

2020 Model Practices

Applicant Information

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Size

Select a size: *

☐ Small (0-50,000) ☐ Medium (50,000-499,999) ☒ Large (500,000+)

Application Information

Local Health Department/Organization Name: *

Public Health - Seattle & King County

Title of Practice: *

Building an Innovative Community Participatory Practice to Advance Environmental Justice at the Duwamish River Superfund Site

Submitter Name: *

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Practice Categories

Model and Promising Practices are stored in an online searchable database. Applications may align with more than one practice category. Please select the most relevant category that applies most to your practice: : *

- | | | | | |
|---|---|--|---|--|
| <input type="checkbox"/> Access to Care | <input type="checkbox"/> Advocacy and Policy Making | <input type="checkbox"/> Animal Control | <input type="checkbox"/> Coalitions and Partnerships | <input type="checkbox"/> Communications/Public Relations |
| <input checked="" type="checkbox"/> Community Involvement | <input type="checkbox"/> Cultural Competence | <input type="checkbox"/> Emergency Preparedness | <input type="checkbox"/> Environmental Health | <input type="checkbox"/> Food Safety |
| <input type="checkbox"/> Global Climate Change | <input type="checkbox"/> Health Equity | <input type="checkbox"/> HIV/STI | <input type="checkbox"/> Immunization | <input type="checkbox"/> Infectious Disease |
| <input type="checkbox"/> Information Technology | <input type="checkbox"/> Injury and Violence Prevention | <input type="checkbox"/> Marketing and Promotion | <input type="checkbox"/> Maternal-Child and Adolescent Health | <input type="checkbox"/> Organizational Practices |
| <input type="checkbox"/> Other | <input type="checkbox"/> Primary Care | <input type="checkbox"/> Quality Improvement | <input type="checkbox"/> Research and Evaluation | <input type="checkbox"/> Tobacco |
| <input type="checkbox"/> Vector Control | <input type="checkbox"/> Water Quality | <input type="checkbox"/> Workforce | | |

Model and Promising Practices are stored in an online searchable database. Applications may align with more than one practice category. Please select the second most relevant category that applies most to your practice: : *

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|---|---|--|---|--|
| <input type="checkbox"/> Access to Care | <input type="checkbox"/> Advocacy and Policy Making | <input type="checkbox"/> Animal Control | <input type="checkbox"/> Coalitions and Partnerships | <input type="checkbox"/> Communications/Public Relations |
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| <input type="checkbox"/> Global Climate Change | <input type="checkbox"/> Health Equity | <input type="checkbox"/> HIV/STI | <input type="checkbox"/> Immunization | <input type="checkbox"/> Infectious Disease |
| <input type="checkbox"/> Information Technology | <input type="checkbox"/> Injury and Violence Prevention | <input type="checkbox"/> Marketing and Promotion | <input type="checkbox"/> Maternal-Child and Adolescent Health | <input type="checkbox"/> Organizational Practices |
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Overview: Provide a brief summary of the practice in this section (750 Word Maximum)

Your summary must address all the questions below:

- Brief description of LHD- location, demographics of population served in your community.
- Describe public health issue.
- Goals and objectives of the proposed practice.
- How was the practice implemented/activities.
- Results/Outcomes (list process milestones and intended/actual outcomes and impacts.
- Were all of the objectives met?
- What specific factors led to the success of this practice?
- Public Health impact of practice.
- Website for your program, or LHD.

Public Health – Seattle & King County (PHSKC) is a large metropolitan health department that serves a population of nearly 2.2 million people with over 100 languages spoken. Along the five mile stretch of the Duwamish River, more than 20 ethnic/language groups come to fish from nearby neighborhoods in South/West Seattle and South King County – a region of the county that also faces many health inequities.

For over a century, the Duwamish River in South Seattle served as a highly industrial area and in 2001, the EPA declared it the Lower Duwamish Waterway (LDW) Superfund site, recognizing it as one of the most polluted rivers in America. Due to the high levels of PCBs, the fish, shellfish and crab that spend their entire lives in the river are unsafe to eat. Development during early life (fetuses, infants and young children) are most impacted by PCB exposures.

The historic pollution has disproportionately impacted Asian-Pacific Islander and Latino immigrant/refugee fishing communities for decades. Health warning signs posted since 2006 have not been effective in raising awareness among fishers who speak little to no English.

In 2017, we launched a community-centered health promotion program for the EPA to advance environmental justice at the LDW Superfund site. The long-term goal is to promote culturally appropriate, healthy actions that protect the health and well-being of fishing communities, especially pregnant women, nursing moms, and young children, from the contaminated resident seafood in the LDW Superfund site before, during, and after the cleanup.

Within the first three years of our program, we established an innovative community participatory practice reflective of the environmental justice principles of capacity-building, meaningful involvement, and empowerment. These principles were guided by the evidence-based recommendations set forth by the National Environmental Justice Advisory Council (NEJAC) in their report to the EPA on Fish Consumption and Environmental Justice ([NEJAC, 2002](#)).

This is the first Superfund site institutional controls program to center the voices of affected community members throughout program development, implementation, and evaluation. It fosters a collaborative and power-sharing relationship between government staff and community members, even while the EPA maintains its regulatory decision-making authority.

We creatively applied existing health promotion and community involvement frameworks, processes, and tools through an equity and social justice lens and within a Superfund regulatory context. These areas of innovation include:

1. Framing the program with a multi-level ([socio-ecological](#)) approach (instead of a traditionally one-way risk communication strategy).
2. Investing in the capacity and empowerment of community members using a [community health worker model](#) (adapted to the Superfund context and seafood contamination issue).
3. Engaging a multi-lingual community advisory group to design the program's logic model (or road map) and social marketing strategies (where typically agency or organizational staff or consultants inform the program planning).

As part of the foundation for this new program, we established an innovative community participatory practice to advance environmental justice based on the objectives:

1. To build the capacity of community members from priority fishing communities to become Community Health Advocates (CHAs) who raise awareness and promote culturally appropriate healthy seafood consumption actions, and
2. To support the CHAs in empowering themselves to influence programmatic decisions and relevant policy recommendations toward protecting the health of their fishing communities from the LDW contaminated resident seafood.

For the past few years, we have trained and collaborated with the CHAs from the Cambodian, Latino and Vietnamese fishing communities. From June 2018 to September 2019, the CHAs completed 88 community-based outreach events and peer-to-peer education, reaching 1,604 community members. Some of the CHAs also participated on a Community Steering Committee that guided the development of the EPA's institutional controls program plan with social marketing strategies and policy recommendations.

We learned through evaluation that:

- Effective communication, shared decision-making with PHSKC, and flexibility were vital to the success of developing a community-informed and culturally appropriate CHA training.
- The structure of CSC meetings supported meaningful involvement and facilitated cross-cultural collaboration among representatives from the three ethnic/cultural groups. Committee members underscored the importance of having a shared mission among members and a safe space for idea sharing to support their work.

We believe to be successful in building a community participatory practice that centers the community voice within a regulatory context, we must apply an equity and social justice lens at every step. This often means honoring community expertise, balancing representation, sharing power, and learning to be creative within existing structures and systems.

This innovative practice is now being modeled at other Superfund sites. For more information about this program, please visit: www.kingcounty.gov/duwamish-fishing

A Model Practice must be responsive to a particular local public health problem or concern. An innovative practice must be -

1. new to the field of public health (and not just new to your health department) OR
2. a creative use of an existing tool or practice, including but not limited to use of an Advanced Practice Centers (APC) development tool, The Guide to Community Preventive Services, Healthy People 2020 (HP 2020), Mobilizing for Action through Planning and Partnerships (MAPP), Protocol for Assessing Community Excellence in Environmental Health (PACE EH). Examples of an inventive use of an existing tool or practice are: tailoring to meet the needs of a specific population, adapting from a different discipline, or improving the content.

Please state the Responsiveness and Innovation of your practice : *

PUBLIC HEALTH PROBLEM

For over a century, the Duwamish River in South Seattle became polluted with toxic chemicals. In 2001, the EPA declared it the Lower Duwamish Waterway (LDW) Superfund site, recognizing it as one of the most polluted rivers in America. Due to the high levels of PCBs, the fish, shellfish and crab that spend their entire lives in the river are unsafe to eat. Development during early life (fetuses, infants and young children) are most impacted by PCB exposures. This historic pollution disproportionately impacts the local immigrant/refugee and low-income communities who fish from the river.

This environmental justice issue at the LDW Superfund site is not unique. Since 1980, the EPA's Superfund program has been managing the cleanups of the nation's worst hazardous waste sites. Many of these sites are rivers, lakes and oceans where communities of color, low-income communities, tribes, and other indigenous peoples go to fish. These communities generally rely on fishing and seafood consumption to a greater extent than the general population, and for reasons unique to their community (such as for nutritional, economic, cultural, traditional and/or spiritual purposes).

For these Superfund sites, the EPA often couples the cleanup of the contamination with "institutional controls". A common example of institutional controls is a risk communication strategy related to a seafood consumption advisory. The advisory warns about limiting or avoiding eating certain seafood caught from a specific waterbody due to chemical pollution.

For more than a decade, advisory signs posted along the Duwamish River have been the primary tool for communicating the health warning, which is issued by the WA State Department of Health. In 2016, an [EPA study](#) found that the health warning signs – even with translated messages – have not been effective in raising awareness among fishers who speak little to no English. Many of these fishers are from the local Asian-Pacific Islander and Latino immigrant/refugee communities.

In 2017, Public Health – Seattle & King County (PHSKC) entered into a Cooperative Agreement with the EPA to use a community-based process to develop "institutional controls" that protect the health of communities that fish at the LDW Superfund site.

TARGET POPULATION

The EPA study was not intended to estimate the size of the target population, but rather to gather information on who is fishing on the river and their fishing practices. The key findings included:

- Fishers from over 20 ethnic/language groups continue to fish in the Duwamish River. The pollution in the river likely has disproportional impacts on communities of color and low-income families.
- Fishing is good for mental, social, and physical health. It is fun and relaxing; it provides fresh food and time for socializing; fishers learn from each other; and it creates a sense of community among fishers.
- A large percentage of fishers who caught polluted seafood and/or were less aware of the advisory are people of color and/or have limited English proficiency. These priority groups include:
 - Asians (mostly Vietnamese, Cambodian, Chinese, and Lao) and Pacific Islanders, Latinos, and multiracial/ethnic groups
 - Non-English speakers (including Khmer, Vietnamese, Spanish, Chinese, and Hmong)
 - Residents of South/West Seattle and areas south of the Seattle city limits (however, fishers travel as far as 33 miles to fish on the Duwamish River)

Our primary audiences are:

- Fishers in King County (particularly those who are currently or former fishers of the Duwamish River) who come from one of the priority ethnic/language groups
- Pregnant women and mothers/caretakers of young children under six years old who receive, eat or cook locally caught seafood

Our secondary audiences are:

- Youth from fishing households
- Other community members who receive, eat or cook locally caught seafood

During this early phase of the program, we focused our program efforts in building community capacity and reaching the Vietnamese, Cambodian (Khmer), and Latino fishing communities.

INNOVATIVE PRACTICES

Within the first three years of our program, we established an innovative community participatory practice reflective of the environmental justice principles of capacity-building, meaningful involvement, and empowerment. These principles were guided by the evidence-based recommendations set forth by the National Environmental Justice Advisory Council (NEJAC) in their report to the EPA on Fish Consumption and Environmental Justice ([NEJAC, 2002](#)).

This is the first institutional controls program at a Superfund site to center the voices of affected community members throughout program development, implementation and evaluation. Furthermore, it has fostered a collaborative and power-sharing relationship between government staff and community members, even while the EPA maintains its regulatory decision-making authority.

We creatively applied existing health promotion and community involvement frameworks, processes and tools through an equity and social justice lens and within a Superfund regulatory context. Specifically, the areas of innovation were:

1. Framing the program with a multi-level ([socio-ecological](#)) approach (instead of a traditionally one-way risk communication strategy).
2. Investing in the capacity and empowerment of community members using a [community health worker model](#) (adapted to the Superfund context and seafood contamination issue).
3. Engaging a multi-lingual community advisory group to design the program's logic model (or road map) and social marketing strategies (where typically agency or organizational staff or consultants inform the program planning).

Innovation Area #1: From a one-way risk communication strategy to a multi-level health promotion approach

One size does not fit all when it comes to developing culturally appropriate strategies and tools to protect the health of historically marginalized and underserved communities. One-way risk communication strategies, such as the seafood advisory signs posted along the Duwamish River, have not been effective in reaching everyone, particularly immigrant/refugee fishers who speak little to no English.

To effectively and equitably promote and support safe seafood consumption, we applied the [socio-ecological framework](#) to program planning in order to identify strategies across multiple levels:

- Individual level to increase awareness, knowledge, skills, and self-empowerment to adopt safe seafood consumption actions.
- Interpersonal level or community networks to create social norms, supportive peer-networks, and collective action to support safe seafood consumption actions.
- Institutions, systems, and policies through which agencies and organizations with resources and authority can help tackle “upstream barriers” to safe seafood consumption that are outside the EPA's Superfund context and control of the most impacted fishing communities

Focusing only on changing individual behaviors, without addressing these higher-level upstream factors—and the root causes of the pollution problem—places an unfair burden, often including a health burden, on people who did not cause the pollution.

NEJAC (2002) states that “with risk avoidance strategies such as fish consumption advisories, the responsibility for addressing environmental contamination and its harmful human health effects is allocated to those who are made to bear the risks of contamination rather than to the sources of that contamination. Furthermore, because risk avoidance strategies place this responsibility on those who are exposed to environmental toxic chemicals, they will necessarily impose a greater burden on communities of color, low-income communities, tribes, and other indigenous peoples. As has been amply demonstrated, it is members of these groups who are among the most exposed.”

The community-guided logic model (or road map) developed through our Community Steering Committee process reflects this multi-level health promotion approach.

Innovation Area #2: Adapting the Community Health Worker model to invest in community capacity and empowerment in order to promote safe seafood consumption at a Superfund site

Building or enhancing the capacity of community members to be program partners is needed to build a sustainable foundation for our program work. Capacity can take the form of knowledge, skills, and self-empowerment to act. Capacity cannot lie solely within one agency, since no single agency can replicate the inroads, trust, and expertise that exist within the communities themselves. Capacity building enhances meaningful involvement (see section on LHD and Community Collaboration). With more knowledge and experience around a topic, community members can actively engage in the program work. Furthermore, involving those affected by a given problem increases their collective ability to find solutions.

NEJAC (2002) states: “[T]here are functions that advisories could usefully serve but that the typical advisory does not attempt to serve, e.g., capacity-building or empowerment in the affected group.... The fourth function that advisories might serve—capacity-building and empowerment—are [sic] important to securing environmental justice.”

At the start of this program (2017-2018), we collaborated with two community organizations – Just Health Action and Environmental Coalition of South Seattle – to develop and pilot a Community Health Advocate (CHA) training for the LDW Superfund site. This early training stemmed from the pilot work in prior years led by Just Health Action in partnership with PHSKC, International Community Health Services, and others.

It was also modeled after the Community Health Worker/Promotor Model ([Latino Health Access, Visión y Compromiso, & Esperanza Community Housing Corporation, 2011](#); [NHLBI, 2014](#)), in which community health workers, promotores, or lay health advisors, who

typically live in the community they serve, have the unique ability to bring information where it is needed most. This model has been applied extensively in the health care system to reach communities that historically face barriers to accessing services (such as from language, cultural, economic, or institutional barriers).

The trainings build upon the CHAs' strengths, cultural expertise, and self-empowerment, while increasing their capacity (knowledge and skills) to take actions based on Just Health Action's Critical Health Literacy model ([Mogford, Gould & DeVoght, 2010](#)).

In this program, the CHAs are community members who represent fishers, moms, and people who eat local seafood catch. They lead culturally appropriate outreach work to raise awareness through word of mouth, which the EPA study identified as one of the key avenues for fishers to learn about issues related to fishing.

As a voice for their community, they also advocate for culturally appropriate recommendations and collaborate with us and the EPA on programmatic decisions, strategies, and tools. For the past few years, we have been working with the Cambodian, Latino and Vietnamese CHA teams, and compensate for their time and cultural expertise in participating in the training, conducting outreach, co-designing health promotion tools, and informing program planning and decision-making.

From June 2018 to September 2019, the CHAs completed 88 community-based outreach events and peer-to-peer education, reaching 1,604 community members. The CHAs were able to collect demographic data of participants from 39 of these events, showing that they promoted the program's message to: 140 fishers, 261 moms and parents/caretakers of young children, and 184 other community members who receive locally caught seafood.

See Evaluation for the findings from the 2018 pilot trainings.

Innovation Area #3: Engaging a multi-lingual community advisory group to design the program's logic model (road map) and social marketing strategies

In establishing this program, the critical deliverable for the EPA was an institutional controls program plan *using a community-based participatory process*. This had never been done before at a Superfund site. And other public health programs typically convene community advisory groups or steering committees made up of directors or staff of community organizations.

Often the main reason for this limited community involvement approach is because it is easier - from the agency perspective. Easier in terms of having everyone be able to speak English, be compensated by their organization, and/or be able to attend meetings during normal business hours.

For us, it was imperative that the voices of fishing community members guided the development of this plan, including its community-based social marketing strategies.

Soon after the CHA trainings in June 2018, we kicked off a 15-member Community Steering Committee (CSC) that included equal representation of CHAs from the three language groups. In addition to a balanced representation of language groups, the committee also sought diverse perspectives from folks with different roles within the fishing communities, including mothers, children of fishers, and fishers themselves.

During six meetings from June to December 2018, all facilitated in four languages simultaneously, the committee members identified key barriers and social marketing principles ([Lee and Kotler, 2012](#); [McKenzie-Mohr, 2011](#)) to promote healthy actions among the primary audiences (fishers and moms). By the end, they created a logic model or road map for the program that included proposed recommendations for policy and institutional changes.

See Evaluation for findings on the 2018 CSC process.

LHD and Community Collaboration

The LHD should have a role in the practice's development and/or implementation. Additionally, the practice should demonstrate broadbased involvement and participation of community partners (e.g., government, local residents, business, healthcare, and academia). If the practice is internal to the LHD, it should demonstrate cooperation and participation within the agency (i.e., other LHD staff) and other outside entities, if relevant. An effective implementation strategy includes outlined, actionable steps that are taken to complete the goals and objectives and put the practice into action within the community.

- Goal(s) and objectives of practice
- What did you do to achieve the goals and objectives?
 - Steps taken to implement the program
- Any criteria for who was selected to receive the practice (if applicable)?
- What was the timeframe for the practice were other stakeholders involved?
- What was their role in the planning and implementation process?
 - What does the LHD do to foster collaboration with community stakeholders? Describe the relationship(s) and how it furthers the practice goal(s)
- Any start up or in-kind costs and funding services associated with this practice? Please provide actual data, if possible. Otherwise, provide an estimate of start-up costs/ budget breakdown.

GOALS AND OBJECTIVES

Public Health – Seattle & King County (PHSKC) is a large metropolitan health department that serves a county population of nearly 2.2 million people with over 100 languages spoken here. In the Environmental Health Services Division, our mission is to identify and sustain environmental conditions that promote healthy people and healthy communities in Seattle and King County. As an agency, we value the principles of community engagement and equity and social justice.

Under a five-year Cooperative Agreement (2017-2021) with the EPA, PHSKC leads this community-based institutional controls program for the EPA to promote the seafood consumption advisory for the LDW Superfund site. The long-term goal is to promote culturally appropriate, healthy actions that protect the health and well-being of fishing communities, especially pregnant women, nursing moms, and young children, from the contaminated resident seafood in the LDW Superfund site before, during, and after the cleanup.

Within the first few years, we established an innovative community participatory practice as the foundation for this new program. Our specific objectives for this practice were:

1. To build the capacity of community members from priority fishing communities to become Community Health Advocates (CHAs) who raise awareness and promote culturally appropriate healthy seafood consumption actions.
2. To support the CHAs in empowering themselves to influence programmatic decisions and relevant policy recommendations toward protecting the health of their fishing communities from the LDW contaminated resident seafood.

PROGRAM DEVELOPMENT ACTIVITIES

The following summarizes how this program evolved and the key stages and activities that were implemented to establish the community participatory practice.

Prior to the Cooperative Agreement (pre-2017)

PHSKC's Environmental Health Division had been involved in different pilot community projects and studies about the Duwamish fishing community and the seafood consumption advisory. We carried out our own limited outreach, as well as, served as an advisor on the projects or studies. During this time, we established working relationships with community organizations and gained some understanding of the Duwamish fishing community. We also recognized that there had been a lack of sustainable resources dedicated to promoting safe seafood consumption among the Duwamish fishing community since the advisory was issued in 2006.

Year 1 of the Cooperative Agreement (2017)

During the launch in 2017, we began establishing the internal program infrastructure and staff capacity (e.g., reporting templates, Federal Grant requirement trainings for staff, hiring a multi-lingual community engagement coordinator, set up community contracts/grants).

In addition, we began developing a draft curriculum with Just Health Action to train the CHAs in 2018.

Furthermore, we created new health promotion tools immediately, including:

- A program logo and brand based on input from four language groups (English, Spanish, Vietnamese and Khmer). Purpose of the logo is to attract the attention of fishers and tie all program materials and activities together.
- Digital story videos created by some community members as outreach tools. These brief videos feature their personal story related to the seafood contamination issue, as told through their own voice, photographs, images, music and text.

Year 2 of the Cooperative Agreement (2018)

In 2018, we partnered with the Environmental Coalition of South Seattle and Just Health Action to pilot the draft CHA training curriculum with members from the Cambodian, Vietnamese, and Latino fishing communities. After the training, the CHAs helped design and implement culturally appropriate tools and outreach to promote the health messages. Some CHAs also helped develop the EPA's draft institutional controls plan through participation in the Community Steering Committee (CSC).

During the first half of the year, we completed a 10-week training (interactive lessons, boat tours, expert panels, and field visits) that certified 23 CHAs from the Cambodian, Vietnamese and Latino fishing communities. Each CHA completed approximately 40 training hours.

"We started with a lack of knowledge and confidence, but throughout the training we gained more knowledge... Also the community is more educated, so the conversation is getting easier and I'm able to deliver the message as well as answer questions. I started out nervous about 'what if they ask questions?' but now I am able to answer all the questions and come back to the meeting and share that with Public Health."—Vietnamese CHA, December 2018

After the training, the CHAs helped us create new multi-lingual tools that they recommended. These tools promote catching and eating only salmon from the Duwamish River and finding alternative fishing sites with safe seafood to eat in King County. The CHAs also helped to design layouts, develop content, recruit for pilot-testing, translate materials and star in the videos.

- **Program Website:** The multi-lingual website targets local fishing families, including the children who may research information for their fisher parents. Website includes an outreach page (in-language) for each CHA team.

- **“Go Fishing in King County” Guide:** Fisher CHAs worked with Public Health’s graphic designer to improve the design and messages so that the guide resonates better with fishers. The guide provides alternative fishing sites with safe seafood to catch in King County.
- **Salmon Recipe Cards:** Public Health learned that some community members do not know how to prepare salmon. The CHAs adapted their cultural seafood dishes to feature salmon.

After the trainings, the certified CHAs led their own community outreach efforts, such as living room chats, community kitchen cooking demos, boat tours, youth group discussions, and backyard gatherings. By the end of 2018, the CHAs conducted 46 outreach activities at homes, piers, community kitchens, farms, festivals and health fairs, reaching 1,015 community members. We also piloted survey tools at the outreach events. Of the 18 events where they surveyed the participants, we learned that the CHAs engaged with 38 fishers, 35 pregnant/nursing moms, and 43 parents/caregivers.

In June 2018, we established the CSC to capture the voices of representatives from the affected fishing communities, with the specific purpose to develop an institutional controls program plan for the EPA. During six CSC meetings, the 15-member CSC (made up of CHAs and their bilingual/bicultural team leads) created the program’s logic model (or road map) and identified the targeted strategies and policy recommendations.

We conducted evaluation of the pilot trainings and the CSC process.

Year 3 of the Cooperative Agreement (2019)

We prepared the institutional controls report based on the road map and the information provided by the CSC in 2018. We finalized the report after considering the EPA’s stakeholder comments with the CSC. The EPA approved the final report in August 2019, which can be found here <https://www.kingcounty.gov/depts/health/environmental-health/healthy-communities/duwamish-fishing/about-us.aspx>

Throughout 2019, the CHAs continued to lead their own culturally appropriate community-based outreach which included community talks, salmon cooking demos, living room chats, festival booths, and boat tours. In addition, the CHAs deepened collaborations between their three teams, community partnerships and created new and innovated outreach activities

Based on the monitoring data we have through September 2019, we learned that the CHAs:

- Conducted 42 community outreach events and presentations, reaching 589 community members
- Completed participant surveys at 21 events, showing that they promoted the program’s message to 102 fishers, 183 parent and caretakers of young children and 184 recipients of locally caught seafood

Among these outreach events, CHAs explored new opportunities to present and engage multiple levels of stakeholders; this includes presenting at a graduate level seminar at the University of Washington, at a new partner Community-Based Organization all-staff meeting, at the EHS Division annual conference and a national webinar for ATSDR. The CHAs also represented community voices and participated in key stakeholder forums such as the EPA’s Healthy Seafood Consumption Consortium and the EPA’s Duwamish Cleanup Roundtable meetings.

For the past two years, we worked with the CHAs in making the Duwamish fishing rules and health video series (in partnership with WA State Department of Fish and Wildlife (WDFW), and University of Washington Superfund Research Program (UWSRP)).

WDFW had designed the framework for the short videos – steps that someone would take; learning the basic rules about fishing on the Duwamish River; types of gear needed for salmon fishing; and, how to prepare salmon at home in traditional dishes. We coordinated with the CHAs to work closely with the UWSPR’s subcontracted videographer to integrate the Duwamish health messages, prepare for and shoot the videos. The CHAs will specifically use them as part of their outreach work and in the Duwamish Fishing Club’s salmon fishing classes.

We repeated the evaluation of the community participatory process in December 2019, specifically related to the CHAs and the CSC. The analysis of the 2019 data has not been completed yet.

PROGRAM STARTUP COSTS

Since the Cooperative Agreement, we were able to build a dedicated PHSKC staff team (program lead, community engagement coordinator, program evaluator, supervisor and finance officer) for this program work. During this early startup phase, the staff resources started with 1.5 FTEs in year 1, then peaked at 2.5 FTEs in year 2, and down to a stable 2.0 FTEs in year 3. Year 2 required the most staff time because of substantial technical support provided to the CHA teams and the need to establish the program infrastructure (protocols, templates, processes etc.) to manage the activities, contracts and reporting.

Table 1 below provides an estimate of the total direct expenses since the Cooperative Agreement was established in January 2017 through the end of December 2019. The actual December 2019 expenses have not been compiled yet.

Table 1 – Total Cost of Direct Expenses (January 2017- December 2019)

Direct Expenses	Total Direct Costs 2017-2019	Percent of Total Direct Costs
PHSKC staff		

Salaries & benefits	\$706,827	48%
Community Contractors & Grantees Community Health Advocates, CBOs, minority/women-owned businesses	\$601,610	41%
PHSKC Direct Operation Expenses	\$79,897	5%
• Travel (mileage, parking)	\$1,325	
• Supplies (outreach, office)	\$8,410	
• Printing (outreach materials)	\$3,718	
• Staff Training (Community-Based Social Marketing, InDesign and Adobe Illustrator)	\$2,441	
• Registration Fees (conferences)	\$2,394	
• Gift Cards (for pilot-testing focus groups)	\$5,440	
• Other direct operational costs (contracts management, financial services, IT, facilities)	\$56,169	
Total Direct Expenses (2017-2019)	\$1,388,334	

FOSTERING MEANINGFUL INVOLVEMENT & COLLABORATION WITH THE CHAs

Sharing power and decision-making with PHSKC

Meaningful involvement is the mutual learning and collaborative process by which both community and agencies can work together – sharing power and decision-making - toward the program goal and objectives. Each partner brings to the table unique expertise that collectively informs programmatic decisions. It requires flexibility and continuous feedback to adapt to community input during program design, implementation, monitoring, and evaluation.

As part of our practice, we center the community voices of those who are most affected by contaminated seafood at the LDW Superfund site. CHAs and other community representatives (fishers, moms, and people who eat local seafood) bring expert knowledge about their cultures, fishing practices, and community. Their ideas and input guide programmatic work and inform agency decisions at multiple levels:

- **On the ground:** CHAs lead their own community outreach efforts to meet the program goal and strategic objectives. While engaging with their communities, they capture additional feedback and recommendations to share with PHSKC, the EPA, and other stakeholders.
- **Program design:** CHAs collaborate with PHSKC and its consultants to design health promotion tools, from the conceptual stage to content development to the broader community pilot-testing stage. They help ensure that the tools will be useful to and resonate with the program's target audiences.
- **Program guidance:** CHAs as part of the CSC will help monitor the progress of the program's implementation before, during, and after the cleanup. The CSC and PHSKC will review the evaluation findings to identify recommendations for changes to the EPA's institutional controls program plan over time.

Overall, a community participatory practice is meaningful only if community input is captured in a timely manner that helps to inform certain decisions, products, or actions by Public Health, the EPA, or other agencies. Thus, a key objective for meaningful involvement is to support CHAs in empowering themselves to influence programmatic decisions and relevant policy recommendations toward

protecting the health of their fishing communities from contaminated LDW seafood.

The program has four areas that CHAs and community partner grantees can meaningfully inform and participate in:

1. **Community Steering Committee (CSC):** The CSC serves as our community advisory group to provide input on ways to adaptively manage the program, including reprioritizing efforts as needed based on community feedback and evaluation results. Established in 2018 with some CHAs and their facilitators to develop the initial institutional controls plan, the CSC will evolve over time to include additional community members from other priority ethnic fishing communities. The EPA will continue to be involved in the CSC workshops to ensure that updates on the cleanup process and decisions made by the EPA related to the program work are shared in a timely manner. The CSC recently re-chartered themselves after the completion of the institutional controls plan was finalized and approved by the EPA. The members see the value of the CSC to coordinate around collective actions to advance the plan's strategies and recommendations. We will also report on evaluation results to the CSC so that we can adaptively manage and reprioritize (if needed) the program's work.
2. **Tools Development:** Design of health promotion tools and activities must involve those whom the program is trying to reach with the tools. Such involvement is a best public health practice. We define these tools as products that can support healthy actions and are not simply informational materials. Ideas for tools originate from the community, including the CHAs. When designing a program tool, we begin by consulting with CHAs to capture, at a high level, the messaging or design elements that are important to include. Before finalizing a robust new tool, we may carry out a pilot-testing phase among community members who represent the target audience. All tools will be available in multiple languages. The EPA has final review and approval of program tools.
3. **Healthy Seafood Consumption Consortium (HSCC):** The consortium brings together agencies, organizations, and the CHAs to discuss and collaborate on efforts that promote healthy seafood consumption in the fishing community. It is a venue in which the CHAs have directly engaged with stakeholders by presenting to them their community recommendations.
4. **Grant-Making Process:** We manage a grant-making process that have involved CHAs in reviewing funding applications submitted in response to our Request for Proposal (RFP) or Request for Application (RFA). We completed our first RFA process in late 2018 for a community-based organization to manage the Latino CHA team. The Latino CHAs helped to review the written applications and interview the candidates in Spanish (including developing interview questions and scoring the candidates). A similar team will be assembled to select community partners to implement the program's strategies.

Applying an equity and social justice (ESJ) lens to the CSC process

Due to the diversity of voices on the CSC, we had to be intentional with every detail of the CSC meetings so that the space feels comfortable, accessible, and meaningful for all of those participating. In addition to the multiple interpreters, all handouts and materials are translated, PowerPoints are visual, and seating is arranged to create the feel of a collective, rather than a presentation.

We did not want this to be set up in a traditional format where there is only one person at the front of the room speaking. We really wanted to create a space that felt like a collective and everyone could share their perspective.

In addition to the space itself, we held meetings on Saturdays to ensure that those who work during the week be able to show up. While this is often perceived as not convenient for government staff, we believe it was essential if we wanted to truly set up an advisory group where fishing community members' voices are highlighted.

The work is not easy. But if it's easy, it's probably not equitable. Our staff view the entire program through an equity and social justice (ESJ) lens, which often means slowing down, practicing humility, and learning to be creative within existing structures and systems.

Examples of how we have applied the ESJ lens into our engagement with the CHAs:

- ESJ is represented in how we show up and engage with the CHAs – where we respect and honor the expertise they bring to the table.
- ESJ is represented in the trust that we have built with the CHAs – they are able to speak their truth with us.
- ESJ is represented when government staff recognize the community's own empowerment and accepts that we can "share power" with community.
- ESJ is represented by the CHAs who are still engaged in this program work – doing work that they feel proud of.

As the first local health department to organize and run an EPA-funded community participatory practice to address contaminated seafood consumption at a Superfund site, we stumbled along the way, yet gained many lessons learned (see section on Sustainability for more information). We now serve as a model for other health departments and EPA offices looking to build a similar program at other Superfund sites.

Community Feedback

We have received extensive positive feedback from the CHAs and their team leads that reflect a commitment to partnering with this program. We capture these through the formal evaluation process as well as moments of written reflections during the CSC meetings.

Khmer CHA Team:

"I have felt empowered because we received education from the organizations [so] that I'm able to communicate to the community and also take feedback from the community to the organization. I feel empowered in that process."

"I feel very fortunate to be able to join this CSC group. I feel that I am being valued to be able to express and make decisions around the subject that matter to human life. I am valued and my voice is being heard—to make decisions and inputs to protect people's health"

around contaminations in the Duwamish. Being here at CSC, we provide the inputs, strategies, and tools to reach out to most affected groups, to have a plan to help protect their health. We create strategies, tools, and plans for fishers to have healthy alternatives to help protect their families' health. At CSC, we are being empowered to be power in the communities."

Vietnamese CHA Team:

"I do feel we are empowered because now we have knowledge about the river. To me, what empowerment looks like is to be able to go out and talk with people about what we just learned and being knowledgeable about something and wanting to share that knowledge. I like learning new things and finding people who have done those things, like learning about the river and finding someone who fishes there and make a connection. To me that's empowerment."

"In the group [Community Steering Committee], everyone's voice has been heard. Whenever we have something to say the other organizational leaders listen to us. I feel that my voice and thoughts are valued. Everyone in the group is very understanding and supports each other's opinions."

Latino CHA Team:

"When I see people interested in learning more and when I see them again, they start talking about the information we shared with them. That's when I feel like we are doing the right thing."

"My time in the CSC has felt very rewarding. Not only have I learned so much, I have also been able to build a better and stronger relationship with my coworkers from all three teams I have also been able to see how we come from different ethnicities and backgrounds, yet in one way or another we have many similarities. We come together and there are no differences between us We are all here for the same reason/purpose: to bring our community a voice."

"All of the processes, they [Public Health] have always included us in the process. They make us feel important, we are united, and it's always been that way—they ask us to be part of everything, every step. We are making history, since it's not seen elsewhere. Normally, a decision is made in an office and that is it, but not here. They've included us, since we are the community—kind of like for the community, by the community."

Evaluation

Evaluation assesses the value of the practice and the potential worth it has to other LHDs and the populations they serve. It is also an effective means to assess the credibility of the practice. Evaluation helps public health practice maintain standards and improve practice. Two types of evaluation are process and outcome. Process evaluation assesses the effectiveness of the steps taken to achieve the desired practice outcomes. Outcome evaluation summarizes the results of the practice efforts. Results may be long-term, such as an improvement in health status, or short-term, such as an improvement in knowledge/awareness, a policy change, an increase in numbers reached, etc. Results may be quantitative (empirical data such as percentages or numerical counts) and/or qualitative (e.g., focus group results, in-depth interviews, or anecdotal evidence).

- What did you find out? To what extent were your objectives achieved? Please re-state your objectives.
- Did you evaluate your practice?
 - List any primary data sources, who collected the data, and how? (if applicable)
 - List any secondary data sources used. (if applicable)
 - List performance measures used. Include process and outcome measures as appropriate.
 - Describe how results were analyzed.
 - Were any modifications made to the practice as a result of the data findings?

Please enter the evaluation results of your practice : *

OBJECTIVES

As part of the foundation for this new program, we established an innovative community participatory practice to advance environmental justice based on the objectives:

1. To build the capacity of community members from priority fishing communities to become Community Health Advocates (CHAs) who raise awareness and promote culturally appropriate healthy seafood consumption actions, and
2. To support the CHAs in empowering themselves to influence programmatic decisions and relevant policy recommendations toward protecting the health of their fishing communities from the LDW contaminated resident seafood.

METHODS

CHA Training Evaluation Data Collection and Analysis. We assessed the CHAs involvement in the 2018 pilot training and outreach at three time points: after completion of a four-week Pre-CHA introductory module of the training curriculum (Level 1), approximately six weeks later after completion of the didactic training module (Level 2), and at the end of the year – approximately six months later. Outcomes of interest included changes in CHA trainees' knowledge, confidence, and empowerment. Ongoing process evaluation assessed feasibility, effectiveness/uptake and acceptability of CHA training from the perspective of CHAs and their team leads. Data

collection methods included questionnaires, focus groups, and individual interviews. Focus group discussions with CHAs supplemented findings from questionnaires.

All data collection tools and processes were offered to CHAs in English, Khmer, Vietnamese, and Spanish languages. CHAs participated in their preferred language. To encourage honest responses and minimize bias in analyses, PHSKC staff labeled assessment tools with a unique identifier to mask identities yet enable linked pre-, post- and final assessments. CHA team leads and multilingual program staff translated written responses to English. The evaluator analyzed de-identified translated responses.

Interviews with CHA team leads were conducted mid-year (post-Level 2) to gather their perspectives on the process of implementing the CHA training, including interactions with program staff, working with CHAs, and training design and structure.

Year-end focus groups were conducted with each CHA team, facilitated by the program evaluator with independent interpreters. PHSKC staff and team leads were not present during focus groups. CHAs who were unable to attend focus groups were interviewed separately. CHAs were also invited to share their reflections on the effectiveness and acceptability of the training strategy. Data from the three focus groups and follow-up interviews were analyzed collectively. Two or more evaluators coded all qualitative data for thematic analyses.

CSC Evaluation Data Collection and Analysis. A focus group was conducted with the CSC on December 1, 2018 to evaluate the CSC process and gather input to guide PHSKC's ongoing engagement with CSC members. All CSC members were invited to attend. Twelve of the 15 (80%) CSC members – including three team leads – participated in the final focus group. The purpose was to evaluate the CSC process and gather input to guide PHSKC's ongoing engagement with CSC members throughout and beyond 2019. Committee members were asked to share their reflections on the CSC process, and to specifically share experiences related to their expectations for participation, their level of comfort sharing ideas, the structure of the meetings, and processes for providing feedback to PHSKC and the EPA.

RESULTS

The 2018 CHA pilot training began in February with 24 CHAs across three teams. Each team experienced some attrition and incomplete response rates over the course of the year. Though formal exit interviews were not conducted, CHAs cited reasons for discontinuing participation in the training including, but not limited to: scheduling conflicts (personal and/or work-related); personal reasons such as medical leave, family obligations, or bereavement; and misalignment between the CHAs' goals and motivation and the goals of the training.

CHA Training Evaluation Results

Outcome Evaluation Findings. Minimal changes in knowledge, confidence, and empowerment were detected through questionnaires over the evaluation period. However, CHAs described the training and outreach as effective and consistently noted improvements in each of these outcome measures during year-end focus group discussions. They described improved knowledge, confidence and skills as key successes of their participation in the training, and knowledge acquisition increased their sense of personal empowerment.

- **Knowledge.** Knowledge scores on questionnaires were similar before and after the didactic training module. In focus group discussions, CHAs reported improvements in their knowledge and skills over time through training experiences and outreach activities.
- **Confidence.** CHAs reported high confidence at the first assessment with minimal change over the year. In focus group discussions, CHAs described that their confidence grew over time with outreach experience. They also described how their CHA teams grew closer throughout the year, which strengthened their confidence and ability to engage with communities.
- **Empowerment.** CHAs consistently rated their level of empowerment as high. In focus group discussions, CHAs described the sense of personal empowerment they feel through gaining knowledge and sharing that knowledge and empowering communities through outreach.

Process Evaluation Findings. The process evaluation sought to answer the question: How feasible and effective was the PHSKC teams' implementation of a community-informed and culturally appropriate CHA training strategy? Feedback from CHAs and team leads suggest that PHSKC developed a community-informed and culturally appropriate community health advocate training and outreach strategy. They described effective communication, shared decision-making, and flexibility as vital to the success of the strategy.

Key process evaluation findings include the following:

- Effective and timely communication was essential to coordinating all aspects of the program and to keeping CHA teams connected and engaged.
- Flexibility in scheduling and training was crucial to implementing a successful strategy.
- Shared decision-making resulted in the team leads feeling empowered. CHAs and team leads valued time to share ideas and challenges with peers and program staff.
- Culturally specific outreach tools were developed by CHAs using the newly acquired knowledge.
- Tools and techniques should be expanded to engage diverse community members, convey knowledge, and support CHAs' continued skill development.

CSC Evaluation Results

Thematic analysis of the CSC focus group discussion revealed what supported members' involvement and motivated them to serve in this capacity. Committee members described outcomes related to capacity building, such as increased knowledge about safe seafood consumption, confidence and skills to share their thoughts and opinions, empowerment to work together to affect change, and the

development of new relationships with other CHA teams as key benefits of participating on the committee.

The structure of CSC meetings – in which CHAs from each team were present and working together – supported meaningful involvement and facilitated cross-cultural collaboration among representatives from the three ethnic/cultural groups. Committee members underscored the importance of having a shared mission and a safe space for idea-sharing. They reported that their ideas were valued by their peers, and by PH and US EPA staff.

DISCUSSION

Evaluation findings show that the pilot training and outreach strategy as implemented increased CHAs' perceptions of their knowledge of safe seafood consumption practices and empowered them to share that knowledge with community members. Focus group participants reported increases in knowledge across all three groups, but questionnaire results did not show overall change. CHAs reported minimal changes in confidence and skills post-training through questionnaires but pointed to increased confidence as a key outcome during focus group discussions. Similarly, focus group results suggest an increase in empowerment, and questionnaire results show minimal change in empowerment.

The conflicting results for changes in knowledge may result from the timing of CHA PRE training knowledge assessments – after some knowledge had been shared in Level 1, using untested questionnaire items that may not adequately measure what was intended, unidentified training and support needs yet to be incorporated, or all three factors. In addition, the length of the knowledge assessment created barriers for some CHAs to complete it, and question fatigue may have contributed to some missed or skipped items. The next phase of implementation and evaluation will consider additional approaches to knowledge transfer, testing questionnaire items for validity, and/or administering a shorter set of items.

The next phase of evaluation will also seek to clarify empowerment measures. Qualitative findings reveal that CHAs conceptualize the impacts of their participation on self (individual) empowerment, community empowerment, and the empowerment of their CHA team as a group. Future evaluations should assess each aspect of empowerment separately.

Another limitation of this evaluation is CHA attrition over time. Each group started with 8 individuals, and group attrition ranged from 13-38%. Some attrition over a one-year pilot effort is expected. Literature describing motivation, retention and sustainability of community health worker programs (a model upon which the CHA program is based) describes attrition as a common problem, with attrition rates up to 77% for some programs (as cited in Bhattacharyya et al., 2001, p.2). Findings are informative despite the loss of some participants to the training. Future program efforts will include upfront communication about the time commitment involved and the role of evaluation to see if that reduces attrition.

Advocates stated in their own words that the training increased their knowledge and they felt more empowered to represent their community, which suggests that the training and outreach are likely to have caused these changes. Participants also suggested things that may improve the strategy, such as additional outreach tools, training in public speaking, and increased opportunities to effectively engage with agency partners, which indicates they felt comfortable raising challenges while in the focus group and would have communicated learning and disempowerment issues they experienced. The training enabled CHAs to gain specific knowledge about a topic that has not been well understood on a community level and convey that knowledge to community members through outreach. An added benefit is that CHAs may feel empowered to continue serving their community as educators and advocates beyond this pilot training.

The training and its evaluation will be strengthened by improving the timing and method of measuring knowledge of the material presented in the training. As suggested by participants, the strategy may also improve effectiveness by increasing options for developing skills in public speaking, engaging directly with agency partners – improving processes for language interpretation, scheduling meetings outside of normal business hours, and inviting agency partners to team meetings and/or CSC meetings. Continuing the community-based, participatory approach to evaluation with multiple methods used to assess training implementation and outcomes will help ensure the needed feedback to evaluate its effectiveness.

CONCLUSIONS

The CHA training is a feasible and effective strategy to train CHAs to conduct culturally appropriate outreach. CHAs named knowledge, confidence, skills, and empowerment as key successes from their participation in the program. CHA attrition in 2018 was 25%, not unlike other programs that engage community health workers (Bhattacharyya, Winch, LeBan, & Tien, 2001). Despite some attrition, the majority of CHAs were effectively engaged and remained active throughout the year. Due to limitations with timing and validity of questionnaires, as well as losses to follow-up, the direct impact of the training curriculum on knowledge, confidence, and empowerment cannot be judged at this time.

RECOMMENDATIONS

The evaluation results suggest that PHSKC staff continue to provide training and education in a community-partnered way, expand learning supports for CHAs beyond the didactic portion of the training module (e.g. further develop public speaking and presentation skills), and support additional opportunities for CHAs to effectively engage with agencies and stakeholders throughout their training. Future training strategies should continue to use a train-the-trainer model with close mentorship (staff support) for team leads.

MODIFICATIONS TO THE PRACTICE

PHSKC used the 2018 findings to:

- Guide revisions and improvements to the curriculum (including reducing the didactic in-classroom portion from 40 hours to 20

hours so the CHAs can begin outreach work sooner)

- Tailor staff support to the CHAs based on their needs (such as public speaking practice improving their credibility by including their photos in health promotion tools)
- Inform the best practices for meaningful involvement with the CHAs in this program
- Support the CHAs' direct engagement with other agency partners (such as at stakeholder meetings)

Sustainability

Sustainability is determined by the availability of adequate resources. In addition, the practice should be designed so that the stakeholders are invested in its maintenance and to ensure it is sustained after initial development (NACCHO acknowledges that fiscal challenges may limit the feasibility of a practice's continuation.)

- Lessons learned in relation to practice.
- Lessons learned in relation to partner collaboration. (if applicable)
- Did you do a cost/benefit analysis? If so, describe.
- Is there sufficient stakeholder commitment to sustain the practice?
 - Describe sustainability plans.

Please enter the sustainability of your practice : *

In the past few years, Public Health-Seattle & King County (PHSKC) established an innovative community participatory practice as the foundation for a new program at the EPA's LDW Superfund site. In a relatively short time, we were able to achieve positive outcomes in community collaboration and empowerment, produce multiple culturally relevant health promotion tools, and prepare a community-informed program plan.

The EPA released its [2019 Environmental Justice Progress Report](#) highlighting the EPA's progress in advancing environmental justice across the country. The report specifically recognized PHSKC's innovative community participatory practice of centering the community voices of the immigrant/refugee fishing communities in the Community Steering Committee to develop the EPA's program strategies.

Our success is due to the:

1. Dedicated and adequate funding and PHSKC staff resources because of the Cooperative Agreement with the EPA (which did not exist before)
2. Community investments in building the capacity of members from the affected communities as part of the CHA training and outreach work
3. Trust and power-sharing that grew between government staff and the CHAs

Under the Superfund law, the EPA requires the parties responsible for the historic contamination in the river to pay for the cleanup. This program work is a required component of the EPA's cleanup plan. The EPA estimates costs of about \$342 million over 17 years to complete the cleanup. Even after the cleanup activities, the EPA does not anticipate that people can safely eat seafood from the Duwamish River in unlimited amounts. Rather, this program work will be necessary beyond the span of the cleanup to protect people who consume fish and seafood, and the nature and extent of ICs will change over time.

For a local health department to lead this work for the EPA, we were able to first establish the funding vehicle via a Cooperative Agreement. Prior to the Cooperative Agreement, PHSKC had one community engagement staff that had limited time and no budget to carry out health outreach work on the Duwamish seafood consumption advisory.

Since the Cooperative Agreement, we were able to build a dedicated PHSKC staff team (program lead, community engagement coordinator, program evaluator, supervisor and finance officer) for this program work. The FTEs range between 1.5 to 2.75 FTEs during this early startup phase.

From an equity standpoint, we budgeted approximately half of the funding to go into investing in community contractors and grantees, including compensation to the CHAs, grants to community-based organizations (CBOs), and minority or women-owned businesses. And our intention is that overtime as the capacity the community grows to partner in this work, we will require less PHSKC staff resources. This will ensure that the sustainability of this practice is rooted in the community with PHSKC as the support to the community.

From January 2017 to December 2019, the program costs approximately \$1,388,334 in direct expenses (staff salaries and benefits, community contracts/grants, and other direct expenses) with close to half (41%) of the funding going to community contractors and grantees.

Lessons Learned

As the first local health department to organize and run an EPA-funded community participatory practice to address contaminated seafood consumption at a Superfund site, we stumbled along the way, yet gained many lessons learned. We now serve as a model for other health departments and EPA offices looking to build a similar program at other Superfund sites.

We incorporated the following practices in trust-building and power sharing between government staff and the CHAs, which will serve as the backbone for a sustainable partnership.

1. Ensure that there is a continuous loopback mechanism in sharing back with the CHAs how their input informed decisions, plans and tools.
2. Building/investing in the leadership development of CHA team leads: many of our team leads started the program as outreach workers and now are team leads, and even program managers. PHSKC sees the importance of growing the skills of team leads to manage the work of CHAs and organize communities in advancing the program's goals.
3. Be transparent early and throughout the program planning process the boundaries for the program that is set by the EPA.
4. Identify creative avenues to address key community recommendations that may fall out of the EPA's program scope.
5. Create opportunities for the CHAs for mutual learning between the EPA and other agency staff (training workshops, CSC meetings).
6. Be open with the CHAs and their team leads about the "behind-the-scene" complexities, and sometimes contentious stakeholder situations that PHSKC staff are faced to move this program forward.
7. Invest in building the knowledge of the CHAs on the issue before bringing them to a Community Steering Committee or community advisory planning process.
8. Foster cross-collaboration among the different ethnic/language CHA teams – their collective impact is powerful!
9. Recognize and honor the expertise that each person brings to the table – either from the government or community – and that we are here to learn from each other.
10. Provide technical assistance to all new CBO partners, to build their capacity in managing Federal grant funding and reporting (but also identify areas of improvement in the contracting process to ensure that it is not overburdening the CBOs).
11. Streamline the in-classroom training to a manageable amount of time (20 hours instead of 40 hours) so that the CHAs can get certified to begin outreach soon – it's the outreach practice where they gain in-depth knowledge and confidence.

Sustainability Plan & Partner Commitments

We have received extensive positive feedback from the EPA staff about this practice. If we mutually agree to renew the Cooperative Agreement in 2022, we could sustain this practice and program over the 17+ years that the EPA anticipates this program will be needed. However, the resources will likely change to adapt to the phases of the cleanup.

- Before the cleanup, we are in the "start-up" phase which is reflective of the work under the current 5-year Cooperative Agreement. This startup phase has required substantial resources to build internal agency capacity and external community capacity, create program infrastructure to meet Federal grant requirements, establish the community participatory practice, and develop and pilot-test new culturally relevant tools and strategies.
- During the cleanup, we want to have a fully mature program that implements effective and culturally relevant tools and strategies with strong community partnerships.
- After the cleanup and when the resident seafood is found to be safer to eat, the program may "wind down" in terms of capacity and resources.

Throughout this timeframe, the CSC will serve as an ongoing space to center the voices of those most affected by the contaminated seafood and as a vehicle for them to share and discuss areas of improvement in the program to the EPA and PHSKC. It is also a place for sharing and learning regarding CHAs' outreach efforts, implementation of program's social marketing strategies by community partners, PHSKC's evaluation findings, and the EPA's progress on the cleanup process.

The EPA and PHSKC anticipates that the strategies will be adaptive (modified or terminated) overtime based on evaluation results, saturation of target audiences, and/or changes to Washington Department of Health's seafood consumption advisory for the LDW Superfund site.

It is anticipated that the CSC membership will evolve over time and will consistently capture the voices of CHAs and other fishing community representatives. The EPA, PHSKC, and the CSC will engage as needed with partner organizations and agencies who can help implement the strategies and/or policy and partnership recommendations within the scope of the EPA's program.

Recommendations that fall outside the scope of the EPA's program have been brought to the EPA-led Healthy Seafood Consumption Consortium to identify potential partner agencies who may have the ability and authority to address those recommendations.

Now that the EPA has approved the institutional controls plan for this program and the internal staff and external community capacity has been built, we have a strong foundation by which to continue the work in partnership with the CHAs.

How did you hear about the Model Practices Program?: *

☐ I am a previous Model Practices applicant

☐ At a NACCHO conference

☒ Colleague in my LHD

☐ Colleague from another public health agency

☐ E-Mail from NACCHO

☐ NACCHO Publication (Connect, Exchange, Public Health Dispatch)

☐ NACCHO Website

Have you applied for Model Practices before?: *

☒ No, this is my first time applying. ☐ Yes, I have applied in the past.

If you answered yes to the question above, please let us know the year and award type. :
