1, 2010, and December 31, 2020, by using the following terms: "community health worker," "promotora," "promotor," "community health representative," "violence interrupter," "violence prevention specialist," "violence intervention specialist," "violence prevention professional," "lay health worker," "community outreach worker," "community health advisor," "behavioral health aide," "village-based counselor," "street worker," and "youth worker" and "violence," "child abuse," "child maltreatment," "child neglect," "elder abuse," "elder maltreatment," "elder neglect," and "safety." We included titles of CHWs conducting violence interruption and outreach because subject matter experts reported that these workers have begun to identify with the APHA definition for a CHW and have connected with CHW organizations.

Figure 1 describes our document and program inclusion and exclusion process. After collecting the peer-reviewed literature, 2 authors (C. B. and N. W.) independently reviewed titles and available abstracts to identify documents that (1) described a public health program that had been implemented in the United States, (2) included at least 1 specific form of interpersonal violence prevention as a program focus (excluding treatment alone), and (3) reported at least 1 individual meeting the APHA definition for a CHW<sup>19</sup> conducting activities relevant to the violence-prevention focus. Our focus on interpersonal violence included 8 forms of violence that occur between individuals, as defined by the CDC (Table A, available as a supplement to the online version of this article at <https://ajph.org>), and excluded self-directed violence. After reviewing the list of included documents and



**FIGURE 1—** Inclusion and Exclusion of Documents and Public Health Programs to Prevent Violence Including Community Health Worker (CHW) Activities

programs, subject matter experts added documents and programs that were not identified through our literature search.

Lastly, we conducted Web searches using Google with the names of the included programs to identify supplemental documents. During this process, we determined that most of the identified programs did not have replications, except for the Cure Violence program. Because CHW activities were similar across these replications, we decided to analyze them as 1 program.<sup>23</sup>

## Coding Scheme Development

We collaboratively developed a coding scheme that could be applied to each program, using an iterative process to develop, test, and refine the coding scheme and develop consensus on the coding. We developed initial codes based on our review of the included

literature and subject matter expert input. Next, one reviewer coded each program based on associated documents (Table B, available as a supplement to the online version of this article at <https://ajph.org>). At least 1 additional reviewer then examined the same documents and provided edits for the program's coding. The reviewers did not assign codes to programs for CHW activities that were not explicitly described. The first author (C. B.) coordinated communications about the coding among reviewers and ensured that changes to the coding process were applied to all the programs. We met 3 times to refine and review coding results together to ensure consistency and consensus and determine the format for presenting results.

## Final Coding Scheme and Definitions

Tables 1 and 2 include the final coding scheme, and Table B includes the final

code definitions. Programs with CHW activities were coded for 8 forms of violence, 5 professional sectors, and 4 focus populations experiencing structural racism and historical trauma. On the basis of previous research,<sup>20,21</sup> we also coded CHW activities in the programs for 10 CHW core roles, applying additional codes to identify the roles that could be focused on the community (i.e., community-focused activities), in addition to on individuals and families (i.e., community-based activities). Programs with identified community-focused CHW roles were also coded for the focus of these roles on 6 types of upstream and structural and intermediary determinants of health inequities from the WHO Framework.<sup>9</sup> Because upstream and structural determinants are expected to have the largest public health impact, we also documented program impacts related to upstream and structural determinants. All relevant codes within a category were

**TABLE 1— Coding for Forms of Violence Addressed, Focus Populations, and Sectors Connected by Community Health Worker Activities in 20 Public Health Programs to Prevent Violence: January 1, 2010–December 31, 2020**

Program	Form(s) of Violence	Focus Population(s)	Sector(s)
<i>Acción para la Salud</i>	Community, family	Hispanic/Latinx	Community, health care, social service
Cambodian Women's Group	Community, family	Asian American	Community, social service
Capital Region Violence Prevention	Community, youth, firearm	Black/African American	Community, health care, social service, justice or legal
Cure Violence	Community, youth, firearm	Black/African American	Community, health care, social service, justice or legal, education
E-Responder	Community, youth, firearm	Black/African American, Hispanic/Latinx	Community
Family Health Advocate	Community, family, intimate partner	Black/African American	Community, health care, social service, justice or legal
Family Spirit	Family, youth, child abuse or neglect	American Indian/Alaska Native	Community, health care, social service, education
Family Wellness Warriors	Community, family, intimate partner, sexual, child abuse or neglect	American Indian/Alaska Native	Community, health care, social service, justice or legal
Interconnections Project	Intimate partner	Black/African American	Community, health care, social service, justice or legal
Lay Health Workers Enhancing Engagement for Parents	Family, child abuse or neglect, intimate partner	Hispanic/Latinx	Community, health care
<i>Líderes</i>	Family, intimate partner	Hispanic/Latinx	Community, social service
Phoenix TRUCE	Community, youth, firearm	Hispanic/Latinx	Community, health care, social service, justice or legal, education
Prescription for Hope	Community, youth, firearm	Black/African American	Community, health care, social service, justice or legal, education
<i>Proyecto Interconexiones</i>	Family, intimate partner	Hispanic/Latinx	Community, health care, social service
Safe Spaces	Family, intimate partner, sexual	Black/African American	Community, health care, social service
SAFER Latinos	Community, youth, firearm	Hispanic/Latinx	Community, social service, education
Special Kids Achieving Their Everything	Family, intimate partner, child abuse or neglect	Hispanic/Latinx	Community, health care, social service, education
Striving to Reduce Violence Everywhere (Multnomah County 2016)	Community, youth, firearm	Black/African American, Hispanic/Latinx	Community, school, social service, health care
We Are Health Movement	Community, youth	Black/African American	Community, social service
Wrap Around Project	Community, youth, firearm	Black/African American, Hispanic/Latinx	Community, social service, health care, justice or legal, education

applied for each program. For example, a program could include CHW activities aimed at addressing multiple forms of violence.

### Coding Analysis

To aggregate the coding across programs, we counted the number of

programs with each code and, for each category, averaged the number of codes per program. Program coding results are provided in [Tables 1](#) and [2](#).

**TABLE 2— Coding for Community Health Worker (CHW) Core Roles and Intermediary and Upstream and Structural Determinants of Health Inequities Addressed by CHW Activities in 20 Public Health Programs to Prevent Violence: January 1, 2010–December 31, 2020**

<b>Program</b>	<b>CHW Core Role(s)</b>	<b>Intermediary Determinant(s)</b>	<b>Upstream and Structural Determinant(s)</b>
<i>Acción para la Salud</i>	Cultural mediation, health education, social support, capacity (I & C), assessments (I & C), outreach, advocacy (I & C), research and evaluation	Material circumstances, psychosocial or behavioral, health and social systems, collective efficacy	Socioeconomic or political context
Cambodian Women's Group	Cultural mediation, social support, capacity (I & C), assessments (I & C), outreach, research and evaluation	Material circumstances, psychosocial or behavioral, health and social systems, collective efficacy	Socioeconomic or political context
Capital Region Violence Prevention	Cultural mediation, health education, care coordination, social support, capacity (I), direct service, outreach, research and evaluation	None identified	None identified
Cure Violence	Cultural mediation, health education, care coordination, social support, capacity (I & C), direct service, assessments (I & C), outreach, advocacy (I & C), research and evaluation	Material circumstances, psychosocial or behavioral, health and social systems, collective efficacy	Socioeconomic or political context, socioeconomic position
E-Responder	Cultural mediation, health education, social support, capacity (I), direct service, assessments (I), outreach, research and evaluation	None identified	None identified
Family Health Advocate	Cultural mediation, health education, care coordination, social support, capacity (I), direct service, assessments (I), outreach, advocacy (I), research and evaluation	None identified	None identified
Family Spirit	Cultural mediation, health education, care coordination, social support, capacity (I), assessments (I), research and evaluation	None identified	None identified
Family Wellness Warriors	Cultural mediation, health education, social support, direct services, capacity (I & C), outreach, advocacy (I & C), research and evaluation	Psychosocial or behavioral, health and social systems, collective efficacy	Socioeconomic or political context
Interconnections Project	Cultural mediation, health education, care coordination, social support, capacity (I), assessments (I), direct service, research and evaluation	None identified	None identified
Lay Health Workers Enhancing Engagement for Parents	Cultural mediation, health education, social support, capacity (I), assessments (I), direct service, outreach, research and evaluation	None identified	None identified
<i>Lideres</i>	Cultural mediation, health education, social support, capacity (I), outreach, advocacy (I), research and evaluation	None identified	None identified
Phoenix TRUCE	Cultural mediation, health education, care coordination, social support, capacity (I & C), direct service, assessments (I & C), outreach, research and evaluation	Psychosocial or behavioral, collective efficacy	None identified
Prescription for Hope	Cultural mediation, health education, care coordination, social support, capacity (I), assessments (I), direct services, outreach, research and evaluation	None identified	None identified
<i>Proyecto Interconexiones</i>	Cultural mediation, health education, care coordination, social support, capacity (I), direct service, research and evaluation	None identified	None identified

Continued

**TABLE 2— Continued**

Program	CHW Core Role(s)	Intermediary Determinant(s)	Upstream and Structural Determinant(s)
Safe Spaces	Cultural mediation, health education, care coordination, social support, capacity (I & C), assessments (I & C), outreach, research and evaluation	Material circumstances, psychosocial or behavioral, health and social systems, collective efficacy	None identified
SAFER Latinos	Cultural mediation, health education, care coordination, social support, capacity (I), direct service, assessments (I), outreach, advocacy (I), research and evaluation	None identified	None identified
Special Kids Achieving Their Everything	Cultural mediation, health education, care coordination, social support, capacity (I), direct service, assessments (I)	None identified	None identified
Striving to Reduce Violence Everywhere (Multnomah County 2016)	Cultural mediation, health education, care coordination, social support, capacity (I & C), direct service, assessments (I & C), outreach, advocacy (I & C), research and evaluation	Material circumstances, psychosocial or behavioral, health and social systems, collective efficacy	Socioeconomic or political context, socioeconomic position
We Are Health Movement	Cultural mediation, health education, care coordination, social support, capacity (I & C), direct service, assessments (I & C), outreach, advocacy (I), research and evaluation	Psychosocial or behavioral, collective efficacy	Socioeconomic or political context, socioeconomic position
Wrap Around Project	Cultural mediation, health education, care coordination, social support, capacity (I), direct service, assessments (I), outreach, advocacy (I), research and evaluation	None identified	None identified

Notes. C = community-focused; I = individual- or family-focused.

Table 3 provides results from the analysis of the coding.

## RESULTS

From the literature, 18 public health programs to prevent violence including CHW activities were identified (Figure 1). Subject matter experts added 2 programs, for a total of 20 identified public health programs to prevent violence including CHW activities.

### Forms of Violence, Sectors, and Populations

Table 1 includes the coding for forms of violence addressed, focus populations, and professional sectors connected by CHW activities for each of the 20 identified programs. Our

analysis of this coding found that CHWs addressed an average of 3 forms of violence, 3 sectors, and 1 population per program (Table 3). In addition, CHWs most often addressed community violence (13 programs), youth violence (10 programs), and family violence (10 programs). Community violence occurs between individuals who are unrelated, generally takes place outside the home, and can include youth violence.<sup>1</sup> Family violence includes a range of violence that can occur in families, including intimate partner violence, child abuse, and elder abuse by caregivers and others.<sup>2</sup> Table A includes these and other definitions for the 8 forms of violence coded.

CHWs in the identified programs worked most often with the community sector (in all 20 programs), social service sector (18 programs), and health

care sector (15 programs). CHWs in these programs worked with Black/African American (10 programs), Latinx/Hispanic (10 programs), American Indian/Alaska Native (2 programs), and Asian American (1 program) populations (Tables 1 and 3).

### Community Health Worker Core Roles

Table 2 includes the coding for CHW core roles and intermediary and upstream and structural determinants of health inequities addressed by CHW activities for each of the 20 programs. Table A also includes a definition for each CHW core role included in Tables 2 and 3. Programs reported an average of 8 of the 10 CHW core roles, with 6 of the 20 programs reporting all 10 roles

**TABLE 3— Analysis of Coding for Community Health Worker (CHW) Activities in 20 Public Health Programs to Prevent Violence: January 1, 2010–December 31, 2020**

Code	No. of Programs Out of 20
<b>Forms of violence addressed by CHW activities</b>	
Community violence	13
Youth violence	10
Family violence	10
Firearm violence	8
Intimate partner violence	8
Child abuse or neglect	4
Sexual violence	2
Elder abuse or neglect	0
<b>CHW core roles reflected in CHW activities</b>	
Cultural mediation	20
Social support	20
Capacity building	20
Individual <sup>a</sup>	12
Community <sup>b</sup>	8
Research and evaluation	19
Health education	19
Outreach	16
Assessment	16
Individual <sup>a</sup>	9
Community <sup>b</sup>	7
Direct service	15
Care coordination	14
Advocacy	9
Individual <sup>a</sup>	5
Community <sup>b</sup>	4
<b>Sectors involved in the CHW activities</b>	
Community	20
Social service	18
Health care	15
Justice or legal	8
Education	7
<b>Populations that were the focus of CHW activities</b>	
Black/African American	10
Hispanic/Latinx American	10
American Indian/Alaska Native	2
Asian American	1
<b>Upstream and structural and intermediary determinants addressed by community-focused CHW activities</b>	
Intermediary determinants	8
Psychosocial or behavioral	8
Collective efficacy	8
Health and social systems	6

Continued

(Table 3). CHWs' cultural mediation, social support, and capacity building roles were seen in all the programs (Tables 2 and 3). For example, these roles were reported for the Prescription for Hope program, in which culturally familiar support specialists helped to facilitate initiation of social services by accompanying participants to appointments and mentoring youth participants.<sup>24</sup> As another example, in the SAFER Latinos program, social *promotores* and peer advocates recruited from the community and schools provided one-on-one support to youths and parents, helped improve communication between families and the school system, and facilitated referrals to academic, job preparation, and other services through the program's "drop-in" community center.<sup>25</sup>

In addition, CHWs participated in research and evaluation in 19 of the 20 programs (Tables 2 and 3). For example, in the Safe Spaces, *Acción para la Salud*, and Cambodian Women's Group programs, CHWs contributed to program design and measurement through a community-based participatory research approach.<sup>26–28</sup> CHWs also provided culturally appropriate health education in 19 programs (Tables 2 and 3). For example, in the Family Spirit program, bilingual American Indian paraprofessionals delivered a parenting curriculum to adolescent mothers in their homes.<sup>29</sup> CHWs provided assessments, direct services, and care coordination in 16, 15, and 14 of the programs, respectively (Tables 2 and 3). For example, all 3 of these roles were reported for the Wrap Around Project, a hospital-based program in which violence intervention specialists provided violently injured patients with one-on-one case management, based on an initial risk assessment, including

**TABLE 3— Continued**

Code	No. of Programs Out of 20
Material circumstances	5
Upstream and structural determinants	6
Socioeconomic or political context	6
Socioeconomic position	3

<sup>a</sup>CHW activities reflecting this role focused on individuals and families only.

<sup>b</sup>CHW activities reflecting this role focused on the community, in addition to individuals and families.

mental health services, employment opportunities, and guidance to other resources.<sup>30</sup>

The CHW advocacy role was reported the least, by 9 of the 20 programs (Tables 2 and 3). CHW activities involving community-focused capacity building, assessments, and advocacy were reported by 8, 7, and 4 programs, respectively (Table 3). *Acción para la Salud* offers an example of a program reporting all 3 of CHWs' community-focused roles. The CHWs in this program used client encounter forms to assess and identify problems to discuss in community forums, developed and implemented policy action projects that included community coalition building and mobilization, and advocated for community needs with policymakers.<sup>27</sup>

### Intermediary Determinants

Eight of the 20 programs reported that CHWs conducted community-focused activities to address psychosocial or behavioral factors and collective efficacy (Tables 2 and 3). For example, CHWs in the Striving to Reduce Youth Violence Everywhere (STRYVE) Multnomah County program provided training to community members to articulate violence as a public health problem.<sup>31</sup> In the Cure Violence program, the CHWs facilitated meetings with

community members to help shift community norms around violence.<sup>23</sup> In the We Are Health Movement program, the CHWs participated in consciousness raising, a first step in community advocacy.<sup>32</sup>

In 6 of the 20 programs, community-focused activities by CHWs aimed to have an impact on the health and social service system (Tables 2 and 3). For example, a CHW-led coalition focused on strategies for improving intimate partner violence services in the Safe Spaces program.<sup>26</sup> Five of the 20 programs reported community-focused activities conducted by CHWs to address the material circumstances in the community (Tables 2 and 3). For example, the CHW facilitating the Cambodian Women's Group engaged community members to develop a community garden.<sup>28</sup> As another example, CHWs in the STRYVE Multnomah County program improved the community environment by engaging youths in placemaking activities, including creating murals and peace poles.<sup>31</sup>

### Upstream and Structural Determinants

In 6 of the 20 programs, CHWs led community-focused activities that helped to reveal upstream and structural determinants of inequities related

to the socioeconomic or political context (Tables 2 and 3). For example, the CHW facilitator of the Cambodian Women's Group led discussions that identified generation gap, lack of education, unemployment or underemployment, trauma, poverty, and discrimination as key upstream and structural drivers of health and violence issues in the community.<sup>28</sup> Three of these 6 programs reported program impacts related to the socioeconomic or political context.<sup>23,31,33</sup> First, in the Cure Violence program, the focus of programs was shifted from criminal justice to community health by obtaining new funding sources.<sup>23</sup> Second, in the STRYVE Multnomah County program, the CHW who was included in county-level meetings to improve policing in the community helped to identify a subjective and potentially discriminatory policing practice.<sup>31</sup> The CHW then proposed a policy that would rely on data, which the county adopted.<sup>31</sup> Third, the statewide implementation of the Family Wellness Warriors program, which is entirely led by the Native people of Alaska (including CHW "natural helpers"), was reported as leading directly to philosophical and policy changes in the health care, social service, judicial, educational, and correctional systems in Alaska.<sup>33</sup>

Lastly, 3 of the 20 programs reported CHW community-focused activities and program impacts related to socioeconomic position.<sup>23,31,32</sup> The We Are Health Movement and STRYVE Multnomah County programs reported that community members who attended the trainings were able to find permanent employment as CHWs.<sup>31,32</sup> In addition, the Cure Violence program included community partner education efforts that helped lead to employment for community members at high risk for violence.<sup>23</sup>



## DISCUSSION

This first examination of the intersection of the CHW and violence-prevention literature shows that CHWs have played many of their core roles in public health programs to address multiple forms of violence. We also found examples of CHWs' community-focused roles<sup>20,21</sup> applied to address upstream and structural determinants of health inequities,<sup>9</sup> with several programs reporting impact.<sup>23,31–33</sup>

Our analysis succeeded in revealing key gaps in the recent programmatic literature. While the CHWs in the 20 programs we reviewed most often addressed community, youth, and family violence, we saw that CHW activities reported in these programs less frequently focused specifically on child abuse or neglect, and none of the programs we reviewed provided CHWs with a specific focus on elder abuse or neglect (Tables 1 and 3). Also, despite the potential for community-focused activities to have upstream and structural impacts,<sup>9,10</sup> most of the programs we identified only included CHWs providing community-based services to individuals and families (Tables 2 and 3). Finally, fewer than a third of the programs (i.e., 6 programs) reported community-focused CHW activities to address upstream and structural determinants of health inequities (Tables 2 and 3).

## Limitations

Our review has 3 main limitations. First, we did not code for program outcomes in this analysis because these outcomes could not be directly attributed to the CHW roles and activities we analyzed. This attribution issue is a common limitation in CHW program

evaluations and systematic reviews.<sup>20</sup> A second limitation was our collection of mostly published literature. A third limitation is that our search included only the most widely used titles of CHWs, along with titles of the specific community-based violence intervention and prevention workers who we were aware had a preexisting connection with the CHW profession.

Our results and limitations suggest next steps to improve programs and research. The opportunity to combine CHW and community violence prevention is salient given the current context.<sup>15</sup> However, public health programs may currently be missing opportunities for CHWs to address the increases in child and elder abuse and neglect seen during the pandemic.<sup>34,35</sup> The programs we identified that specifically focused on child abuse and neglect tended to include multigenerational behavioral interventions.<sup>29,33</sup> Strategies focusing on the primary prevention of adverse childhood experiences through community-focused activities (e.g., affecting policies, cultural norms, and social norms) could also help to prevent child and elder abuse and neglect and other forms of violence.<sup>7,8</sup>

A logical next step after this review could be a scan and analysis of a wider breadth of unpublished program reports detailing CHW activities. Such an effort may also help to identify more examples of CHWs' community-focused roles and activities to address upstream and structural determinants. It could also be beneficial to examine CHW roles related to preventing self-directed violence (e.g., suicide) and other forms of violence that were not a focus of this review.

In addition, while our review found that CHWs were often included in the research and evaluation of a program

(Tables 2 and 3), equity in researcher or program designer and CHW partnerships might be further advanced by including CHWs as co-researchers and co-program designers. For example, this article is the product of a partnership including CHWs and non-CHW allies. CHWs contributed to the conceptualization of this review and provided input to refine our coding for CHW roles and activities based on their extensive experience developing, implementing, and evaluating violence intervention and prevention strategies in the field. The CHW authors of this article also provided a combination of lived experiences, practice-based wisdom, and previous leadership roles that has proven imperative for determining the vision, scope, purposes, implications, and opportunities to disseminate this work. Going forward, it will be important to fully document partnerships between researchers or program designers and CHWs to share best practices and success stories.

Research is also needed to analyze the outcomes of the promising violence prevention strategies and adaptations that CHWs are developing and leading in the field. For example, in Wilmington, North Carolina, a CHW-led community-wide violence prevention initiative has involved transforming a dormant community asset (i.e., vacant lot and abandoned building) into a community center that aims to build community cohesion and collective efficacy.<sup>36</sup> The CHW Common Indicators Project, a national project with CHW leadership,<sup>37</sup> is developing process and outcomes measures that could be used in the future to evaluate the impact of CHW activities related to violence prevention. Systematic reviews could be completed once a rigorous evidence base on outcomes has been developed.

Because the impact of violence on health and well-being is established,<sup>1,2</sup> another next step could be to support CHWs in chronic disease and other health promotion programs to extend their existing roles and activities to include violence prevention. This could involve the development of new tools and partnerships with CHW training programs, which exist in nearly every state.<sup>38</sup> In addition, the CHW definition provides an umbrella that could also potentially inform outreach to a wider range of community-based violence-prevention workers (e.g., victim advocates). Identifying more community-based violence prevention positions and developing partnerships with violence prevention programs could help to support more individuals meeting the CHW definition in connecting with the broader profession of CHWs (e.g., through national, state, and local CHW organizations and networks).

Finally, programs and partners may also want to consider how to help advance sustainable financing for CHW roles and activities relevant to violence prevention. For example, Illinois and Connecticut recently passed laws directing Medicaid reimbursement for violence intervention services.<sup>39</sup> One potential issue with CHW Medicaid financing relevant to violence prevention is the current gap in financing for CHWs' community-focused activities.<sup>38,40</sup> New research could help to inform models that could help programs to ensure fidelity across sites and provide evidence in support of sustainable financing mechanisms.

## Conclusions

Violence continues to be a serious public health issue that has lasting impacts for individuals, families, and

communities. The examples in this essay help to illustrate CHWs' potential to provide a comprehensive approach to violence prevention that involves reframing violence as a public health issue, changing community norms around violence, helping communities to heal collectively from violence and trauma, and developing community leadership and capacity to initiate change in structural conditions. Supporting CHW leadership in programs and research to prevent violence could have a substantial public health impact, especially if efforts support CHWs in working upstream. *AJPH*

## ABOUT THE AUTHORS

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**Note.** The findings and conclusions in this article are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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## REFERENCES

- Dahlberg LL, Krugg EG. Violence—a global public health problem. In: Dahlberg LL, Krug EG, Mercy JA, Zwi AB, Lozano R, eds. *World Report on Violence and Health*. Geneva, Switzerland: World Health Organization; 2002:1–21.
- Niolon PH, Kearns M, Dills J, et al. *Preventing Intimate Partner Violence Across the Lifespan: A Technical Package of Programs, Policies, and Practices*. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2017.
- Armstead TL, Wilkins N, Nation M. Structural and social determinants of inequities in violence risk: a review of indicators. *J Community Psychol*. 2021;49(4):878–906. <https://doi.org/10.1002/jcop.22232>
- Centers for Disease Control and Prevention. Web-based Injury Statistics Query and Reporting (WISQARS) System. December 2, 2021. Available at: <https://www.cdc.gov/injury/wisqars/index.html>. Accessed March 18, 2022.
- Zimmerman GM, Messner SF. Individual, family background, and contextual explanations of racial and ethnic disparities in youths' exposure to violence. *Am J Public Health*. 2013;103(3):435–442. <https://doi.org/10.2105/AJPH.2012.300931>
- Fortin P, Sunshine J, Anderson A, et al. Community health workers extend solutions to violence prevention. In: St John JA, Mayfield-Johnson SL, Hernández-Gordon WD, eds. *Promoting the Health of the Community*. Cham, Switzerland: Springer Nature Switzerland; 2021:153–166.
- Connecting the dots: an overview of the links among multiple forms of violence. Atlanta, GA:

- Centers for Disease Control and Prevention; 2014.
8. Preventing adverse childhood experiences: leveraging the best available evidence. Atlanta, GA: Centers for Disease Control and Prevention; 2019.
  9. *A Conceptual Framework for Action on the Social Determinants of Health*. Geneva, Switzerland: World Health Organization; 2010.
  10. Butel J, Braun KL. The role of collective efficacy in reducing health disparities: a systematic review. *Fam Community Health*. 2019;42(1):8–19. <https://doi.org/10.1097/FCH.000000000000206>
  11. Centers for Disease Control and Prevention. Racism and health: racism is a serious threat to the public's health. July 8, 2021. Available at: <https://www.cdc.gov/healthequity/racism-disparities/index.html>. Accessed September 30, 2021.
  12. Brownstein JN. Charting the course for community health worker research. *Prog Community Health Partnersh*. 2008;2(3):177–178. <https://doi.org/10.1353/cpr.0.0024>
  13. Centers for Disease Control and Prevention. Interim list of categories of essential workers mapped to standardized industry codes and titles. March 29, 2021. Available at: <https://www.cdc.gov/vaccines/covid-19/categories-essential-workers.html>. Accessed February 11, 2022.
  14. Centers for Disease Control and Prevention. Community health workers for COVID response and resilient communities. April 28, 2021. Available at: <https://www.cdc.gov/chronicdisease/programs-impact/nofo/covid-response.htm>. Accessed September 30, 2021.
  15. Health Resources and Services Administration. Community-based workforce for COVID-19 vaccine outreach. June 2021. Available at: <https://www.hrsa.gov/coronavirus/community-based-workforce>. Accessed February 2, 2022.
  16. The White House. Taking on gun crime and violence with a whole-of-government approach. March 28, 2022. Available at: <https://www.whitehouse.gov/briefing-room/blog/2022/03/28/taking-on-gun-crime-and-violence-with-a-whole-of-government-approach>. Accessed May 20, 2022.
  17. American Public Health Association. Violence is a public health issue: public health is essential to understanding and treating violence in the US Policy number 20185. November 13, 2018. Available at: <http://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2019/01/28/violence-is-a-public-health-issue>. Accessed September 30, 2021.
  18. Landers SJ, Stover GN. Community health workers—practice and promise. *Am J Public Health*. 2011;101(12):2198. <https://doi.org/10.2105/AJPH.2011.300371>
  19. American Public Health Association. Community health workers. Available at: <https://www.apha.org/apha-communities/member-sections/community-health-workers>. Accessed September 30, 2021.
  20. Rosenthal EL, Fox DJ, St John JA, et al. The Community Health Worker Core Consensus (C3) Project story: confirming the core roles and skills of community health workers. In: St John JA, Mayfield-Johnson SL, Hernández-Gordon WD, eds. *Promoting the Health of the Community*. Cham, Switzerland: Springer Nature Switzerland; 2021:11–35. [https://doi.org/10.1007/978-3-030-56375-2\\_2](https://doi.org/10.1007/978-3-030-56375-2_2)
  21. Wiggins N, Borbón A. Core roles and competencies of community health advisors. In: Rosenthal EL, Wiggins N, Brownstein JN, et al, eds. *The Final Full Report of the National Community Health Advisor Study: Weaving the Future*. Tucson, AZ: University of Arizona, Health Sciences Center; 1998:11–17.
  22. The Community Guide to Preventive Services. Community health workers. Available at: <https://www.thecommunityguide.org/content/community-health-workers>. Accessed February 14, 2022.
  23. Cure Violence Global: the evidence of effectiveness. Chicago, Illinois: Cure Violence Global; 2021.
  24. Gomez G, Simons C, St John W, et al. Project Prescription for Hope (RxH): trauma surgeons and community aligned to reduce injury recidivism caused by violence. *Am Surg*. 2012;78(9):1000–1004. <https://doi.org/10.1177/000313481207800942>
  25. Edberg M, Cleary SD, Andrade E, et al. SAFER Latinos: a community partnership to address contributing factors for Latino youth violence. *Prog Community Health Partnersh*. 2010;4(3):221–233. <https://doi.org/10.1353/cpr.2010.0009>
  26. Wennerstrom A, Haywood C, Wallace M, et al. Creating safe spaces: a community health worker-academic partnered approach to addressing intimate partner violence. *Ethn Dis*. 2018;28(suppl 2):317–324. <https://doi.org/10.18865/ed.28.S2.317>
  27. Ingram M, Schachter KA, Sabo SJ, et al. A community health worker intervention to address the intermediary determinants of health through policy change. *J Prim Prev*. 2014;35(2):119–123. <https://doi.org/10.1007/s10935-013-0335-y>
  28. Lee JP, Kirkpatrick S, Rojas-Cheatham A, et al. Improving the health of Cambodian Americans: grassroots approaches and root causes. *Prog Community Health Partnersh*. 2016;10(1):113–121. <https://doi.org/10.1353/cpr.2016.0018>
  29. Barlow A, Mullany B, Neault N, et al. Effect of a paraprofessional home-visiting intervention on American Indian teen mothers' and infants' behavioral risks: a randomized controlled trial. *Am J Psychiatry*. 2013;170(1):83–93. <https://doi.org/10.1176/appi.ajp.2012.12010121>
  30. Patel D, Sarlati S, Martin-Tuite P, et al. Designing an information and communications technology tool with and for victims of violence and their case managers in San Francisco: human-centered design study. *JMIR Mhealth Uhealth*. 2020;8(8):e15866. <https://doi.org/10.2196/15866>
  31. Wiggins N, Vance S, Ranjith A, bin'Abdullah AH. Striving to Reduce Youth Violence Everywhere (STRIVE): final evaluation report. Portland, OR: Multnomah County Health Department; 2017.
  32. Bridgeman-Bunyoli A, Mitchell SR, Bin Abdullah AHM, et al. "It's in my veins": exploring the role of an Afrocentric, popular education-based training program in the empowerment of African American and African community health workers in Oregon. *J Ambul Care Manage*. 2015;38(4):297–308. <https://doi.org/10.1097/JAC.0000000000000112>
  33. Ray L, Outten B, Andrews P, Gottlieb K. Disrupting the intergenerational transmission of trauma among Alaska Native people: a conceptual model for the Family Wellness Warriors Initiative. *J Health Dispar Res Pract*. 2018;12(2):3. <https://digitalscholarship.unlv.edu/jhdrp/vol12/iss2/3>
  34. Swedo E, Idaikkadar N, Leemis R, et al. Trends in US emergency department visits related to suspected or confirmed child abuse and neglect among children and adolescents aged <18 years before and during the COVID-19 pandemic—United States, January 2019–September 2020. *MMWR Morb Mortal Wkly Rep*. 2020;69(49):1841–1847. <https://doi.org/10.15585/mmwr.mm6949a1>
  35. Chang ES, Levy BR. High prevalence of elder abuse during the COVID-19 pandemic: risk and resilience factors. *Am J Geriatr Psychiatry*. 2021;29(11):1152–1159. <https://doi.org/10.1016/j.jagp.2021.01.007>
  36. Sokoto House. Sokoto House. 2021. Available at: <https://sokotohouse.org>. Accessed Septmber 30, 2021.
  37. Rodela K, Wiggins N, Maes K, et al. The Community Health Worker (CHW) Common Indicators Project: engaging CHWs in measurement to sustain the profession. *Front Public Health*. 2021;9:674858. <https://doi.org/10.3389/fpubh.2021.674858>
  38. Barbero C, Mason T, Rush C, et al. Processes for implementing community health worker workforce development initiatives. *Front Public Health*. 2021;9:659017. <https://doi.org/10.3389/fpubh.2021.659017>
  39. Fischer K, Vander K, O'Rourke L, James L, Dreier FL. *Medicaid: Advancing Equity for Victims of Violence*. Jersey City, NJ: The Health Alliance for Violence Intervention; 2021.
  40. Schmit CD, Washburn DJ, LaFleur M, Martinez D, Thompson E, Callaghan T. Community health worker sustainability: funding, payment, and reimbursement laws in the United States. *Public Health Rep*. 2022;137(3):597–603. <https://doi.org/10.1177/00333549211006072>