

Visualizing mental health and SDOH in public housing

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National Center for Health in Public Housing (NCHPH)

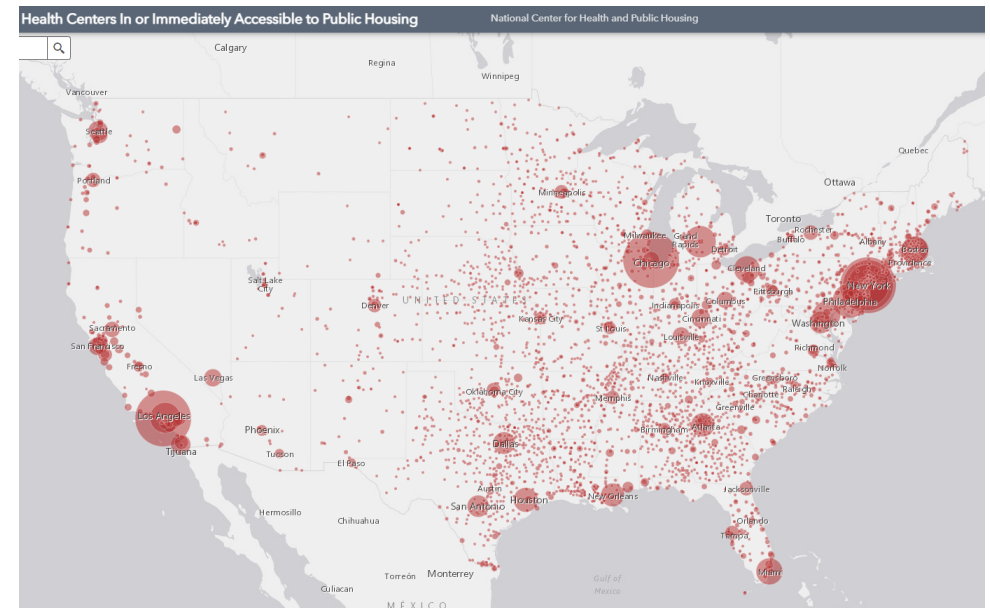
- The National Center for Health in Public Housing (NCHPH) is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number U30CS09734, a National Training and Technical Assistance Partner (NTTAP) for \$2,006,400 and is 100% financed by this grant. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.
- The mission of the National Center for Health in Public Housing (NCHPH) is to strengthen the capacity of federally funded Public Housing Primary Care (PHPC) health centers and other health center grantees by providing training and a range of technical assistance.



Health Centers Close to Public Housing

- 1,373 Federally Qualified Health Centers (FQHC) = **30 million patients**
- 458 FQHCs In or Immediately Accessible to Public Housing = **5.7 million patients**
- 108 Public Housing Primary Care (PHPC) = **911,683 patients**

Source: [2021 Health Center Data](#)



Source: [Health Centers in or Immediately Accessible to Public Housing Map](#)

Public Housing Demographics



1.5 Million
Residents



2 Persons
Per Household



38% Disabled



52% White



91% Low
Income



43% African-
American



26% Latinx



19% Elderly



36% Children



32% Female Headed
Households with
Children

Session Background

The burden of behavioral health conditions on individuals in traditionally marginalized communities is significant. These conditions impact health center patients in a variety of ways that are cumulative, insidious and often difficult to address.

In this webinar we seek to gain a greater understanding of the behavioral health burden on community health centers through data visualization. Specifically, using interactive maps we will examine the main metrics related to behavioral health, the social determinants of health and their interaction. Using this understanding we will discuss the latest research and program creation efforts that can be used to better address the behavioral health burden in your community.

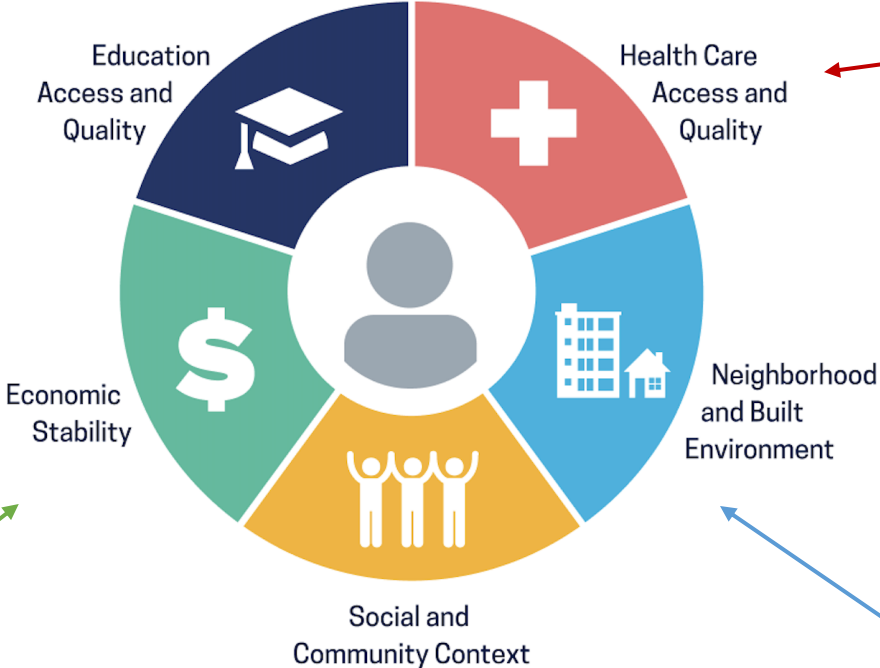
Learning objectives

1. To visualize and describe the impact of behavioral health conditions and the social determinants of health on community health centers.
2. To gain a better understanding of how these issues interact.
3. Review recent research in addressing behavioral health systemically from the health center-level.
4. Examine ways to integrate best practices and available research into actionable program design.

Section 1: Visualization

Visualizing the impact of behavioral health conditions and the social determinants of health on community health centers

Social Determinants of Health



Years of formal education are correlated with a healthier and longer life. The impact of low-levels of education is not limited to childhood/adolescence or one's working years.

Individuals with employment are more likely to experience positive health outcomes and experience lower rates of heart disease, diabetes and other chronic conditions.

People's relationships with family, friends, co-workers and community-members impacts physical and psychological health and wellbeing. Unsafe housing, discrimination or economic impoverishment can act as barriers to these.

One in ten Americans do not have access to healthcare. Many more are medically underserved and lack access, particularly to preventative services.

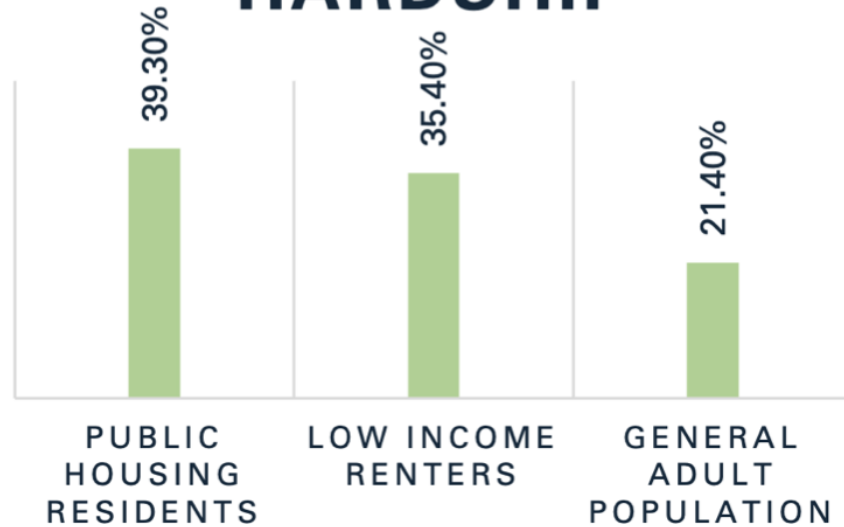
Access to housing is a critical component to healthy living. Unhoused populations are largely limited to ED care and lack access to preventative services. Quality and location of housing is linked to preventative service access and the necessary components of healthy living, such as a healthy diet and pollution-free living.

Prevalence of select health conditions in HUD-assisted adults

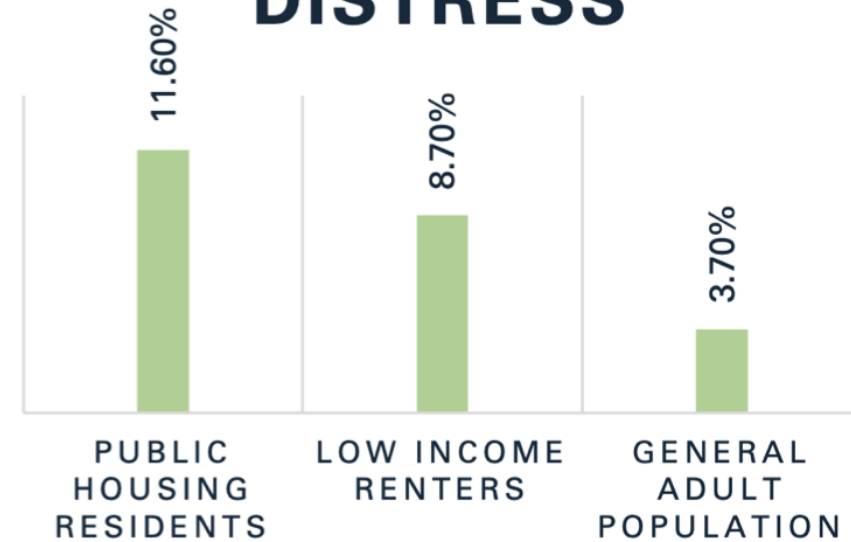
	HUD-Assisted	Low-Income Renters	All Adults
Fair/Poor Health	35.8%	24%	13.8%
Overweight/ Obese	71%	60%	64%
Disability	61%	42.8%	35.4%
Diabetes	17.6%	8.8%	9.5%
Chronic Obstructive Pulmonary Disease (COPD)	13.6%	8.4%	6.3%
Asthma	16.3%	13.5%	8.7%

Source: A Health Picture of HUD-Assisted Adults, 2006–2012

DISTRESS WITH MENTAL HARDSHIP

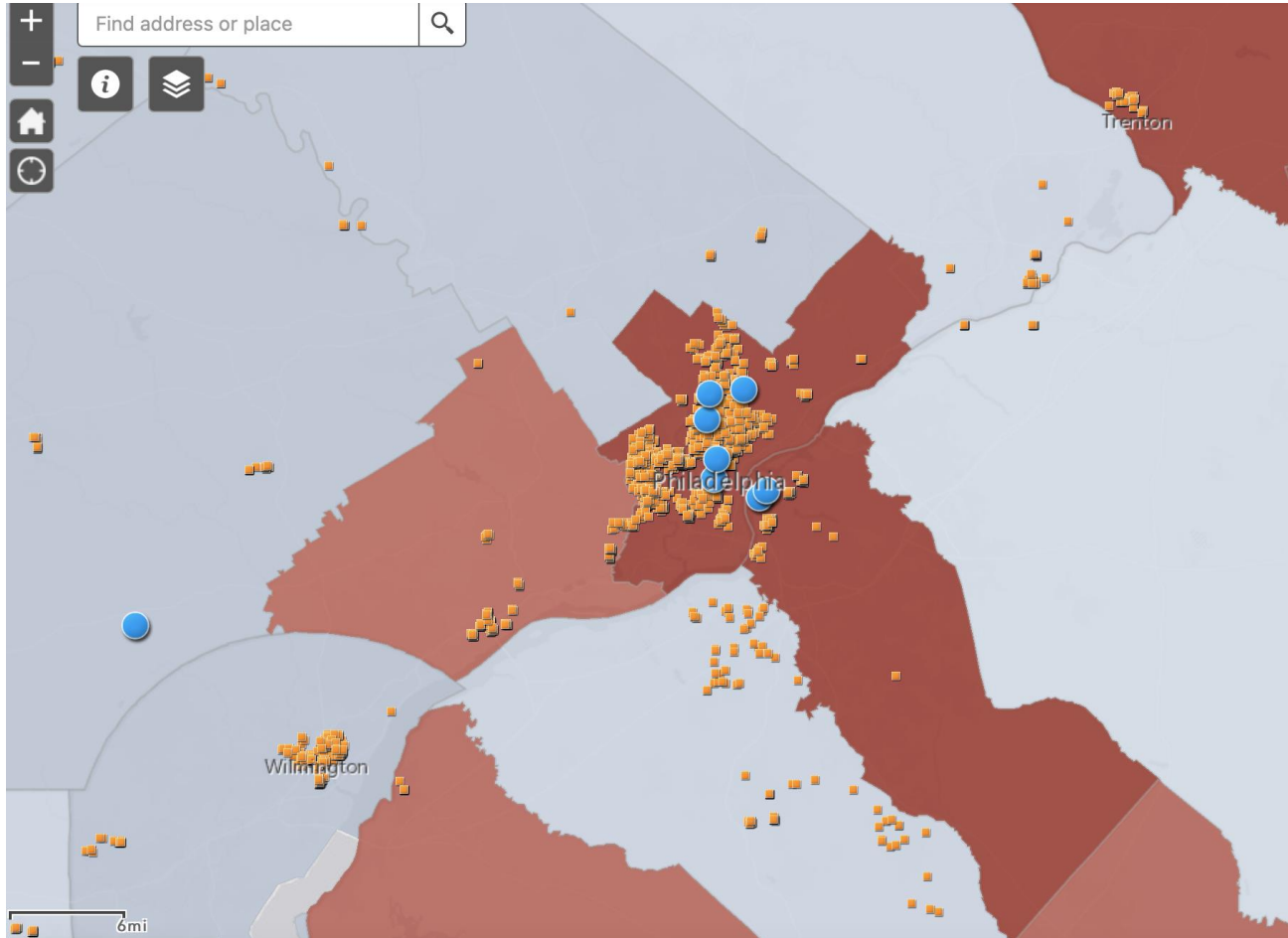


SERIOUS PSYCHOLOGICAL DISTRESS



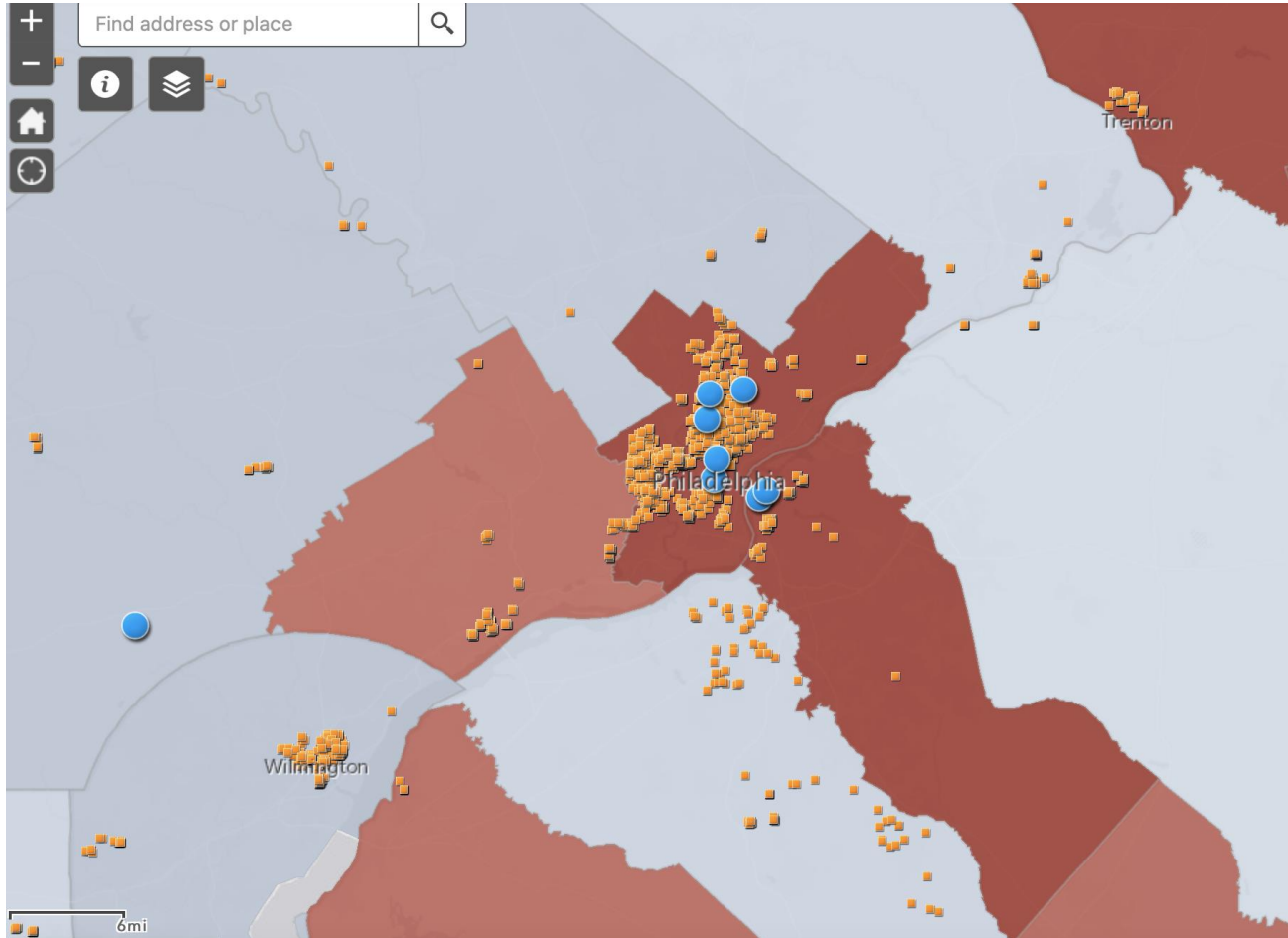
Source: A Health Picture of HUD-Assisted Adults, 2006–2012 | HUD USER

Mapping income inequality: PHPCs and residents of public housing



- The relationship between the location of PHPC's, public housing and indicators of income inequality is robust.
- This relationship can be visualized well in Philadelphia, PA.
- Does this relationship also manifest in your area of operation?

Mapping income inequality: PHPCs and residents of public housing

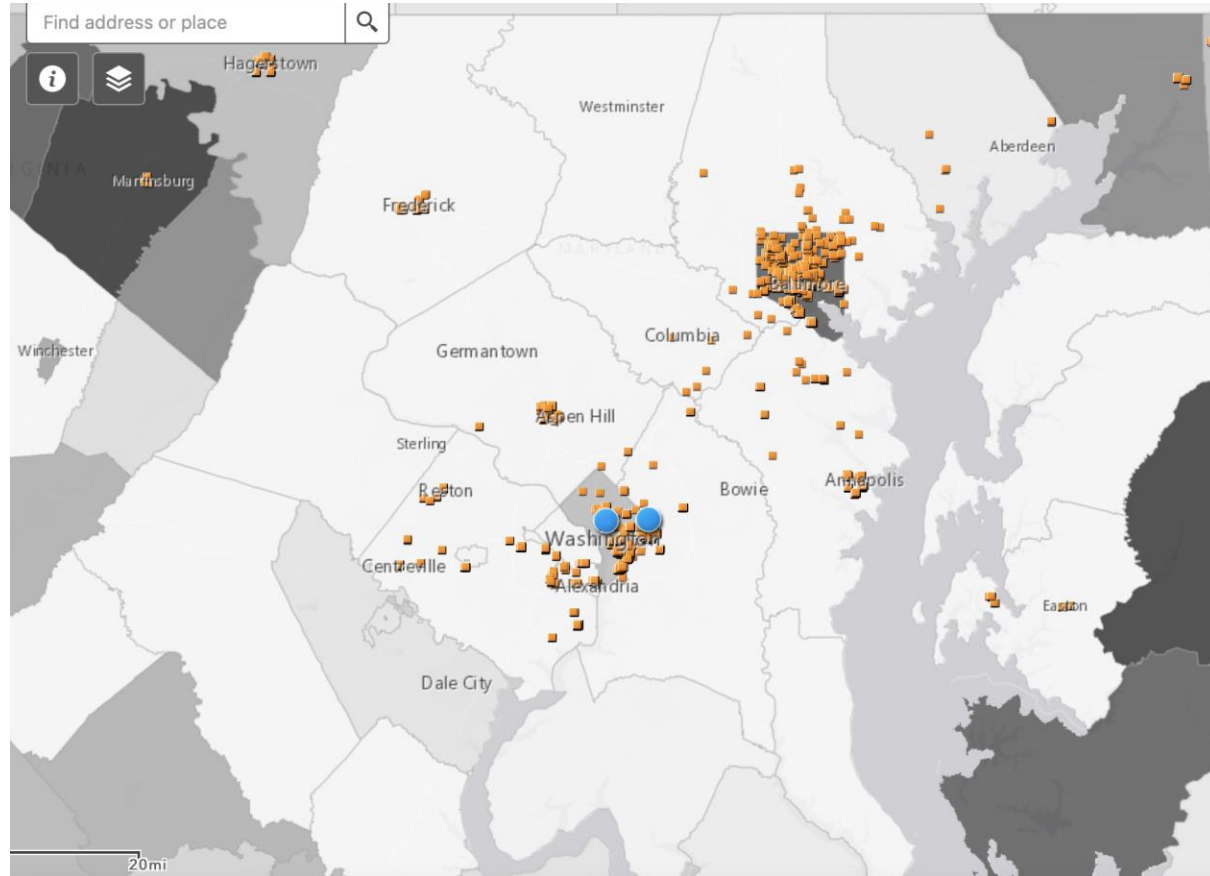


Take 5 minutes to search your area of operation on the map.

What patterns emerge?

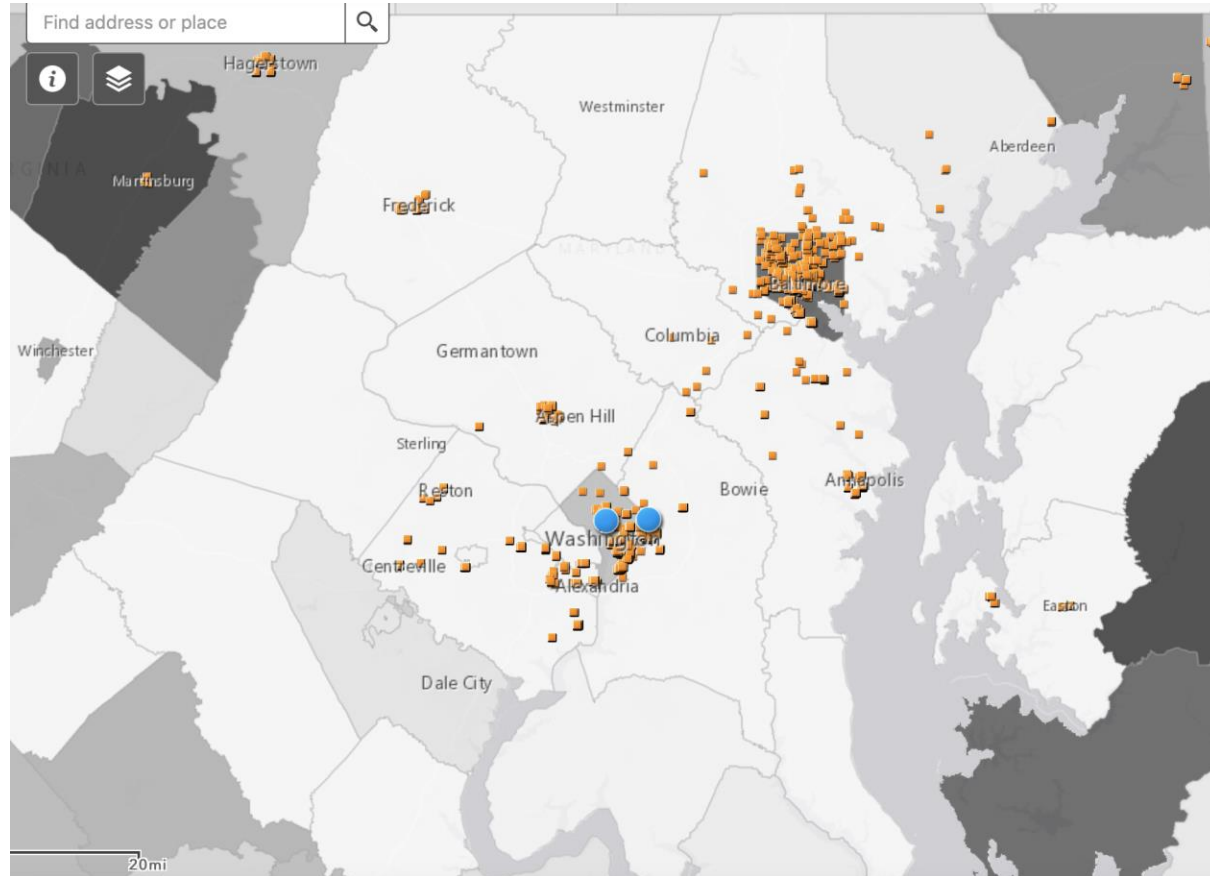
Where are levels of high income inequality in relation to PHPC's and public housing units in your service area?

Mapping adult smoking risk: PHPCs and residents of public housing



- The relationship between the location of PHPC's, public housing and indicators of income inequality is robust.
- This relationship can be visualized well in the Washington, DC – Baltimore metropolitan area.
- Does this relationship also manifest in your area of operation?

Mapping adult smoking risk: PHPCs and residents of public housing

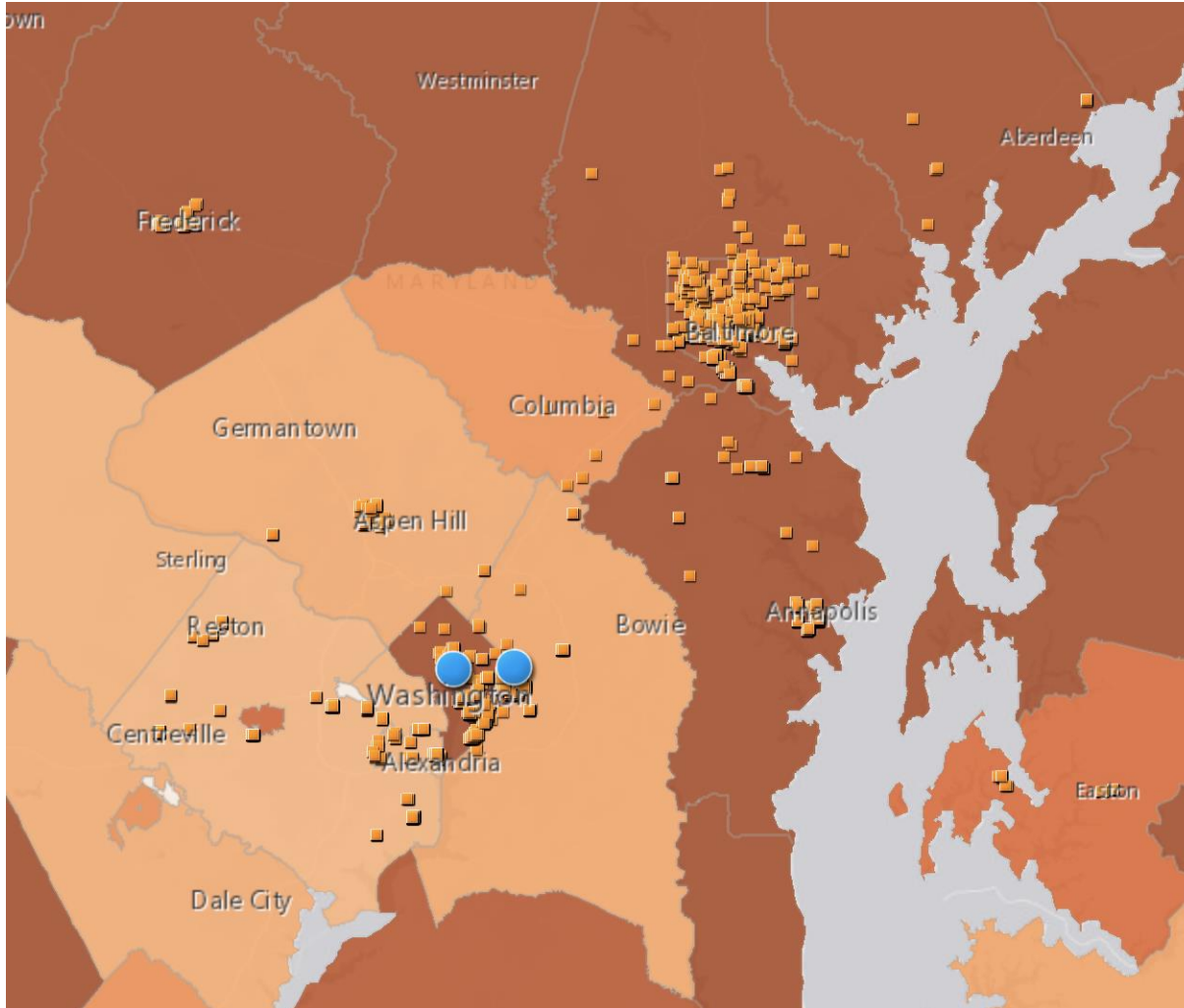


Take 5 minutes to search your area of operation on the map.

What patterns emerge?

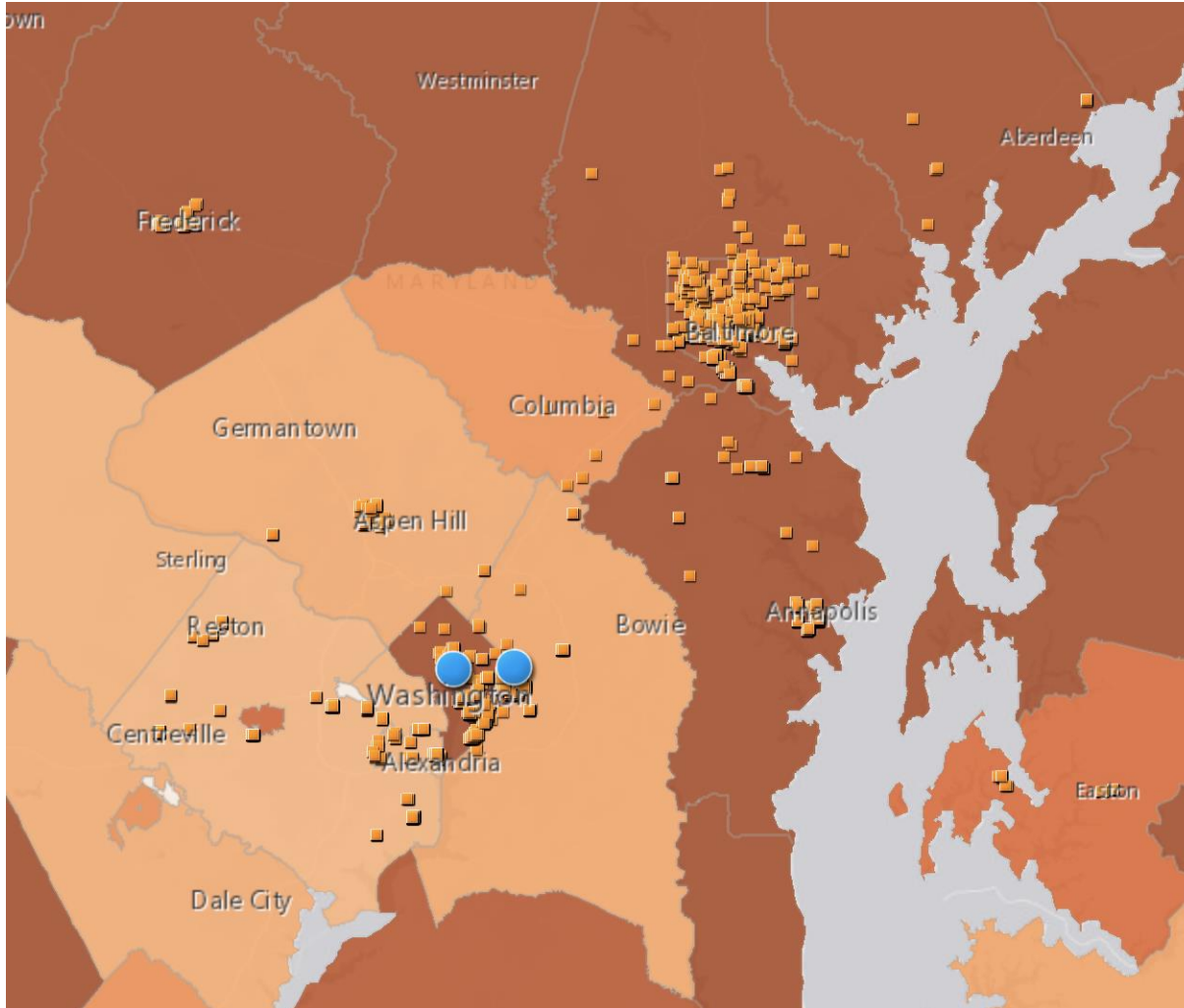
Where are levels of high smoking use in relation to PHPC's and public housing units in your service area?

Mapping drug overdose deaths: PHPCs and residents of public housing



- Here drug overdose deaths are shown with locations of PHPC's and public housing units.
- As can be seen, public housing units appear clustered in areas with higher rates of drug overdose.
- Does this relationship also manifest in your area of operation?

Mapping drug overdose deaths: PHPCs and residents of public housing



Take 5 minutes to search your area of operation on the map.

What patterns emerge?

Where are levels of high overdose deaths in relation to PHPC's and public housing units in your service area?

Section 2: Impact

Understanding the connection between social/behavioral health, the SDOH and geography

Educational Attainment	Counties with PHPC	U.S. Avg.
Completed High School*	77%	94%
High School Graduation Rate*	81%	95%

Source: Author tabulations from 2021 County Health Rankings and 2020 Health Resources and Services Administration Uniformed Data System
 *See “Key Terms” Section for definition.

Why This Matters:



Educational level is associated with better physical health, such as lower rates of diabetes and improved self-reported health.⁹

Income and Employment	Counties with PHPC	U.S. Avg.
Completed High School	4%	2.6%
Income Ratio*	5	3.7
Children in Poverty*	19%	10%

Source: Author tabulations from 2021 County Health Rankings and 2020 Health Resources and Services Administration Uniformed Data System
 *See "Key Terms" Section for definition.

Why This Matters:



Inequalities in income in a community can serve as a social stressor and result in a loss of social connectedness, as well as decreased trust, social support, and a sense of community for all residents.¹⁰

Mental Health	Counties with PHPC	U.S. Avg.
Frequent Mental Distress*	15%	12%
Average Number of Mentally Unhealthy Days*	5	3.8

Source: Author tabulations from 2021 County Health Rankings and 2020 Health Resources and Services Administration Uniformed Data System
 *See "Key Terms" Section for definition.

Why This Matters:



The number of unhealthy days can be a proxy for broader concerns. A study by Jia et al. found that counties with more unhealthy days were likely to have higher unemployment, poverty, percentage of adults who did not complete high school, higher mortality rates, and prevalence of disability than counties with fewer unhealthy days.¹⁴

Tobacco and Alcohol Use	Counties with PHPC	U.S. Avg.
Smokers*	18%	16%
Excessive Drinking*	17%	15%

Source: Author tabulations from 2021 County Health Rankings and 2020 Health Resources and Services Administration Uniformed Data System
*See "Key Terms" Section for definition.

Why This Matters:



Smoking causes cancer, heart disease, stroke, lung diseases, diabetes, and chronic obstructive pulmonary disease.¹⁵ Measuring the prevalence of tobacco use in the population can alert PHPC health centers to the need for cessation programs or the effectiveness of existing tobacco control programs.¹⁶ While excessive drinking is a risk factor for a number of adverse health outcomes, such as sexually transmitted infections, unintended pregnancy, suicide, interpersonal violence, and motor vehicle crashes.¹⁷

Substance-Related Mortality	Counties with PHPC	U.S. Avg.
Driving Deaths with Alcohol Involvement*	24%	11%
Drug Overdose Mortality Rate*	21%	11%

Source: Author tabulations from 2021 County Health Rankings and 2020 Health Resources and Services Administration Uniformed Data System
*See "Key Terms" Section for definition.

Why This Matters:



Motor vehicle crashes are one of the leading causes of death in the U.S. Providing effective alcohol-related programs could prevent many deaths in the community. Likewise, opioid related deaths are also preventable. Examining the drug overdose rates in the county can determine need for substance use counseling and treatment.

Section 3: Research and Best practices

Best practices in community-level interventions

The Link between Housing, Neighborhood, and Mental Health






by EARLE CHAMBERS, DAMARIS FUSTER,
SHAKIRA SUGLIA AND EMILY ROSENBAUM

What is it about moving to a lower-poverty neighborhood that improves health and well-being among low-income families? Ever since *Gautreaux v. the Chicago Housing Authority* in 1966, policymakers, residents, and others have believed that helping low-income people move out of high-poverty neighborhoods could dramatically improve their lives.¹ Most recently, for example, the Moving to Opportunity (MTO) program found that moving to a lower-poverty neighborhood led to better mental and physical health for low-income mothers. But what about moving leads to these and other improvements? Is it higher-quality housing? More cohesive neighborhoods? Fewer worries about crime? Or something else entirely?

KEY FINDINGS

- Poor housing conditions are associated with more depressive symptomology and hostility.
- Perceived overcrowding increases the risk of hostility.
- Housing quality and overcrowding are linked with poorer mental health regardless of whether a family lives in public housing or in subsidized private rentals.
- Neighborhood disarray is associated with greater hostility.
- Neighborhood social cohesion reduces the risk of depression and hostility.

Housing and neighborhood physical quality: Children's mental health and motivation

Kimberly A. Rollings^a  , Nancy M. Wells^b , Gary W. Evans^c ,
Amanda Bednarz^d, Yizhao Yang^d 

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<https://doi.org/10.1016/j.jenvp.2017.01.004> ↗

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Abstract

This longitudinal study examined relations between the physical quality of housing, neighborhood, and their interactive effect on the life course development of 341 U.S. rural children from ages 9–24 years. Standardized instruments assessed housing quality (structural, clutter/cleanliness, indoor climate, hazards, crowding/privacy) and neighborhood quality (street connectivity, density, land use mix; proximate building/sidewalk conditions; neighborhood stability; proximity to nature/amenities). Analyses focused on two critical components of child development: 1) psychological health and 2) helplessness. Growth curve analyses with multilevel modeling revealed that

The impact of interventions for youth experiencing homelessness on housing, mental health, substance use, and family cohesion: a systematic review

[Jean Zhuo Wang](#), [Sebastian Mott](#), [Olivia Magwood](#), [Christine Mathew](#), [Andrew Mclellan](#), [Victoire Kpade](#), [Priya Gaba](#), [Nicole Kozloff](#), [Kevin Pottie](#) ✉ & [Anne Andermann](#)

[BMC Public Health](#) **19**, Article number: 1528 (2019) | [Cite this article](#)

Circuit is open

Abstract

Background

Youth often experience unique pathways into homelessness, such as family conflict, child abuse and neglect. Most research has focused on adult homeless populations, yet youth have specific needs that require adapted interventions. This review aims to synthesize evidence on interventions for youth and assess their impacts on health, social, and equity outcomes.

Methods

We systematically searched Medline, Embase, PsycINFO, and other databases from inception

Emergency department utilisation among formerly homeless adults with mental disorders after one year of Housing First interventions: a randomised controlled trial

A. Russolillo, M. Patterson, L. McCandless, A. Moniruzzaman & J. Somers 

Pages 79-97 | Published online: 28 Feb 2014

 Download citation

 <https://doi.org/10.1080/14616718.2014.884881>



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Abstract

Homeless individuals represent a disadvantaged and marginalised group who experience increased rates of physical illness as well as mental and substance use disorders. Compared to stably housed individuals, homeless adults with mental disorders use hospital emergency departments and other acute health care services at a higher frequency. Housing First integrates housing and support services in a client-centred model and has been shown to reduce acute health care among

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