

CENTERS OF
EXCELLENCE IN
PUBLIC HEALTH AND
HOMELESSNESS

PUBLIC HEALTH AND HOMELESSNESS TOOLKIT

FOR STATE
AND LOCAL
HEALTH
DEPARTMENTS

The Centers of Excellence in Public Health and Homelessness Toolkit for State and Local Health Departments is designed to assist health departments and other public health organizations in their efforts to support public health for people experiencing homelessness (PEH) in their jurisdictions. This toolkit provides tools, templates, program blueprints and strategies to assist health departments in understanding, planning and implementing program activities and objectives.

The mark "CDC" is owned by the U.S. Department of Health and Human Services and is used with permission. Use of this logo is not an endorsement by HHS or CDC of any particular product, service, or enterprise.



EXECUTIVE SUMMARY

People experiencing homelessness (PEH) are disproportionately affected by a multitude of infectious diseases, ranging from HIV, tuberculosis and hepatitis A and C to invasive bacterial diseases such as severe streptococcal disease. Homeless shelters across the country have experienced multiple COVID-19 outbreaks. PEH are also at an increased risk for a spectrum of non-infectious diseases, including heart disease, lung disease and mental illness. Based on this increased susceptibility for negative health outcomes, there is a critical need to develop appropriate, targeted public health interventions to address infectious and non-infectious health risks in this population. To address these public health challenges, health departments, federal agencies, homeless service providers and healthcare providers can employ a variety of tools and strategies in the following domains: strengthening partnerships, promoting health equity, engaging and empowering people experiencing homelessness, identifying and prioritizing infectious disease needs and improving data systems.



Strong partnerships are characterized by diverse and empowered participants who together represent a broad knowledge base and a robust range of experiences and perspectives. Establishing clear priorities, well-defined roles and responsibilities and open communication are essential to an effective partnership. Engaging people with lived experience thoughtfully and including them in meaningful roles will provide voices and perspectives from individuals that cannot be gained from traditional education or work experience. Partnership resources include an interview protocol to better understand partners' needs and priorities.



Engaging people with lived experience (PLE) can improve the effectiveness of public health programs and provide a voice to the individuals and families who access health care and other services. People who have experienced homelessness or are currently experiencing homelessness can provide a level of knowledge and expertise that doesn't come from formal education or employment. These individuals have unique perspectives on the conditions, challenges and experiences associated with being unhoused and navigating existing service systems, as well as firsthand knowledge of what works and what doesn't. This toolkit includes guidance to plan and implement consumer advisory boards designed to empower patients with lived experience and improve how health departments provide services to patients experiencing homelessness.



Health equity is a state in which everyone has a fair and just opportunity to achieve their highest level of health. Inequities in education, housing and employment directly relate to negative health outcomes, including decreased life expectancy and increased rates of disease. Prioritizing equitable access to optimal health, including health care and housing services, regardless of race, age, ability, gender or current housing status, is essential. Public health professionals need to consider and measure equity outcomes in all phases of program planning and implementation. Equity resources include an evidence-based tool designed to prioritize COVID-19 resource sites based on these considerations.



Identifying and prioritizing infectious disease needs depends on information gathering, information sharing and prioritization activities. The section on infectious diseases is designed to help health departments identify and reduce the incidence of infectious diseases among people experiencing homelessness. The tools and resources in this section can help to identify the most pressing diseases of concern and gaps in prevention and treatment options. One example is a tool focused on transmission routes designed to assist in identifying and responding to infectious diseases among PEH.



Data modernization efforts can provide data more quickly, streamline data exchange and detect health threats more effectively. Working with isolated data systems creates barriers to understanding and responding to the disease needs of homeless populations. By examining how public health and housing information is collected and managed, health departments can assess the strengths and limitations of their health and housing data systems. Data systems can generally be improved by increasing the levels of integration, connectivity and utility, while maintaining privacy and security measures. This toolkit provides a number of data modernization tools, including one for communities to identify and track their progress in integrating their homeless assistance and healthcare systems and services.

Identifying and responding to disease threats in communities experiencing homelessness can be complex and challenging. Whether formalizing existing partnerships, engaging people with lived experience, prioritizing disease needs or modernizing information systems, this work can be challenging for health departments, particularly those with competing priorities and limited resources. This toolkit provides tools, strategies and demonstrated practices to assist health departments in meeting these challenges.

Protecting the health of people currently experiencing homelessness, while supporting the end of homelessness, requires multi-agency and multidisciplinary collaboration.

This toolkit provides tools, strategies and demonstrated practices to assist health departments in meeting these challenges.

TABLE OF CONTENTS

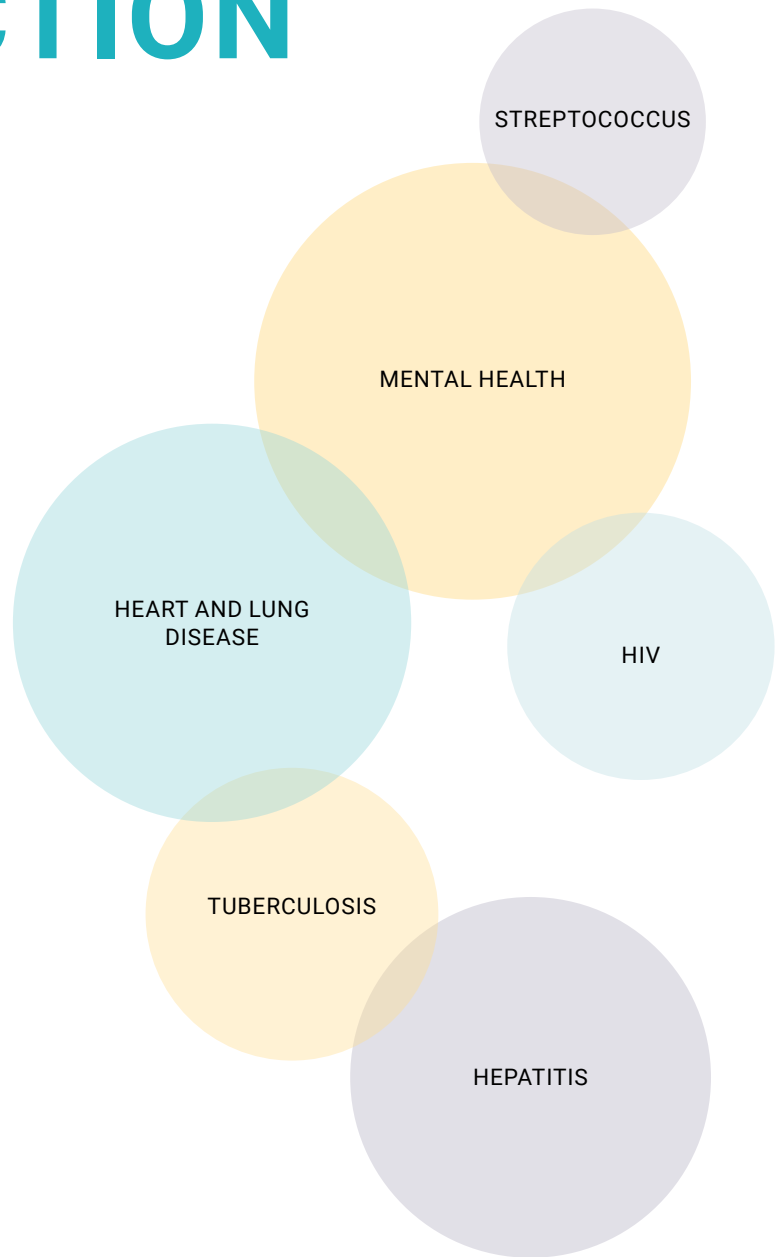
EXECUTIVE SUMMARY	3
INTRODUCTION	6
Background	6
Centers of Excellence in Public Health and Homelessness Project	7
Toolkit.....	8
Definitions	9
PARTNERSHIP BUILDING	10
Example: Public Health and Homelessness Partnership Structure	11
Example: CDC Foundation Centers of Excellence in Public Health and Homelessness Key Informant Interview Protocol	11
Using a RACI Chart to Manage Roles and Responsibilities	11
Additional Resources: Partnership Building.....	12
ENGAGING PEOPLE WITH LIVED EXPERIENCE	13
Example: Partnership Planning Matrix.....	13
Example: COVID-19 Peer Educator Program	14
Example: Consumer Advisory Boards	14
Additional Resources: Engaging People with Lived Experience.....	15
EQUITY	16
Example: Prioritizing Resources by Equity Considerations.....	18
Additional Resources: Equity	19
INFECTIOUS DISEASE AMONG PEH	20
Prioritizing Infectious Disease Needs	20
Example: Infectious Diseases of Current Concern	22
Example: PEH Mortality Analysis	22
Additional Resources: Infectious Disease Among PEH	23
DATA MODERNIZATION AND DATA INTEGRATION	24
Example: Data Linkages to Track COVID-19 Vaccine Coverage Among PEH	25
SWOT Analysis.....	27
Data Use Agreements.....	27
Examples: Data Sharing Strategies	28
Additional Resources: Data Modernization and Data Integration	29
CONCLUSION	30
REFERENCES	31
ACKNOWLEDGMENTS	32
APPENDICES	33

INTRODUCTION

Background

People experiencing homelessness (PEH) are disproportionately affected by a multitude of infectious diseases, ranging from HIV, tuberculosis and hepatitis A and C to invasive bacterial diseases such as severe streptococcal disease.¹ Homeless shelters across the country have experienced multiple COVID-19 outbreaks.²⁻⁵ PEH are also at an increased risk for a spectrum of non-infectious diseases, including heart disease, lung disease and mental illness.⁶ This toolkit is rooted in infectious disease principles with a focus on reducing COVID-19 and other infectious diseases among PEH; however, the strategies and resources provided are also applicable to non-disease-specific challenges faced by health departments that serve PEH. Four sections—partnerships, engaging people with lived experience, equity and data modernization—are not linked to any specific disease or disease category.

Improving health among PEH is a multidimensional challenge. There is a critical need to develop appropriate, targeted public health interventions to address COVID-19 with the potential benefit of addressing other infectious and non-infectious health risks. Protecting the health of people currently experiencing homelessness, while supporting the end of homelessness, requires multi-agency and multidisciplinary collaboration.



Protecting the health of people currently experiencing homelessness, while supporting the end of homelessness, requires multi-agency and multidisciplinary collaboration.

Centers of Excellence in Public Health and Homelessness Project

Building on the unique multisectoral partnerships that emerged during the COVID-19 pandemic, the CDC Foundation and Centers for Disease Control and Prevention (CDC) launched the Centers of Excellence in Public Health and Homelessness project. The initiative aimed to pilot three Centers of Excellence with a multidisciplinary approach to identify critical infectious disease public health needs for people experiencing homelessness in order to minimize their risk of contracting COVID-19 and other infectious diseases. The Center of Excellence model was applied to foster support and collaboration, ensure equity, strengthen partnerships, improve data systems and identify infectious and non-infectious disease priorities. The project is grounded in community organization theory and an ecological model of health. A logic model of this project is located in [Appendix A](#).



PILOT SITES

- 1 The **Minnesota Center of Excellence** was co-managed by the Minnesota Department of Health and Hennepin Healthcare Research Institute. Its priorities included building a governance structure with equitable representation, studying the causes of infectious disease and premature death among PEH in the state, strengthening efforts to better link housing and healthcare data and informing the state's plan to end homelessness and promote equity in Minnesota.
- 2 The **Seattle and King County Center of Excellence** was managed by Public Health Seattle & King County's Community Health Services (CHS) division. Its priorities included engaging internal partners and external partners through CHS' Health Care for the Homeless Network to validate infectious disease needs among PEH by conducting interviews and a focus group, as well as data integration efforts to improve the collection of housing status as a routine part of disease surveillance.
- 3 The **San Francisco Center of Excellence** was managed by the San Francisco Department of Public Health. Its priorities included conducting a geographically focused infectious disease needs assessment, strengthening data collection and creating a tool designed to assist health departments in sexually transmitted infection screening, testing and treatment for people experiencing unsheltered homelessness.

FEATURES OF THE CENTER OF EXCELLENCE MODEL

FOSTER SUPPORT AND
COLLABORATION

ENSURE EQUITY

STRENGTHEN
PARTNERSHIPS

IMPROVE DATA
SYSTEMS

IDENTIFY DISEASE
PRIORITIES

Toolkit

The primary goals of the Center of Excellence project were to compile and share strategies, lessons learned and best practices in public health and homelessness. The goal of this toolkit is to assist health departments and other public health organizations in their efforts to support public health for PEH in their jurisdictions. This toolkit provides tools, templates, program blueprints and strategies to assist health departments in understanding, planning and implementing program activities and objectives. It is designed to provide a framework to empower public health professionals to better understand and respond to the infectious disease needs of PEH based on their own community's needs, goals and resources.

The toolkit is divided into five sections: partnership building, engaging people with lived experience, equity, infectious disease prioritization and data modernization. Each section contains a brief introduction, strategies and tools to equip health departments, examples of case studies and best practices and additional online resources. Additional forms, templates and other interactive tools are located in the appendices. The sections and individual tools are intended to be referenced and used independently. For example, a health department focused on improving its data system infrastructure can locate the data modernization section in the toolkit, assess the state of its information systems and select tools and resources with the greatest utility.



TOOLKIT SECTIONS



PARTNERSHIP BUILDING



ENGAGING PEOPLE WITH LIVED EXPERIENCE



EQUITY



INFECTIOUS DISEASE PRIORITIZATION



DATA MODERNIZATION

The goal of this toolkit is to assist health departments and other public health organizations in their efforts to support public health for PEH in their jurisdictions.

DEFINITIONS

DATA INTEGRATION

Data integration involves connecting data systems to allow access of information from the combined systems at a single user point. Integrating data systems can allow public health agencies and professionals to understand the connections between health and other characteristics of a community—for example, connecting existing information about health surveillance and housing status.⁷

DATA MODERNIZATION

Data modernization is the process of improving data systems from siloed and fragile data systems to connected and resilient systems. The goals of data modernization include the ability to provide more complete data more quickly, streamline data exchange, detect new health threats faster and better monitor the effectiveness of prevention and control programs.⁸

EQUITY

Equity is the state of being just, impartial and fair.⁹ Health equity is a state in which everyone has a fair and just opportunity to attain their highest level of health.¹⁰

HOMELESSNESS

Homelessness is defined differently by different agencies and statutes. The definitions listed in the McKinney-Vento Act are the most widely used and accepted in the United States. The U.S. Department of Housing and Urban Development (HUD) references Section 103 of Subtitle I of the McKinney-Vento Act. This section defines homelessness as a situation where an individual or family is living in a publicly or privately operated shelter designated to provide temporary living arrangements. It defines unsheltered homelessness as a situation where an individual's or family's primary nighttime residence is a public or private place not designed for or ordinarily used as a regular sleeping accommodation for human beings, including a car, park, abandoned building, bus or train station, airport or camping ground. Most education systems in the United States reference Section 725 of Subtitle VII-B of the McKinney-Vento Act. This designates children living in the circumstances listed above, as well as those living in motels, hotels, trailer parks or camping grounds due to the lack of alternative accommodations, and those staying with others (doubled up) due to loss of housing, economic hardship or a similar situation.¹¹

PEOPLE WITH LIVED EXPERIENCE

A person with lived experience is someone who has lived or is currently living with the issues the community is focusing on and who may have insight to offer about the system as it is experienced by consumers.¹²



PARTNERSHIP BUILDING

Health department leadership can help build partnerships rooted in infectious disease priorities with community members. Health department professionals or programs who work regularly with people experiencing homelessness or homeless service providers are well-positioned to serve as a hub for strong partnerships. Programs specializing in homelessness are likely to understand the health and service needs and resources within their community, so there is value in engaging a diverse group of stakeholders.

This section provides strategies for creating a strong coalition of partners to address the health needs of members of the community experiencing homelessness. The primary goal should be to establish a team of enthusiastic, knowledgeable partners with the capacity to commit the necessary time and resources to this effort.

KNOWLEDGE AND SKILL SETS NEEDED IN THE COALITION

General characteristics of homelessness and site-specific challenges

Potential partners: street outreach coordinators, social service providers, people with lived experience

Existing community healthcare services

Potential partners: medical social workers, public health department providers, clinic staff

Homeless shelters, housing programs and homeless service providers

Potential partners: homeless shelter program coordinators, state or local housing agency staff

Infectious disease testing and/or vaccination programs

Potential partners: health department screening and testing coordinators, health department vaccination coordinators, nonprofit organizations that provide testing and access to vaccinations

Unsheltered homelessness outreach

Potential partners: street outreach coordinators, faith-based organization outreach volunteers

Infectious disease prevalence and incidence

Potential partners: health department, shelter intake coordinators

Environmental health

Potential partners: local public health departments responsible for water/toxins, local community-based organizations focused on environmental health

Additional partners

University faculty with expertise in public health, social work, evaluation and research; healthcare organizations with experience serving patients experiencing homelessness; elected officials; neighborhood leaders; faith-based organizations; food relief programs; academic institutions (medical, nursing); and/or data managers/analysts



Example: Public Health and Homelessness Partnership Structure

Public Health Seattle & King County

Public Health Centers

- 13 clinics with multiple satellite locations
- Includes parent-child health, family planning, primary care, HIV/STD, TB programs

Healthcare for the Homeless Network

- 18 contractors provide medical, behavioral health, substance use and enabling services
- Mobile medical van & street medicine
- Governance Council and Community Advisory Group

COVID-19 Homeless Response

- Case & outbreak investigations
- Homeless Health Emergency Action and Response Teams (HEART)
- Mobile Assessment & Congregate Setting Investigations Team
- Mobile vaccination
- Isolation & quarantine

Adapted from "Progress on Partnership Formation and Structure," by Public Health Seattle & King County, n.d. (personal communication, February 7, 2022).



Example: CDC Foundation Centers of Excellence in Public Health and Homelessness Key Informant Interview Protocol

Public Health Seattle & King County

Public Health Seattle & King County developed a protocol (**Appendix B**) to interview partners to confirm priority infectious disease needs among PEH and gather additional context and promising approaches and best practices in place to address the needs. It interviewed representatives across the three divisions (Community Health Services, Environmental Health Services, and Prevention) as well as partner organizations.

Using a RACI Chart to Manage Roles and Responsibilities

Establishing roles and responsibilities early is important to identify shared priorities and processes, as well as to ensure no time is lost during project launch or implementation. A Responsible-Accountable-Consulted-Informed (RACI) chart is a common project management tool that describes the roles of participants involved in a project. More complex projects greatly benefit from a project-wide RACI chart to clarify roles and responsibilities before launching project activities. RACI is an acronym for the four key project responsibilities:

Responsible: Individual or individuals that execute and manage an item. This person completes the activity and oversees tactical direction.

Accountable: (Usually one) individual who has full ownership and final approval for an activity.

Consulted: Individual whose feedback is sought and with whom there is two-way communication. Indicates someone that must be consulted for input prior to a final decision or action.

Informed: Individuals who are kept up to date on progress and, when necessary, asked to provide input. Includes those who need to be informed after a decision or action is taken because they may act or make decisions based on the output.

» A RACI chart template is available as **Appendix C**. Individual names or titles can be entered in the table to designate project roles and responsibilities.¹³

Additional Resources: Partnership Building

The following resources are intended to help health departments strengthen and improve partnerships with a variety of organization types, including social service providers, hospital emergency departments and community organizations.

Strengthening Partnerships for Better Health Outcomes During COVID-19

Framework for an Equitable COVID-19 Homelessness Response Project

A guide for communities to improve health care for PEH during the COVID-19 pandemic by strengthening partnerships between healthcare and service providers.

» https://endhomelessness.org/wp-content/uploads/2021/01/01-27-2021_Strengthening-Partnerships_FINAL.pdf

Homeless in the ED: Partnerships to Improve Care for People Without Homes in Emergency Departments

National Health Care for the Homeless Council

A webinar series describing strategies to improve partnerships between hospital emergency departments, health centers and community providers to improve access to services for PEH.

» <https://nhchc.org/webinars/homeless-in-the-ed-partnerships-to-improve-care-for-people-without-homes-in-emergency-departments/>

Innovative Treatment, Housing, and Service Partnerships to Link Housing with Health and Human Services

U.S. Department of Housing and Urban Development

A strategy guide designed to equip service providers with ideas for innovative cross-system partnerships and coordination, including examples and case studies.

» <https://files.hudexchange.info/resources/documents/H2-Innovative-Treatment-Housing-and-Service-Partnerships.pdf>

Housing-Healthcare Partnership Profile

U.S. Department of Housing and Urban Development

A list of homeless assistance, housing and healthcare partners for community and Continuum of Care coordinators.

» <https://www.hudexchange.info/resources/documents/H2-Housing-Healthcare-Partnership-Profile.pdf>



Health department professionals or programs who work regularly with people experiencing homelessness or homeless service providers are well-positioned to serve as a hub for strong partnerships.



ENGAGING PEOPLE WITH LIVED EXPERIENCE

Engaging people with lived experience (PLE) can improve the effectiveness of public health programs and provide a voice to the individuals and families who access health care and other services. These individuals have unique perspectives on the conditions, challenges and experiences associated with being unhoused and navigating existing service systems, as well as firsthand knowledge of what works and what doesn't.

Health departments should consider how to engage PLE in their community engagement and partnerships. Examples of different engagement strategies are outlined in the following examples.

PEOPLE WITH LIVED EXPERIENCE POSSESS:

Expertise that doesn't come from training or formal education

Knowledge from an experience with an issue or challenge

Direct experience with a system, process or issue

Direct experience trying to engage with a resource

Awareness of what works, what doesn't work and what resources (formal or informal) are available in the community¹²



Example: Partnership Planning Matrix

Minnesota Department of Health

The Minnesota Department of Public Health created a matrix to visually assess the diversity and inclusion of PLE in their public health and homelessness partnerships (**Appendix D**).

Metrics included:

- Current/recent PEH
- Homelessness advocates
- People who identify as Black, Hispanic, American Indian or Alaska Native, Asian or Pacific Islander
- Youth
- People who identify as gay, lesbian, bisexual or transgender (GLBT)
- Tribal health providers



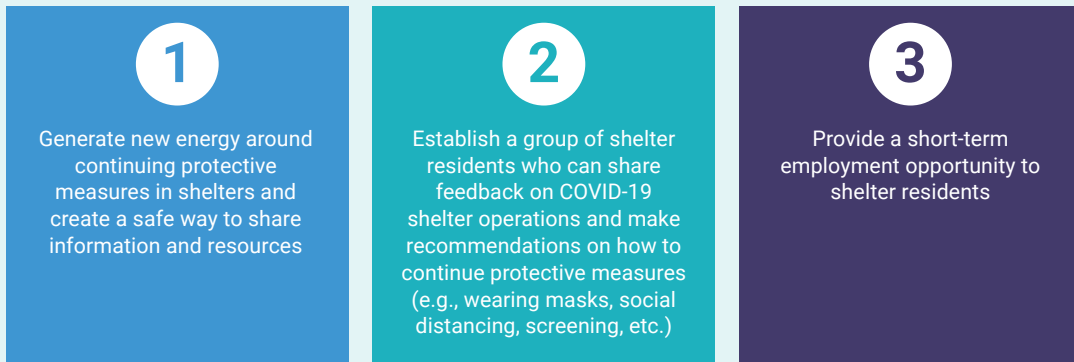
Example: COVID-19 Peer Educator Program

DC Department of Human Services

To engage people with lived experience and improve COVID-19 vaccination rates among PEH, the DC Department of Human Services created a program to hire and train COVID-19 Peer Educators with lived experience to teach homeless shelter residents about the benefits and risks of COVID-19 vaccines and promote vaccination efforts.

» For more information, visit <https://content.govdelivery.com/accounts/DCWASH/bulletins/2d938b9>

COVID-19 PEER EDUCATOR PROGRAM: GOALS



*Adapted from "COVID Peer Educators," by the District of Columbia Department of Human Services, n.d. (personal communication, May 31, 2022).
<https://dhs.dc.gov | @DCHumanServ>*



Example: Consumer Advisory Boards

National Health Care for the Homeless Council

To empower patients with lived experience and improve how health centers provide services, the National Health Care for the Homeless Council encourages and promotes consumer advisory boards (CABs). CABs are advisory groups for health centers, made up of people who use services at the health center. These advisors work with the organization's staff and Governing Board to improve program management and service delivery.

The mission of a CAB is to:

- Give feedback and recommendations to health center staff and Governing Board
- Advocate for consumers with respect to the services delivered by the health center
- Connect people experiencing homelessness to the health center

» For more information, visit https://nhhc.org/wp-content/uploads/2020/06/CAB-Manual_2020-Update.pdf



Additional Resources: Engaging People with Lived Experience

The following links provide background, strategies and step-by-step guides to engage people with lived experience thoughtfully and meaningfully.

Nothing About Us Without Us—Involving People with Lived Experience in CoC Decisions

National Alliance to End Homelessness

A webinar describing how three communities are engaging PLE in meaningful ways.

» https://www.youtube.com/watch?v=v0Koqlr9Q5k&t=103s&ab_channel=NationalAllianceToEndHomelessness

Getting Started—Engaging People with Lived Experience

Community Commons/100 Million Healthier Lives

A good introduction for agencies preparing for thoughtful and effective engagement with PLE.

» <https://www.communitycommons.org/collections/1-Getting-Started-Engaging-People-with-Lived-Experience>

Methods and Emerging Strategies to Engage People with Lived Experience

U.S. Department of Health and Human Services

Draws on lessons learned to provide strategies to engage PLE in research, programming and policymaking.

» <https://aspe.hhs.gov/reports/lived-experience-brief>



Engaging people with lived experience can improve the effectiveness of public health programs and provide a voice to the individuals and families who access health care and other services.



EQUITY

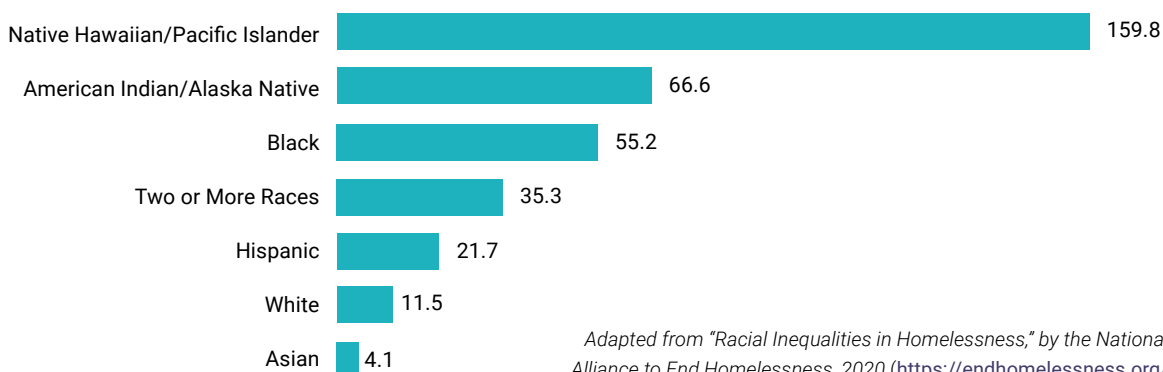
Health equity is the state in which everyone has a fair and just opportunity to attain their highest level of health. Achieving health equity requires focused and ongoing societal efforts to address historical and contemporary injustices; overcome economic, social and other obstacles to health and health care; and eliminate preventable health disparities. This is achieved when every person can attain their full health potential and no one is disadvantaged from achieving this potential due to social position or other socially determined circumstances.¹⁰

Health inequities are reflected in differences in length of life, quality of life, rates of disease and disability and access to treatment. Equitable opportunity includes equal access to resources that affect one's health. When policies, programs and systems that support health are equitable, poor health outcomes can be reduced, health disparities can be prevented and the whole of society benefits.

The following chart illustrates the rate at which most minority groups experience homelessness, which is far greater than that of Whites and Asians. In the United States, Black individuals make up about 13 percent of the general population but over 40 percent of the unhoused population. Similarly, people who identify as Native Hawaiian, Pacific Islander, American Indian, Alaska Native and two or more races are overrepresented among PEH.¹⁴

MOST MINORITY GROUPS EXPERIENCE HOMELESSNESS AT MUCH HIGHER RATES

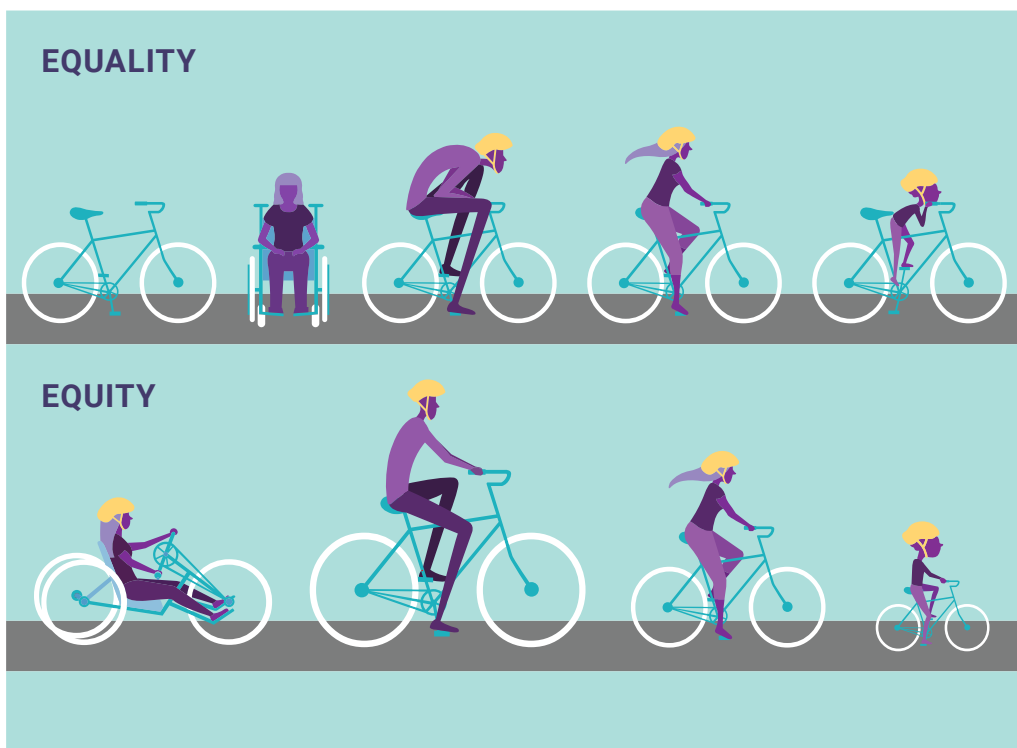
Number of people experiencing homelessness per 10,000 in population by race and ethnicity



Adapted from "Racial Inequalities in Homelessness," by the National Alliance to End Homelessness, 2020 (<https://endhomelessness.org/resource/racial-inequalities-homelessness-numbers/>).¹⁴

Equity is often mistaken for equality. Equality describes the state of equal allocation of resources and opportunities, regardless of one's circumstances. However, not every group of people needs the same resources and opportunities to thrive. Providing the same resources without considering individuals' specific circumstances may increase health, economic and social disparities. The following diagram illustrates the difference between equity and equality.

DIFFERENCE BETWEEN EQUALITY AND EQUITY



Adapted from "Visualizing Health Equity: One Size Does Not Fit All Infographic," by the Robert Wood Johnson Foundation, 2017 (<https://www.rwjf.org/en/insights/our-research/infographics/visualizing-health-equity.html>).¹⁵

QUESTIONS CONCERNING EQUITY

Every public health program should consider the following questions concerning equity:

- Are all necessary partners represented in program activities, including tribes, scientific researchers, professional organizations, racial and ethnic minority-serving organizations, community organizations and community members?
- Is information from the agency provided through channels and in formats and languages suitable for diverse audiences, including people with disabilities, people with limited English proficiency, people with low literacy or people who face other challenges accessing information?
- Do program participants understand why personal information, including race and ethnicity, is important for stopping the spread of disease among family, friends and communities?
- Are all community members able to access the information they need to keep themselves and their loved ones safe from infectious diseases?¹⁶

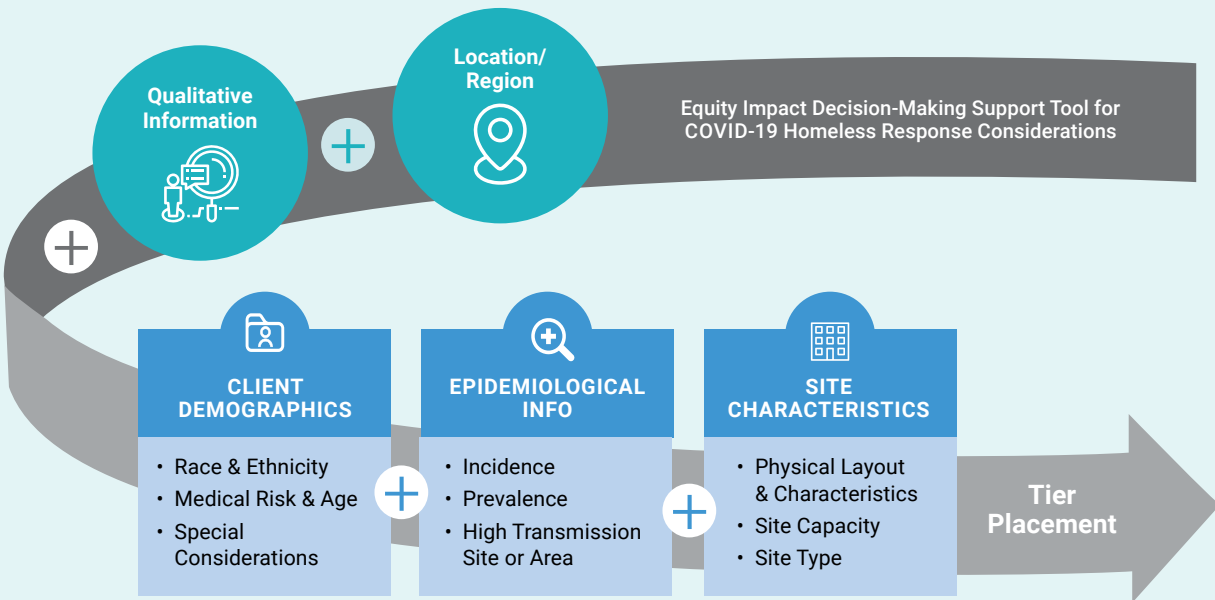


Example: Prioritizing Resources by Equity Considerations

Public Health Seattle & King County

Public Health Seattle & King County created the following tool to prioritize COVID-19 resource sites based on equity considerations.

PRIORITIZING RESOURCES BY EQUITY CONSIDERATIONS



Adapted from "Prioritizing Resources by Equity Considerations," by Public Health Seattle & King County, n.d. (personal communication, February 7, 2022).

 **Additional Resources: Equity**

The following resources provide tools to assess equity impact in communities and program implementation.

Equity Impact Review Tool

King County Office of Equity and Social Justice

Provides instructions to assess the positive and negative impacts of policies and programs on community equity.

» <https://kingcounty.gov/elected/executive/equity-social-justice/tools-resources.aspx>

Health Equity Tracker

Satcher Health Leadership Institute

A powerful tool to explore the complex dynamics of health and social inequity. Can be customized to track multiple conditions and determinants on local, state and national levels.

» <https://healthequitytracker.org/>

King County Equity Impact Awareness Tool

King County Office of Equity and Social Justice

King County created a tool to identify vulnerable communities in the Seattle area.

» <https://kingcounty.gov/~media/elected/executive/equity-social-justice/2020/COVID-19/OESJ-EIA-942020.ashx?la=en>

Advancing Health Equity: A Guide to Language, Narrative and Concepts

American Medical Association, Association of American Medical Colleges Center for Health Justice

A set of tools to address health inequities through the context of equitable language and narrative.

» <https://www.ama-assn.org/about/ama-center-health-equity/advancing-health-equity-guide-language-narrative-and-concepts-0>

Ensuring Equity in COVID-19 Planning, Response and Recovery Decision Making: An Equity Lens Tool for Health Departments

Human Impact Partners, Big Cities Health Coalition

A resource for health departments to promote equity in program planning and implementation.

» <https://www.bigcitieshealth.org/health-equity-tool/>



INFECTIOUS DISEASE AMONG PEH

People experiencing homelessness are at an increased risk of contracting communicable diseases including tuberculosis, hepatitis C, skin disease, HIV/AIDS, sexually transmitted infections and other infections.¹⁷ This section is designed to help health departments identify and reduce the incidence of infectious diseases among people experiencing homelessness; however, these resources can also apply to identifying and prioritizing non-infectious diseases. The tools and practices in this section can help to identify the most pressing diseases of concern and gaps in prevention and treatment options.

Prioritizing Infectious Disease Needs

To identify and prioritize infectious disease needs in a jurisdiction, the following approach is recommended:

1 Information Gathering

Gather relevant partners to review records, documentation and assessment forms, and have conversations with staff and clients to collect information about disease prevalence and gaps in resources. These findings may include quantitative and qualitative data.



2 Information Sharing

All site partners involved in the needs prioritization should convene to discuss the most pressing infectious disease needs among people experiencing homelessness in their community. Each partner organization should present their summary report findings. Needs should be specific and actionable.

EXAMPLES OF DEFINED NEEDS

Issue	Action
COVID-19	increase testing in shelters
HIV/Hepatitis C	reduce barriers to harm reduction services
COVID-19	provide isolation and quarantine facilities for people experiencing homelessness
Hepatitis C	improve access to screening and testing for unsheltered populations
Respite/ Recovery	improve access to supportive housing for unsheltered individuals upon hospital release
Tuberculosis	reduce barriers to medical treatment and prevention
Hepatitis C	improve access to treatment and management
COVID-19	improve access to vaccines and vaccination rates

3 Prioritization

Given the volume of infectious disease needs and limited resources, it is likely that health departments will have to prioritize the needs they have identified. Team leadership, as defined in the RACI chart, should agree on a method for prioritization of needs. It is recommended to start by selecting three or four criteria measures to score your prioritization.

The partnership should determine the prioritization method that works best for the team. The prioritization process should be equitable and methodical. The number of partners involved, partnership culture and existing experience and relationships among partners should be considered when determining how to reach a consensus on most pressing needs.

EXAMPLES OF CRITERIA MEASURES

Size of the problem
Seriousness of the problem
Importance to the community
Availability of current interventions
Economic or social impact
Public health concern
Availability of resources
Evidence that an intervention can improve the problem
Alignment with existing vision or mission
Equity



Example: Infectious Diseases of Current Concern

Public Health Seattle & King County

Public Health Seattle & King County focused on transmission routes in its approach to identifying and prioritizing infectious disease needs among PEH. The needs were compiled and synthesized based on existing information and then shared with partners during interviews to confirm priorities, add context and better understand promising approaches and best practices in place to address the needs.

INFECTIOUS DISEASES OF CURRENT CONCERN FOCUS ON TRANSMISSION ROUTES

Respiratory spread (airborne/droplet)	Fecal oral spread (direct/indirect contact)	Other—Hygiene/safe environment (direct/indirect contact)	Behavioral health (sexual &/or substance use related)
COVID-19	Shigella	MRSA	Hepatitis B
Influenza	Hepatitis A	Cutaneous diphtheria	Hepatitis C
Tuberculosis	Norovirus	Bartonella quintana	Syphilis
Meningococcal		Scabies	HIV
Invasive strep		Impetigo	Wound botulism
Varicella			

Homeless response teams & community advisory group report three interrelated needs:

- 1 increase focus on hygiene as the cornerstone of infection prevention & control
- 2 deepen understanding of environmental factors & air quality
- 3 ensure access to prevention supplies and support for behavioral health conditions

Adapted from "Infectious Diseases of Current Concern," by Public Health Seattle & King County, n.d. (personal communication, February 7, 2022).



Example: PEH Mortality Analysis

Minnesota Department of Health

In 2022, the Minnesota Department of Health partnered with the Health, Homelessness and Criminal Justice Lab at the Hennepin Healthcare Research Institute to conduct a homeless mortality study. The study merged state death records, population data from the U.S. Census and Health Management Information System data to compare mortality rates and causes of death among PEH and the general Minnesota population. The results showed that the mortality rate for people experiencing homelessness was three times higher than for the general population and that a 20-year-old person experiencing homelessness in the state had the same rate of death as a 50-year-old in the general population.



Additional Resources: Infectious Disease Among PEH

The following tools are designed to assist health departments and public health professionals in planning and implementing programs to improve the health of PEH. Some are setting-specific, and some target specific categories of disease.

Stop the Hidden Epidemic: Five Steps to Prevent and Treat HIV, HCV and STDs Among People Experiencing Homelessness

San Francisco Department of Public Health

A useful tool to inform and assist health providers in preventing sexually transmitted infections (STIs) among PEH.

» https://californiaptc.com/qi_resource/stop-the-hidden-epidemic-five-steps-to-prevent-and-treat-hiv-hcv-and-stds-among-people-experiencing-homelessness-san-francisco-department-of-public-health/

Infectious Disease Toolkit for CoCs

U.S. Department of Housing and Urban Development

Planning and implementation tools for preventing and managing the spread of infectious diseases for PEH. Includes tools that focus on shelter and encampment settings.

» <https://www.hudexchange.info/resource/5985/infectious-disease-toolkit-for-cocs/>

Clinical and Quality Improvement—Diseases

National Health Care for the Homeless Council

A comprehensive set of educational materials to support clinicians and administrators providing care for PEH. Includes information on STIs, hepatitis, HIV/AIDS and tuberculosis.

» <https://nhchc.org/clinical-practice/diseases-and-conditions/diseases/>

Technical Assistance and Training

National Health Care for the Homeless Council

An online form to request technical assistance on a variety of topics related to health care, public health and homelessness.

» <https://nhchc.org/get-technical-assistance/>

Standards for Shelter-Based Health Care

Chicago Homelessness and Health Response Group for Equity

An exhaustive guide to assist healthcare planning and delivery in shelter settings.

» https://alltheequity.org/wp-content/uploads/2022/03/Standards_Shelter_Based_Health_Care_CHHRGE_final-draft_12Sept2020.pdf

Antigen Testing in Congregate Shelters: Process Outline and Implementation Playbook

University of California San Francisco Benioff Homelessness and Housing Initiative

A planning and implementation guide for the use of COVID-19 rapid-testing solutions in congregate homeless shelters.

» <https://homelessness.ucsf.edu/resources/antigen-testing-congregate-shelters-process-outline-and-implementation-playbook>

Training on Homelessness for Public Health Providers

CDC TRAIN

An interactive training module to equip public health providers with the knowledge and skills needed to better serve communities experiencing homelessness.

» <https://www.train.org/cdctrain/admin/course/1104013/>



DATA MODERNIZATION AND DATA INTEGRATION

Identifying and understanding the health needs of people experiencing homelessness is a substantial challenge to many public health agencies. There are significant limitations associated with the use of multiple information systems, each of which typically operates in isolation. Housing status may not be incorporated into a population's health records. Similarly, medical information is not consistently available in a community's Homeless Management Information System, which documents an individual's use of homeless services. Due to these and other technological, logistical, political and privacy-related challenges, housing and health data systems do not typically connect to or communicate with each other. This prevents healthcare providers from understanding the housing challenges faced by their patients and prevents homeless service providers from understanding the health needs of their consumers. In addition, it prevents health departments from predicting, detecting and targeting the disease needs of PEH in their jurisdictions.

Data integration describes building connections between isolated data systems. In the context of public health and homelessness, it refers to connections between systems of health information and systems of housing and social services information.⁷ Historically, these data exist in separate, isolated data systems. On a population level, this creates a barrier to understanding connections between housing

WHAT IS DATA MODERNIZATION?



Data modernization is the process of improving data systems from siloed and fragile data systems to connected and resilient systems.



The goal is to be able to **provide more complete data more quickly**, streamline data exchange, detect new health threats faster and better monitor the effectiveness of prevention and control programs.⁸

status and health and makes it difficult for public health agencies to assess and respond to disease threats among PEH. On an individual level, these isolated systems prevent social service providers from understanding and supporting the healthcare needs of their clients and creates additional barriers to healthcare providers' and medical social workers' ability to connect their patients with needed support services.

Data modernization and data integration can be complicated, labor-intensive and expensive, potentially involving legal, logistical, political and technological challenges. However, the following examples illustrate how some jurisdictions are finding solutions through innovative approaches, strong partnerships and thorough assessments.

» A data integration tracking tool is located in **Appendix E**. Instructions for conducting a data mapping exercise, which helps organizations visualize strengths and weaknesses in their information management systems, is located in **Appendix F**.



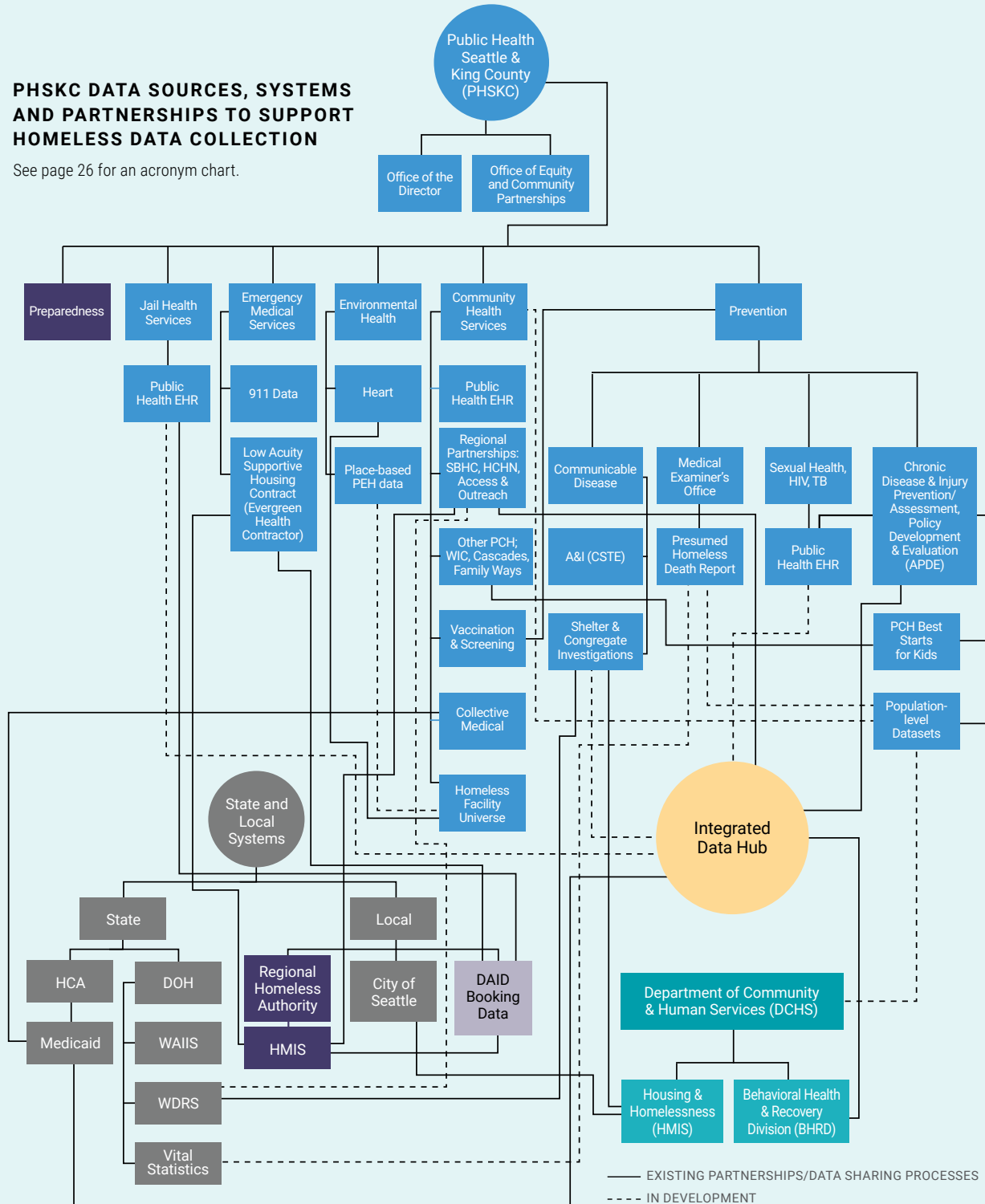
Example: Data Linkages to Track COVID-19 Vaccine Coverage Among PEH

Public Health Seattle & King County

Public Health Seattle & King County has made remarkable progress on data integration and continues its efforts to improve data and the use of data to better understand disease burden among people experiencing homelessness. The following diagram represents the current state of data sources, systems and partnerships and areas where connections are in development.

PHSKC DATA SOURCES, SYSTEMS AND PARTNERSHIPS TO SUPPORT HOMELESS DATA COLLECTION

See page 26 for an acronym chart.



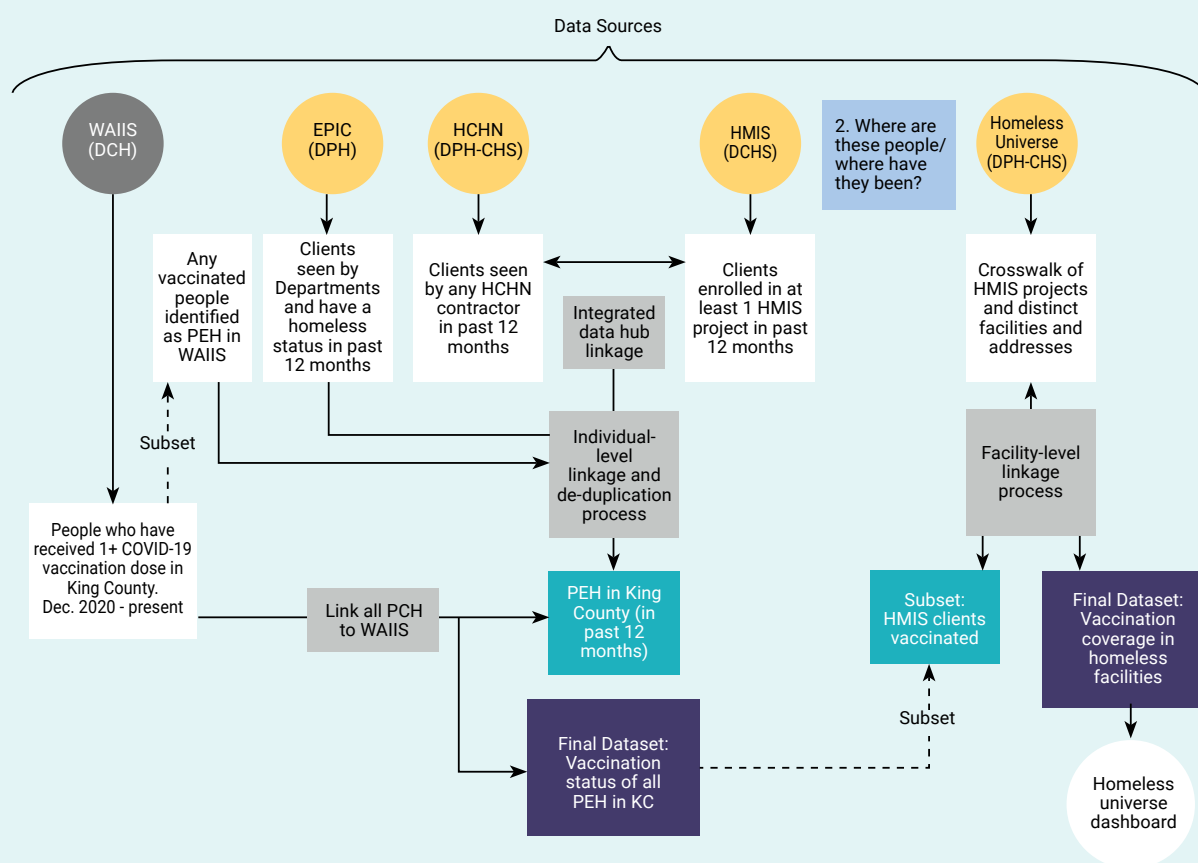
Adapted from "Data Sources, Systems and Partnerships to Support Homeless Data Analysis," by Public Health Seattle & King County, n.d. (personal communication, September 30, 2022).

One recent example is the linkage across its Homeless Management Information System, Health Care for the Homeless Network, Community Health Services electronic health records and the Washington State Immunization Information System to determine **estimates of COVID-19 vaccine coverage among people experiencing homelessness and housing instability in King County**. This effort allows the agency to accurately track vaccination coverage at a population and homeless service facility level and analyze COVID-19 vaccination rates among PEH in real time.

EXISTING DATA LINKAGE ACROSS SYSTEMS

Example: Estimating COVID-19 vaccination among PEH

1. Estimate # PEH vaccinated using operational definition: Epic, HCHN, HMIS, WAIS



PEH	PEOPLE/PERSONS EXPERIENCING HOMELESSNESS
WAIS	WASHINGTON STATE IMMUNIZATION INFORMATION SYSTEM
DPH-CHS	DEPARTMENT OF PUBLIC HEALTH, COMMUNITY HEALTH SERVICES
EPIC	ELECTRONIC HEALTH RECORD SYSTEM USED IN COMMUNITY HEALTH SERVICES
HCHN	HEALTH CARE FOR THE HOMELESS NETWORK
HMIS	HOMELESS MANAGEMENT INFORMATION SYSTEM
DCHS	DEPARTMENT OF COMMUNITY AND HUMAN SERVICES
PHSKC	PUBLIC HEALTH SEATTLE & KING COUNTY

Adapted from "Existing Data Linkage Across Systems: Estimating COVID-19 Vaccination Among PEH," by Public Health Seattle & King County, n.d. (personal communication, February 7, 2022).

SWOT Analysis

For communities in the early phases of data system assessments, a SWOT analysis (**Appendix G**) may be a useful approach. A SWOT analysis can help organizations identify internal and external factors that affect their chances of success. Users sort the factors that affect their organization as strengths, weaknesses, opportunities and threats.

» For more information on SWOT analysis, including examples of completed SWOT analyses, visit <https://www.health.state.mn.us/communities/practice/resources/phqitoolbox/swot.html>.



Adapted from "SWOT Analysis," by the Minnesota Department of Health, 2022, (<https://www.health.state.mn.us/communities/practice/resources/phqitoolbox/swot.html>).¹⁸

Data Use Agreements

To facilitate data sharing, health departments should consider using data use agreements (DUAs) with partners by creating a DUA template, expanding the scope of an existing DUA or using the appropriate local template. Establishing a DUA can improve the surveillance of diseases affecting homeless populations by enabling partners to readily share information on infectious disease prevalence and incidence. DUAs may also be useful in facilitating the integration of housing status and infectious disease surveillance data.

All parties can remove any identifying information before sharing or discussing health surveillance data. However, even de-identified data constitute protected health information and should be used, managed and protected responsibly. Work with your legal counsel to refine and represent the interests of your organization.

PROVISIONS IN THE AGREEMENT

The agreement should include provisions to ensure that the recipient of the data will:

- Not use or disclose the information other than as permitted by the DUA
- Use appropriate safeguards to prevent uses or disclosures of the information that are inconsistent with the DUA
- Report uses or disclosures that are in violation of the DUA
- Ensure that all partners agree to the same restrictions and conditions that apply to the recipient
- Not re-identify the information



Examples: Data Sharing Strategies

Homebase

Homebase is a nonprofit public interest law firm dedicated to the social problem of homelessness. Homebase works directly with communities to develop strengths-based, customized responses to their most pressing challenges with a mission to end homelessness and reduce poverty. It compiled the following examples of communities that are working to improve their public health information systems.

Marin County, California developed a universal release of information involving 42 entities from a wide variety of provider partners. This allowed providers to collaboratively care for clients across service domains.

Sonoma County, California hired external privacy experts to encourage the Board of Supervisors to adopt a resolution to support cross-sector data sharing across all departments.

Seattle & King County, Washington public health department and public housing authorities collaborated to link healthcare and housing data to improve service delivery and understanding of the relationship between housing and health.

Orange County, California created a sharing agreement with its Medicaid health plan provider, promoting collaboration of care provided to shared clients. The county also established a governance committee to advise on data privacy, security and compliance.





Additional Resources: Data Modernization and Data Integration

The following resources represent a wide range of tools to assist jurisdictions in better understanding, planning and implementing improvements to their data systems and information-sharing efforts.

Data-Driven Strategies for Client Identification, Enrollment and Cross-Systems Care Coordination

U.S. Department of Housing and Urban Development

A strategy guide for identifying PEH across multiple systems and connecting them with the appropriate services.

» <https://www.hudexchange.info/resources/documents/H2-Data-Driven-Strategies.pdf>

Informatics-Savvy Health Department Toolkit

Public Health Informatics Institute

A toolkit to assist public health agencies in data modernization planning by assessing agency strengths and weaknesses.

» <https://phii.org/module-1/introduction/>

Healthcare-Housing Integration Progress Tracking Tool

U.S. Department of Housing and Urban Development

A tool for communities to identify and track their progress in integrating their homeless assistance and healthcare systems and services.

» <https://www.hudexchange.info/resources/documents/H2-Healthcare-Housing-Integration-Progress-Tracking-Tool.pdf>

Overcoming Common Barriers to Data Linkage

Association of State and Territorial Health Officials

A brief discussion of challenges and lessons learned from health and social service data integration projects.

» <https://www.astho.org/topic/brief/overcoming-common-barriers-to-data-linkage/>

Webinar Series: PRAMS Data Linkage

Association of State and Territorial Health Officials

A webinar series providing information on linking data systems, including data use agreements, legal barriers and evaluation.

» <https://www.astho.org/topic/population-health-prevention/women-infant-family-health/webinar-series-prams-data-linkage/>

Homelessness and Health Data Sharing Toolkit

U.S. Department of Housing and Urban Development

A toolkit explaining how communities are integrating health and housing data to improve outcomes for PEH.

» <https://www.hudexchange.info/resource/6145/homelessness-and-health-data-sharing-toolkit/>

Sample Data Use Agreement

U.S. Centers for Disease Control and Prevention

A sample data use agreement between a healthcare provider and research entity describing how data will be used and who is permitted to receive or use it.

» https://www.cdc.gov/nchs/data/nhamcs/Sample_DUA_NHAMCS.pdf

Disclosures for Public Health Activities

U.S. Department of Health and Human Services

Legal guidance explaining the regulations associated with the HIPAA Privacy Rule and public health information reporting.

» <https://www.hhs.gov/hipaa/for-professionals/privacy/guidance/disclosures-public-health-activities/index.html>

SimpleReport and ReportStream

Overviews of SimpleReport and ReportStream, which are free, easy-to-use software platforms used to report COVID-19 test results and other public health data to public health departments.

» <https://www.simplereport.gov/>

» <https://reportstream.cdc.gov/>

CONCLUSION

Ensuring the health of PEH is a challenging endeavor. Identifying and responding to the infectious and non-infectious disease needs of PEH requires a thoughtful, multifaceted approach. This toolkit is not intended to be a comprehensive guide for health departments to serve the health needs of PEH in their jurisdictions. However, it does provide some real-world best practices, guides and strategies to envision, plan and implement health promotion programs in this space. The resources in this toolkit were generously shared by health departments and organizations that have been serving PEH for decades, with the hope of supporting others with different levels of experience, staff and resources in their demanding and important work.



REFERENCES

1. Liu, C. Y., Chai, S. J., & Watt, J. P. (2020). Communicable disease among people experiencing homelessness in California. *Epidemiology & Infection*, 148, e85. <https://doi.org/10.1017/S0950268820000722>
2. Imbert, E., Kinley, P. M., Scarborough, A., et al. (2021). Coronavirus disease 2019 outbreak in a San Francisco homeless shelter. *Clinical Infectious Diseases*, 73(2), 324–327.
3. Baggett, T. P., Keyes, H., Sporn, N., & Gaeta, J. M. (2020). COVID-19 outbreak at a large homeless shelter in Boston: implications for universal testing. *MedRxiv*.
4. Tobolowsky, F. A., Gonzales, E., Self, J. L., et al. (2020). COVID-19 outbreak among three affiliated homeless service sites—King County, Washington, 2020. *Morbidity and Mortality Weekly Report*, 69(17), 523.
5. Chang, Y. S., Mayer, S., Davis, E. S., et al. (2022). Transmission dynamics of large coronavirus disease outbreak in homeless shelter, Chicago, Illinois, USA, 2020. *Emerging Infectious Diseases*, 28(1), 76.
6. Schanzer, B., Dominguez, B., Shrout, P. E., & Caton, C. L. (2007). Homelessness, health status, and health care use. *American Journal of Public Health*, 97(3), 464–469.
7. Davenport, T., Verma, A., Linthicum, D. (2019). *Data modernization and the cloud. Which trend is driving the other?* Deloitte Insights. <https://www2.deloitte.com/us/en/insights/topics/analytics/data-modernization-and-cloud-migration-initiatives.html>
8. Deputy Director for Public Health Science and Surveillance. (2022). *Data Modernization Initiative*. U.S. Centers for Disease Control and Prevention. <https://www.cdc.gov/surveillance/data-modernization/index.html>
9. Annie E. Casey Foundation. (2021). *Equity vs. Equality and Other Racial Justice Definitions*. <https://www.aecf.org/blog/racial-justice-definitions>
10. National Center for Chronic Disease Prevention and Health Promotion. (2022). *Advancing Health Equity in Chronic Disease Prevention and Management*. U.S. Centers for Disease Control and Prevention. <https://www.cdc.gov/chronicdisease/healthequity/index.htm>
11. U.S. Department of Housing and Urban Development. (2019). *HUD's Definition of Homelessness: Resources and Guidance*. <https://www.hudexchange.info/news/huds-definition-of-homelessness-resources-and-guidance/>
12. Mann, Z., McDermott, E., Byrd, K., et al. (2020). *Engaging People with Lived Experience Toolkit*. 100 Million Healthier Lives. <https://www.communitycommons.org/collections/Engaging-Lived-Experience-Toolkit>
13. Villanova University. (2021). *How to Streamline Roles and Promote Team Collaboration with an Effective RACI Chart*. <https://www.villanovau.com/resources/project-management/responsibility-assignment-matrix-raci-chart/>
14. National Alliance to End Homelessness. (2020). *Racial Inequalities in Homelessness, by the Numbers*. <https://endhomelessness.org/resource/racial-inequalities-homelessness-numbers/>
15. Robert Wood Johnson Foundation. (2017). *Visualizing Health Equity: One Size Does Not Fit All Infographic*. <https://www.rwjf.org/en/library/infographics/visualizing-health-equity.html>
16. Office of Minority Health and Health Equity *What is Health Equity?* U.S. Centers for Disease Control and Prevention. <https://www.cdc.gov/healthequity/whatis/index.html>
17. Fazel, S., Geddes, J. R., & Kushel, M. (2014). The health of homeless people in high-income countries: descriptive epidemiology, health consequences, and clinical and policy recommendations. *Lancet (London, England)*, 384(9953), 1529–1540.
18. Minnesota Department of Health. (2022). *SWOT Analysis*. <https://www.health.state.mn.us/communities/practice/resources/phqitoolbox/swot.html>



ACKNOWLEDGMENTS

This project was supported by an anonymous donor to the CDC Foundation's COVID-19 Emergency Response Fund. In addition, we would like to acknowledge the following organizations for their perspectives, expertise and guidance in developing this toolkit.

Minnesota Department of Health	CareJourney
San Francisco Department of Public Health	University of Minnesota - Carlson School of Management
Public Health Seattle & King County	Philadelphia Department of Public Health
Health, Homelessness, & Criminal Justice Lab, Hennepin Healthcare Research Institute	Wind Youth Services
University of California San Francisco Benioff Homeless and Housing Initiative	Johns Hopkins Bloomberg School of Public Health
National Health Care for the Homeless Council	Pima County Health Department
DC Department of Human Services	City of Tucson
Community Solutions	Homebase

APPENDIX A

CENTERS OF EXCELLENCE IN PUBLIC HEALTH AND HOMELESSNESS ROADMAP AND LOGIC MODEL

Centers of Excellence in Public Health and Homelessness

CDC FOUNDATION PROGRAM ROADMAP

Name of program/project: Centers of Excellence in Public Health and Homelessness

Problem/Situation: What is the issue or problem you are hoping to help solve with this program/project?

People experiencing homelessness are disproportionately affected by a multitude of infectious diseases, ranging from HIV, tuberculosis and hepatitis A and C to invasive bacterial diseases such as severe streptococcal disease. Now, COVID-19 has led to outbreaks in homeless shelters across the country and there is a critical need to develop appropriate, targeted public health interventions to address COVID-19 with the potential benefit of addressing other infectious and non-infectious health risks. Protecting the health of people currently experiencing homelessness, while supporting the end of homelessness, requires multi-agency and multidisciplinary collaboration. This proposal is intended to initially fund three Centers of Excellence (CoE) to promote collaborative problem-solving among state, tribal, local and territorial health departments, homeless service providers, healthcare providers and academic centers.

Main Strategies/Activities: What are the main activities or strategies you will undertake as part of this project to address the problem?

The primary objectives of these CoEs are to use a multidisciplinary approach to identify critical public health needs for people experiencing homelessness to minimize their risk of contracting COVID-19 and other infectious diseases. This work will include ongoing assessments and surveillance of the public health needs among people experiencing homelessness, the development and pilot testing of policies and program strategies to address those needs and the analysis and evaluation of these policies and programs to identify best practices.

- Each CoE will implement and evaluate prevention and control projects by:
 - Developing and maintaining (through regular meetings) a coalition of local homeless service providers, healthcare providers, academic experts, health plans and state and local public health agencies in the jurisdiction to address the subsequent activities
 - Conducting a local or state-level infectious disease needs assessment of the homeless population in the context of the COVID-19 crisis and developing a targeted public health intervention to address the identified needs using a multidisciplinary approach, with appropriate systems in place to capture data for evaluation
 - Integrating collection of housing status as a routine part of state/local health department disease surveillance, investigation and follow-up
 - Participating in peer-to-peer sharing of best practices with partner CoEs and other jurisdictions
 - Developing a final report on lessons learned and cumulative site impact
- Initiative-level work will include:
 - Collection of baseline information on public health/healthcare partnerships, needs assessment for CoE creation
 - Identification of best ways to foster relationships across partners
 - Development of a toolkit including best practices, lessons learned, meeting facilitation guides, relevant templates, etc.

Simple Logic Model Table: Please list the activities you will implement and the short-, mid- and longer-term outcomes you hope will result. **Bolded activities and outcomes correspond to the site-specific activities.**

Activities	Short-term Outcomes	Medium-term Outcomes	Long-term Outcomes/ Impacts
<p>Phase One: Set-up</p> <ul style="list-style-type: none"> Develop a coalition with new and existing partners, including at least one partner or work group focused on data Develop a coalition charter describing the roles of coalition members, objectives and timelines for coalition activities and efforts <p>Phase Two: Establish Centers and Gather Baseline Information</p> <ul style="list-style-type: none"> Conduct infectious disease needs assessment and prioritization as a collaborative process across partners Create project charter and strategic plan for needs identified in the needs assessment Identify gaps and challenges in reporting housing status for case notifications <p>Phase Three: Implementation</p> <ul style="list-style-type: none"> Assess level of integration of housing status as a routine part of health department disease surveillance Collect baseline information on public health and homelessness Centers partnerships Establish/Participate in peer-to-peer network for sharing of resources with partner CoEs Develop tools and website-based communications to assist program development based on topic need Develop lessons learned final report <p>Phase Four: Wrap-Up, Product Finalization</p> <ul style="list-style-type: none"> Develop toolkit including lessons learned, best practices and meeting facilitation guides. Toolkit should be shareable and aims to facilitate public health promotion among people experiencing homelessness Disseminate information about available interventions for homeless population for use and adaptation by organizations 	<p>Phase One: Set-up</p> <ul style="list-style-type: none"> Improved coordination and communication between relevant partners in homelessness and health and across sites <p>Phase Two: Establish Centers and Gather Baseline Information</p> <ul style="list-style-type: none"> Establishment of relationships between coalition of partners in public health Prioritization of infectious disease needs in homeless population Identification of means of housing linkage from healthcare and public health entry points <p>Phase Three: Implementation</p> <ul style="list-style-type: none"> Sharing of resources between organizational partners within each Center and across the project to improve service access and delivery across the field Development of lessons learned, allowing continuous improvement of program and of field knowledge Report of lessons learned created and disseminated for use by other organizations <p>Phase Four: Wrap-Up, Product Finalization</p> <ul style="list-style-type: none"> Homeless populations utilize the intervention established by CoEs Action plan to assist organizations in searching for, adapting and implementing interventions as part of their organizational capacity building 	<ul style="list-style-type: none"> Improved understanding of how public health and homeless Center partnerships can be started, sustained and improved Improved understanding of how healthcare and public health services can support ending homelessness Greater access to public health interventions for homeless populations Changes in behaviors and intervention use by the target population Increased linkages to housing for people experiencing homelessness Increased preparedness of organizations to meet future demand of service needs during public health emergencies 	<ul style="list-style-type: none"> State and local levels implement best practices and approaches State and local staff reduce risky practices and adopt protective practices Improved treatment and outcomes of COVID-19 disease in populations experiencing homelessness

External Factors: List any big outside factors that will influence whether or not your activities will successfully achieve your outcomes.

1. Political will
 2. Difficulties in hiring or contracting with academic or governmental partners
 3. Changes in policies or priorities related to the COVID-19 pandemic
-

Evaluation Plan: Indicate the key activities and outcomes you propose to measure to track the implementation and effectiveness of the project. Also list the data source/collection method.

Phase 1:

- Develop and maintain a coalition
 - Measure: CoE finalizes a coalition of partners to develop a charter to address public health, homelessness with mission, objectives and directory
 - # of CoEs formed; #, type of partner in each; estimated reach of each CoE
-

Phase 2:

- Conduct an infectious disease needs assessment
 - Measure: CoE submits a report from the needs assessment of the homeless population, including a public health implementation strategy, which may include behavioral and environmental components, to address the top three needs
 - # of needs assessments performed
-

Phase 3:

- Assess level of integration of housing status
 - Measure: CoE completes report evaluating degree of data integration and opportunities for improvement
 - Participate in peer-to-peer sharing
 - Measures: Each CoE:
 - participates in bimonthly CDC Foundation/CDC/CoE calls
 - participates in six quarterly peer-to-peer homelessness topic work group calls (e.g., education/training, website/health promotion, special project development and evaluation), with each Center leading one work group call
 - creates and maintains a homelessness resource website that includes a description of the Center, its partners, resources and activities
 - website metrics to be provided
 - Monitor progress
 - Measures: CoEs will:
 - identify, measure and assess progress against the identified needs
 - develop and monitor indicators for health equity comparing 1) outcomes among PEH and the general population and 2) outcomes among racial groups within PEH
 - develop a metric that assesses healthcare engagement based on needs assessment
-

Phase 4:

- Develop a toolkit including lessons learned, best practices and meeting facilitation guides
 - Measures: # of materials developed
 - Disseminate information about available interventions for homeless population for use and adaptation by organizations
 - Measures: # of materials developed, # of dissemination events, estimated population reached
-

APPENDIX B

KEY INFORMANT INTERVIEW PROTOCOL

Public Health Seattle & King County

Public Health Seattle & King County conducted interviews with internal and external partners to validate the priority infectious disease needs among PEH, gather success stories and best practices to address the needs and identify where opportunities for improvement remained. Twelve interviews were conducted with 17 people across the three divisions of Public Health Seattle & King County (Community Health Services, Environmental Health Services, and Prevention) as well as with external partner organizations including the Seattle/King County Coalition on Homelessness and the Department of Community and Human Services. This protocol can be tailored to a wide range of partnership efforts to explore partner priorities, success stories and opportunities for improvement.

PUBLIC HEALTH AND HOMELESSNESS CENTERS OF EXCELLENCE

Key Informant Interview Protocol [Internal]

Introduction

Interview Script:

Through our conversation today, we are hoping to learn from you what may be missing from our current understanding of infectious disease needs among people experiencing homelessness and what opportunities for improvement would make the biggest impact to prevent or reduce the spread of disease.

I will be taking notes and, with your permission, will record the interview for notetaking purposes only, but nothing you say will be attributed to you by name. Any questions for me before we begin?

Participants	Date

This interview protocol contains all questions, but not everyone interviewed will be asked all questions. Interviews are tailored to the individual based on their subject matter expertise (see Role-specific questions), and some questions are still a work in progress as we map out the next set of stakeholders to be interviewed based on knowledge/analysis gaps.

#	Questions (for all)	Notes
1	<i>[Preface with understanding of their role]</i> Please tell us a little more about your role in efforts to improve the health of people experiencing homelessness.	

#	Questions (for all)	Notes
2	<p>Based on a review of materials and summarized discussions with homeless response teams and community advisory groups, there are three priority themes from a public health perspective:</p> <ul style="list-style-type: none"> a. Increase focus on hygiene services, supplies and restroom access as the cornerstones of both infection prevention and human dignity/rights b. Deepen understanding of environmental factors, like air quality and ventilation in both shelters and encampments c. Ensure access to harm reduction supplies and supports for behavioral health conditions that are trauma-informed and culturally relevant <p><i>What is missing? What might be misunderstood or misrepresented?</i></p> <p><i>What are you and your team focusing on?</i></p>	
3	<p>The COVID-19 pandemic exposed many underlying inequities and prompted some systems changes. Three priority themes from a community level have surfaced:</p> <ul style="list-style-type: none"> a. Recognize racism as a root cause of homelessness and connect efforts to end homelessness with ending racism b. Continue focusing on quality of shelter (more room, privacy, space for belongings) and new options for housing c. Make physical and behavioral healthcare services more accessible to people who are unsheltered and to people experiencing less visible types of homelessness (i.e., doubled up) <p><i>What do you think is needed to sustain these systems changes?</i></p> <p><i>[Tailored prompts: people, policy, process, etc.]</i></p> <p><i>Who are the people we need to keep engaged when priority shifts? (e.g., public health decision-makers, political leaders, general public)</i></p> <p><i>What are the policies that are pivotal to sustaining these changes?</i></p> <p><i>What are the processes/operations that are essential to sustaining these changes?</i></p>	
4	<p>Throughout the pandemic, people needed to quickly adapt, innovate and discover new ways to solve problems. We want to capture some examples.</p> <p><i>Tell me about a time when you felt success in solving a problem.</i></p> <p><i>Tell me about a time when you observed other providers (healthcare, shelter service providers) feeling successful.</i></p> <p><i>Tell me about a time when you observed people experiencing homelessness feeling successful.</i></p>	
5	<p><i>Tell me more about the issues your team is prioritizing for 2022.</i></p> <p><i>[Follow-up prompt]</i></p> <p><i>What informed your decision to prioritize these issues?</i></p>	

#	Role-specific questions	Notes
	Questions for environmental health partners	
	<p>The COVID-19 pandemic raised awareness about the need to support homeless shelters in improving air quality via distribution of HEPA fan/filtration systems.</p> <p><i>Tell me more about how air quality contributes to infectious disease prevention and outreach response.</i></p> <p><i>[Follow-up prompt]</i></p> <p><i>What other approaches to reducing respiratory spread (airborne/droplet) have been successful [in shelter/encampment/other settings]?</i></p>	
	<p>The Healthcare for the Homeless Network community advisory group has spoken about continued challenges accessing hygiene services, supplies, restrooms and specifically the quality of water available in unsheltered spaces like encampments.</p> <p><i>Tell me more about how water quality contributes to infectious disease prevention and outbreak response.</i></p> <p><i>[Follow-up prompt]</i></p> <p><i>What has been the most successful approach to reducing fecal oral spread (direct/indirect contact) in shelter/encampment/other settings?</i></p>	
	<p>One of the areas we know comparatively less about is the link between pollution and infectious disease—specifically in unsheltered spaces.</p> <p><i>How would you explain those connections in plain language?</i></p>	
	Questions for data specialists (collectors, analysts, decision-makers)	
	<p>One of the long-term goals of this project is to improve the surveillance system so we better understand disease burden among people experiencing homelessness.</p> <p><i>What is the current state of providing data on the percentage of people experiencing homelessness?</i></p> <p><i>[Follow-up prompt]</i></p> <p><i>What are the systems used for gathering/analyzing/reporting data related to PEH?</i></p> <p><i>What are the technical challenges of gathering/analyzing/reporting data?</i></p> <p><i>[OR]</i></p> <p><i>What data infrastructure/systems changes would make it easier to support disease investigation among PEH?</i></p>	
	<p>Data specific to homelessness appears limited via the Washington Tracking Network WTN Data Portal.</p> <p><i>What are the legal and jurisdictional challenges of data gathering/sharing/analyzing?</i></p> <p><i>[Follow-up prompt]</i></p> <p><i>Who is the best person to help us understand data collection at the state level?</i></p>	

#	Role-specific questions	Notes
	<p><i>What does modernizing our surveillance system look like?</i></p> <p>[OR]</p> <p><i>What does the ideal state look like, and what are the resources needed to get there?</i></p> <p><i>What is the current state of training of disease investigators to improve collection of housing status outside of traditional settings?</i></p>	
	Questions for healthcare providers (in progress/next steps)	
	<i>What information or data would make it easier for providers to prevent or mitigate spread of infectious disease among PEH?</i>	
	Wrap-up questions (for all)	
6	<p>For the past two years, you and your team have continually been in crisis response mode. Please take a moment now to step back and reflect. Imagine you have a magic wand that functions within the realm of the Department of Public Health.</p> <p><i>What is the first thing you would do to improve health outcomes among people experiencing homelessness?</i></p> <p><i>What do the results of that action look like in 12 months?</i></p> <p>[OR]</p> <p><i>What does it look like when we are successful in preventing or reducing the spread of infectious disease?</i></p>	
7	<p><i>Is there anyone else you think we should be sure to talk to?</i></p> <p><i>[Follow-up prompt]</i></p> <p><i>If so, what questions would you want to ask them?</i></p>	
8	<p><i>What else would you want to know if you were doing this work?</i></p> <p>[OR]</p> <p><i>What should we have asked you that we didn't?</i></p>	
9	<i>Are there any background materials, reports or data sources you think we should be aware of?</i>	

Thank you and next steps.

Adapted from "Key Informant Interview Protocol," by Public Health Seattle & King County, n.d. (personal communication, March 31, 2022).

APPENDIX C

RACI CHART TEMPLATE

Centers of Excellence in Public Health and Homelessness

Category	Task	Responsible (complete task)	Accountable (oversee task completion)	Consulted (review and approve)	Informed (receive updates)
Program management	Coordinate meetings, meeting agendas and partnership communications				
Program management	Manage notes, meeting agendas, meeting minutes and partnership communications				
Program management	Manage reports				
Program management	Maintain master calendar				
Partner engagement/communications	Recruit collaboration partners				
Partner engagement/communications	Maintain communications and meeting schedule with partners				
Needs prioritization	Coordinate needs prioritization				
Needs prioritization	Identify data sources				
Needs prioritization	Manage and analyze needs prioritization data				
Needs prioritization	Identify gaps in resources				
Needs prioritization	Prioritize infection threats				
Needs prioritization	Identify gaps and challenges in reporting housing status in infectious disease case records				

Category	Task	Responsible (complete task)	Accountable (oversee task completion)	Consulted (review and approve)	Informed (receive updates)
Program implementation	Develop public health implementation strategy				
Program implementation	Integrate housing status into case documentation				
Program implementation	Develop and monitor indicators for health equity				
Reports / tools / dissemination	Develop findings products (presentations, summaries, etc.)				
Reports / tools / dissemination	Create and maintain homelessness resource website				
Reports / tools / dissemination	Develop tools and website-based communications				
Reports / tools / dissemination	Develop summary reports, including activities, lessons learned, best practices and meeting facilitation guides				
Reports / tools / dissemination	Develop lessons learned final report				
Reports / tools / dissemination	Disseminate information on lessons learned, population needs and available interventions				
Program evaluation	Collect baseline information on partnerships				
Program evaluation	Identify, measure and assess progress against identified needs				

APPENDIX E

HEALTHCARE-HOUSING INTEGRATION PROGRESS TRACKING TOOL

U.S. Department of Housing and Urban Development

Overall Objective: Integrated and coordinated housing and health care that fosters housing stability, health and wellness for people who are homeless or at-risk, and efficient, effective use of healthcare and housing resources.

Performance Category: Systems Change, Planning and Leadership					
Target Outputs/Outcomes	N/A	Not Yet Started	Increased Understanding/ Skills	Applied Knowledge/ Concrete Progress	Accomplished
Action Planning session completed					
Action Plan (including implementation guidelines) finalized					
Ongoing and regular Leadership/Implementation Team meetings, with active participation by representatives from housing, healthcare and other mainstream systems					
H2 Plan components embedded in other system plans, structures					

Performance Category: Enrollment					
Target Outputs/Outcomes	N/A	Not Yet Started	Increased Understanding/ Skills	Applied Knowledge/ Concrete Progress	Accomplished
Expertise regarding Medicaid eligibility requirements and enrollment resources in homeless assistance agencies					
Identification of homeless/housing system clients in need of Medicaid and benefit program enrollment or renewal assistance					
Medicaid and other benefit program enrollment assistance available and offered to all eligible uninsured homeless/housing system clients					
100% enrollment in Medicaid and SSI/SSDI of eligible members of the H2 Target Populations: (1) people experiencing homelessness and (2) low-income people living with HIV/AIDS					

Performance Category: Engagement					
Target Outputs/Outcomes	N/A	Not Yet Started	Increased Understanding/ Skills	Applied Knowledge/ Concrete Progress	Accomplished
Connection to ongoing primary care for all homeless/housing system clients					
Increased rates of medication and health appointment adherence among homeless/housing system clients					
Improved measurable health outcomes for homeless/housing system clients with one or more chronic conditions					
Reduction of avoidable use of emergency and inpatient hospital services					
Reduction in costs incurred and/or number of visits to emergency rooms for non-emergencies					

Performance Category: Integration					
Target Outputs/Outcomes	N/A	Not Yet Started	Increased Understanding/ Skills	Applied Knowledge/ Concrete Progress	Accomplished
Written policies or agreements that require housing/ healthcare system connection (e.g., Memoranda of Understanding between housing agency and Federally Qualified Health Center; hospital policies that require participation in CoC)					
Direct links from health care providers to CoC Coordinated Entry System(s)					
Awareness and understanding of CoC Coordinated Entry System(s) by health care providers					
Regular participation by health care providers in CoC Coordinated Entry System(s)					
Discharge planning processes (in hospitals, jails, alcohol and drug treatment programs) that include consideration of housing needs and, if necessary, link to housing assistance system					
Integration of primary care and other health services into CoC and/or Coordinated Entry System(s)					
Integration Models (e.g., FQHC that has agreed to provide primary health care to each member of Target Populations that seeks housing assistance) operating in each CoC/county/community					

Performance Category: Data-Driven Interventions					
Target Outputs/Outcomes	N/A	Not Yet Started	Increased Understanding/Skills	Applied Knowledge/Concrete Progress	Accomplished
Healthcare data systems that collect housing-related information (e.g., consistent use of ICD10 codes relating to homelessness by all hospitals)					
Sharing of data between homeless/housing assistance providers and healthcare providers					
Integration of data across homeless/housing assistance and healthcare systems					
Identification of shared priority sub-populations and development of targeted interventions					

Performance Category: Resource Maximization					
Target Outputs/Outcomes	N/A	Not Yet Started	Increased Understanding/Skills	Applied Knowledge/Concrete Progress	Accomplished
Expansion, waivers, state plan options, demonstration programs and other action to maximize use of Medicaid to support housing stability					
Medicaid billing for services provided by homeless-housing and service providers (through direct billing by providers or partnerships with managed care organizations or other health providers)					
Maximization of health and human services funding (i.e., increased successful applications for relevant funding opportunities)					
Increased percentage of CoC funds going toward direct housing costs / Decreased percentage of CoC funds going toward services/treatment					

Adapted from "Healthcare-Housing Integration Progress Tracking Tool," by the U.S. Department of Housing and Urban Development, n.d. (<https://www.hudexchange.info/resources/documents/H2-Healthcare-Housing-Integration-Progress-Tracking-Tool.pdf>).

APPENDIX G

SWOT ANALYSIS TEMPLATE

Communities for Public Health

A SWOT analysis will help you identify internal and external factors in the environment that can help with the development of your organization's goals and objectives. State the idea you are assessing:

Identify strengths, weaknesses, opportunities and threats (SWOT) for your organization. Use the examples to the left, if necessary. The presence of weaknesses and threats are gaps to be addressed in planning, while the absence of strengths or opportunities clarifies the need for further planning or development.

<p>EXAMPLES</p> <ul style="list-style-type: none"> • Collective capabilities • Morale, commitment, leadership • Governance, participation norms, defined roles • Resources, funding assets, people • Experience, knowledge, data • Innovation • Collaboration • Accreditations, certifications • Processes, systems, IT, communications • Cultural, attitudinal, behavioral norms 	<p>STRENGTHS</p> <p>What does your organization do well?</p>	<p>WEAKNESSES</p> <p>In what ways is your organization lacking?</p>
<p>EXAMPLES</p> <ul style="list-style-type: none"> • Political, legislative, financial factors • Stakeholder involvement • Technology development and innovation • Quality of partnerships • Development of knowledge • Uptake in disseminated knowledge • Best practices • External (competing or synergistic) factors • Relevant trends in public health 	<p>OPPORTUNITIES</p> <p>What external factors help facilitate your organization's activities?</p>	<p>THREATS</p> <p>What external factors hinder your organization's activities?</p>

Adapted from "SWOT Analysis Tool," by Communities for Public Health, n.d. (<https://www.cdc.gov/publichealthgateway/phcommunities/resourcekit/resources-2-2.html>)

