



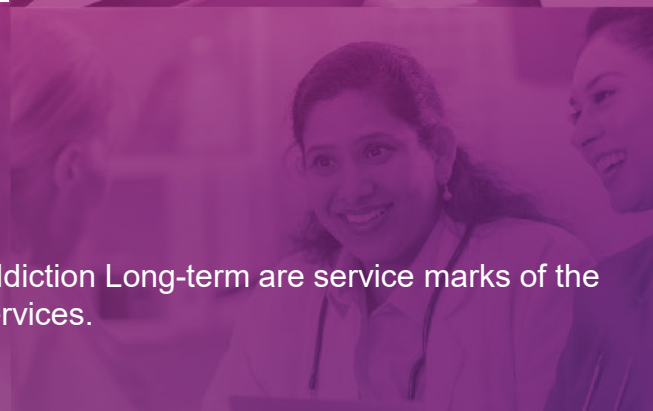
**NIH
HEAL
INITIATIVE**

Virginia's Office of Behavioral Health Wellness Approach to Social Determinants of Health



September 9, 2020

Gail Taylor, Director



NIH National Institutes of Health
HEAL Initiative

NIH HEAL Initiative and Helping to End Addiction Long-term are service marks of the U.S. Department of Health and Human Services.

Context of Virginia Disparities Geographically

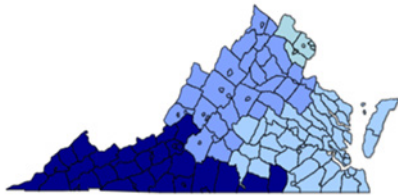
VIRGINIA



Factors Influencing Policy and Practice Change - VCU Behavioral Health Index Study

RATE PER 10,000 PEOPLE

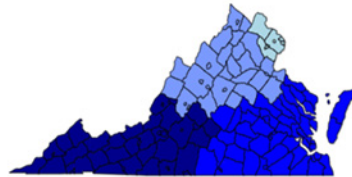
Note that variations in color may exaggerate differences between areas in the map when, in reality, very little variability exists across the state. Hover over the map to see the specific regional/CSB data.



4.93 # of People/10,000 48.92

DEPRESSIVE DISORDER (2017)

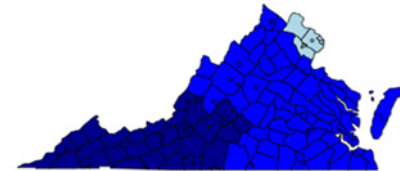
Note that variations in color may exaggerate differences between areas in the map when, in reality, very little variability exists across the state.



15.2 Percent Respondents

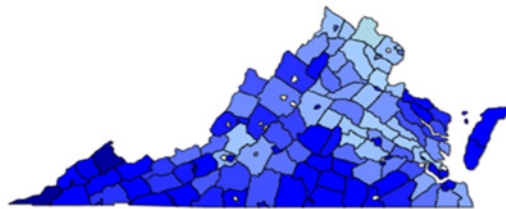
CURRENT SMOKER (2017)

Note that variations in color may exaggerate differences between areas in the map when, in reality, very little variability exists across the state.

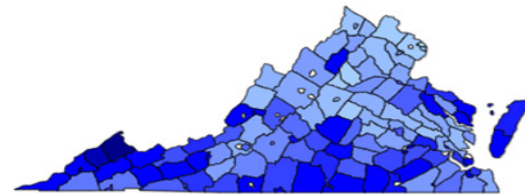


24.7

Note that variations in color may exaggerate differences between areas in the map when, in reality, very little variability exists across the state. Hover over the map to see the specific regional/locality data.



3.00% Poverty 28.56%



2.49% Unemployment 7.61%

Factors Influencing Policy and Practice Change - VCU Behavioral Health Index Study

The Behavioral Health Index

A Study by the Center on Society and Health
Virginia Commonwealth University



COMMISSIONED BY THE VIRGINIA DEPARTMENT OF BEHAVIORAL HEALTH AND DEVELOPMENTAL SERVICES

Health and wellbeing are influenced by social factors and our environment—our education, income, living conditions, and life history—and this applies not only for physical health but also emotional and psychological wellbeing. While we know that the risk of mental illness is shaped by family history, genetics, and unidentified factors that scientists have yet to discover, we also know that the risk of chronic stress, anxiety, depression, and substance abuse are affected by exposure to trauma, unemployment, poverty, unstable housing, and other social determinants of health (Figure 1).

Such local factors contribute to geographic variations in behavioral health needs across Virginia—and in the demands placed on local providers and service systems. The prevalence rate—the percentage of a population with mental illness or substance abuse disorders—is often higher in socioeconomically distressed areas. Unfortunately, reliable data on the true prevalence of mental health conditions are unavailable in Virginia and much of the nation. A tool for estimating prevalence would be a useful alternative, not only for clinicians but also for policymakers responsible for funding the 40 Community Services Boards (CSBs) that provide behavioral health services across the Commonwealth. For some years, CSB funding has been dictated by historical allocations, but other states have derived more sophisticated methods that consider other important factors.



In 2003, the Virginia Department of Behavioral Health and Developmental Services funded the Center on Society and Health at Virginia Commonwealth University to produce an index that could estimate the prevalence of mental health needs in the local populations served by the 40 CSB districts. The researchers developed the Behavioral Health Index (BHI), which they derived by applying

advanced statistical methods (multiple linear regression equations) that use local data to predict the number of mentally unhealthy days reported by the population in the past month. Five local measures were used to capture the socioeconomic conditions of local communities, as well as health care access and quality. The BHI was scored on a scale of 0 to 100; high scores reflect populations with fewer mentally unhealthy days, low scores indicate places with more mentally unhealthy days. Further details on the methodology are available in the Technical Report.

The BHI results are shown here (Figure 2) and reported in detail in the Technical Report. In general, CSB districts serving suburban areas of Hampton Roads, metropolitan Richmond, and Northern Virginia had higher BHI values, whereas those serving rural southwestern districts or urban centers (e.g., Richmond City, Norfolk City) had lower BHI values.

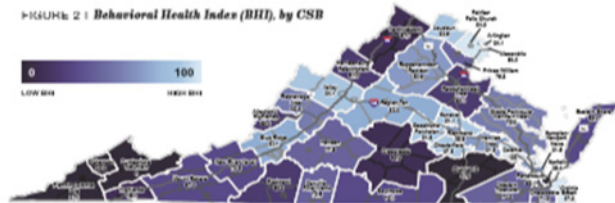
820 East 10th Street, Suite 2200, Richmond, Virginia 23298-0210
(804) 688-2488 | www.vcuhsr.vcu.edu

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Although the BHI can serve as a rough approximation of how mental health needs vary across the Commonwealth, the limitations should be considered. First, although the regression model performed well (R² of 0.43), its estimate of the number of mentally unhealthy days is no substitute for complete prevalence data. Second, no single measure of mental health can predict the prevalence of specific conditions, such as serious mental illness, drug addiction, developmental disorders, or other needs addressed by CSBs. These conditions are influenced by factors beyond the five variables used in this study, and often change over time. Third, prevalence is only one of many factors that policymakers should consider in allocating resources to behavioral health providers and agencies. They must consider other factors, such as existing local infrastructure, other revenue sources, local access to mental health professionals, and income levels in the community. In the short term, areas with low BHI scores deserve special attention in allocating resources, but more sophisticated models will ultimately be needed to fully assess levels of need.

1. U.S. ZIP codes that produce a given estimate would be poor indicators of BHI in Richmond and VA. BHI is based on the Virginia Department of Behavioral Health and Developmental Services (VDBHS) data on prevalence of mental health needs, which include all ages of residents, not just those with mental illness. Behavioral health data from ZIPs may also give overall health needs.

FIGURE 2 | Behavioral Health Index (BHI), by CSB



Virginia State Epidemiological Outcomes Workgroup (SEOW)

Health Disparities: A Summary from Virginia's Substance Use Prevention Efforts

This document was produced in 2020 by OMNI Institute in collaboration with the Virginia State Epidemiological Outcomes Workgroup (SEOW). OMNI and the SEOW compiled this document as a summary of the larger report. It can be used as a starting point to share a common definition of health disparities and see an example of a disparity in Virginia. For more extensive resources and further learning on this topic, please see the full report and the reference section included there. For more information on the SEOW, please visit <https://seow.virginia.gov/>.

What are Health Disparities?

Health Disparity Defined

A health disparity is a systematic and usually avoidable difference in health between groups of people who have relatively different positions in society.

When there is a health disparity in a community, health equity cannot exist at the same time. Health equity is when everyone in a community can reach their highest level of health regardless of factors like race, income, and zip code.

Health disparities negatively affect the health of people linked to social, economic, and environmental disadvantages.

Factors that Influence Disparities

The cause of health disparities is often unequal social and economic resources, known as social determinants of health. These are factors that influence the length and quality of life.

Common Social Determinants of Health

<p>Health & Healthcare</p> <ul style="list-style-type: none"> Access to health care Health literacy 	<p>Neighborhood & Built Environment</p> <ul style="list-style-type: none"> Access to healthy foods Crime & violence Environmental conditions
<p>Social & Community Context</p> <ul style="list-style-type: none"> Isolation Discrimination 	<p>Economic Stability</p> <ul style="list-style-type: none"> Employment Housing instability Poverty
<p>Education</p> <ul style="list-style-type: none"> Early childhood education & development Language & literacy 	

Example Impact of a Social Determinant of Health

Education Scenario: A low-income neighborhood in a city that relies on property taxes to fund schools. With lower property values in this neighborhood, there is less funding to support teacher salaries, school materials and infrastructure, and extra-curricular activities. Students attending these schools do not have access to the same education as students attending school in a wealthier part of the city.

Impact: Lower high school graduation and college acceptance rates, which impacts earning potential and ability to afford health care.

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Health Disparity Example: Current Tobacco Use in Virginia

Below is an example of a disparity in tobacco use among Virginians, which helps demonstrate how health disparities emerge in a population. This example focuses on one potential cause of the disparity. Additional factors contributing to this disparity (such as race, gender, and age) may exist and should be further explored to inform state efforts and ensure all Virginians are served equitably.

About the Disparity

As household income decreases, rates of adult tobacco use increase.

In 2017, current tobacco use among all adults in Virginia was approximately 19%. When broken out by annual household income, disparities in tobacco use rates emerged, with rates ranging from 14% to 31% depending on income level.

Those with an annual household income less than \$50,000 had higher rates of tobacco use than the overall Virginia rate, while those with higher incomes had a lower rate of use than the state average.



Why this Disparity is Occurring

Greater availability of tobacco is linked to higher rates of smoking.

In areas where tobacco is more available, tobacco companies often target marketing efforts to give the impression that tobacco is available and accessible, encouraging further use.

This map of Virginia shows a higher density of tobacco retailers (larger circles) in areas with lower household income levels (brighter yellow shading).



How Virginia is Addressing this Disparity

Virginia has partnered with the organization Counter Tools since 2015 to identify the tobacco retailers that exist and advance Virginia's tobacco control strategies.

CS&A have created an inventory of tobacco retailers by visiting and recording every retailer across the state.

Using the inventory of retailers, CS&A have identified areas considered "tobacco swarms," where policy change would be useful at reducing the number of retailers and access to tobacco products.

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Identifying and Presenting Health Disparities

Health disparities data allows communities to determine what is causing health differences among groups and to create plans to work toward eliminating them.

Elements of Health Disparity Data

There are several pieces of data to consider when identifying health disparities in a population. Below are some of the elements and examples of each.

<p>Health Status</p> <ul style="list-style-type: none"> Life Expectancy Infant Mortality Chronic Disease 	<p>Social Grouping</p> <ul style="list-style-type: none"> Racial or ethnic groups Income groups Educational level groups 	<p>How to Compare Groups</p> <ul style="list-style-type: none"> Ratio/differences of health rates Comparing the best and worst-off
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Types of Data to Explore

Through data, communities can target problematic issues causing inequities and work towards positive change. Communities can see if initiatives have reduced disparities by tracking data over time. Refer to the full document for a list of available resources for each type of data.

- Health behaviors and outcome data**

Can be broken down by demographic characteristics, such as race, ethnicity, or income.
- Community factors and social determinants of health.**

Look at data from different sectors to identify factors and other social determinants of health contributing to health disparities.
- Community voices from affected populations**

An effective way to frame data in the broader community context is by including community voices to help interpret and explain data.

Tips for Framing Health Disparity Data Responsibly

Framing health disparity data appropriately is important to avoid perpetuating negative stereotypes or overlooking the social determinants of health that have contributed significantly to the disparity. These tips serve as a starting point to consider when sharing health disparity data.

1. Include data on the context around the disparity.
2. Incorporate community voices from affected populations
3. Know your audiences and make data understandable to them.
4. Be aware of your own thoughts and biases when interpreting data.

Health disparity data cannot be interpreted in a vacuum without also examining the community context, culture, and voices. Without all those pieces, data are simply numbers instead of genuinely representing individuals and the disparities they face.

For more info on health disparities, visit seow.virginia.gov for the extended version of this document

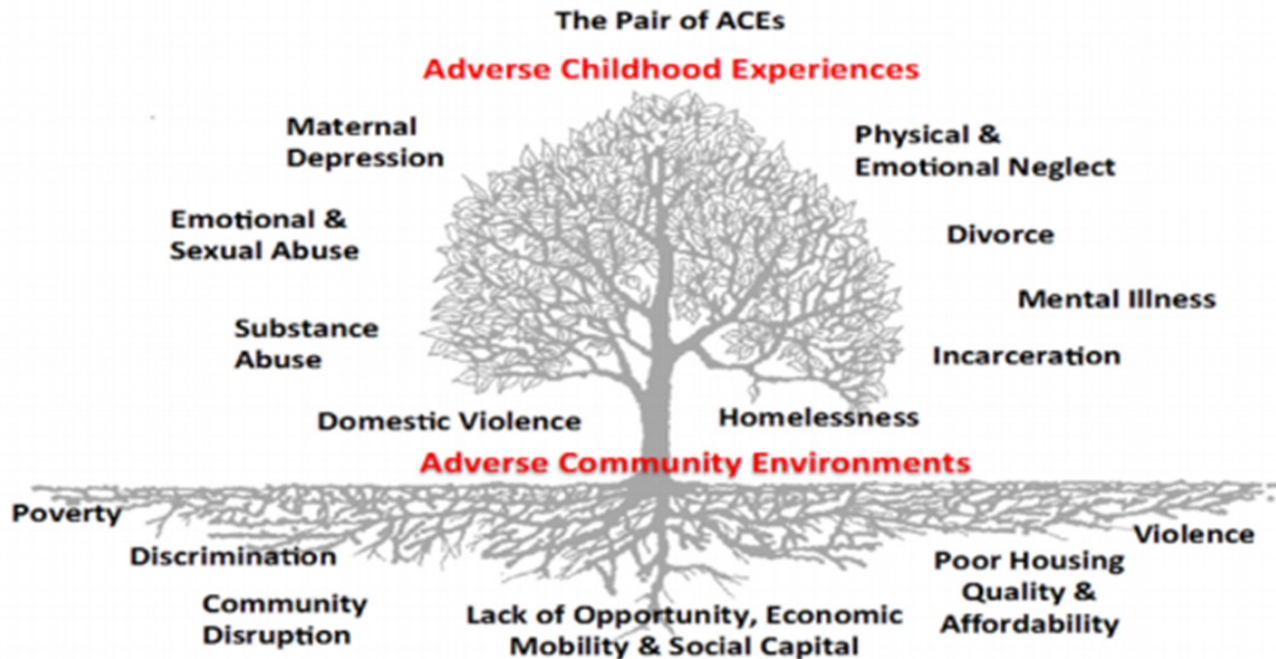
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Intervention & Practice

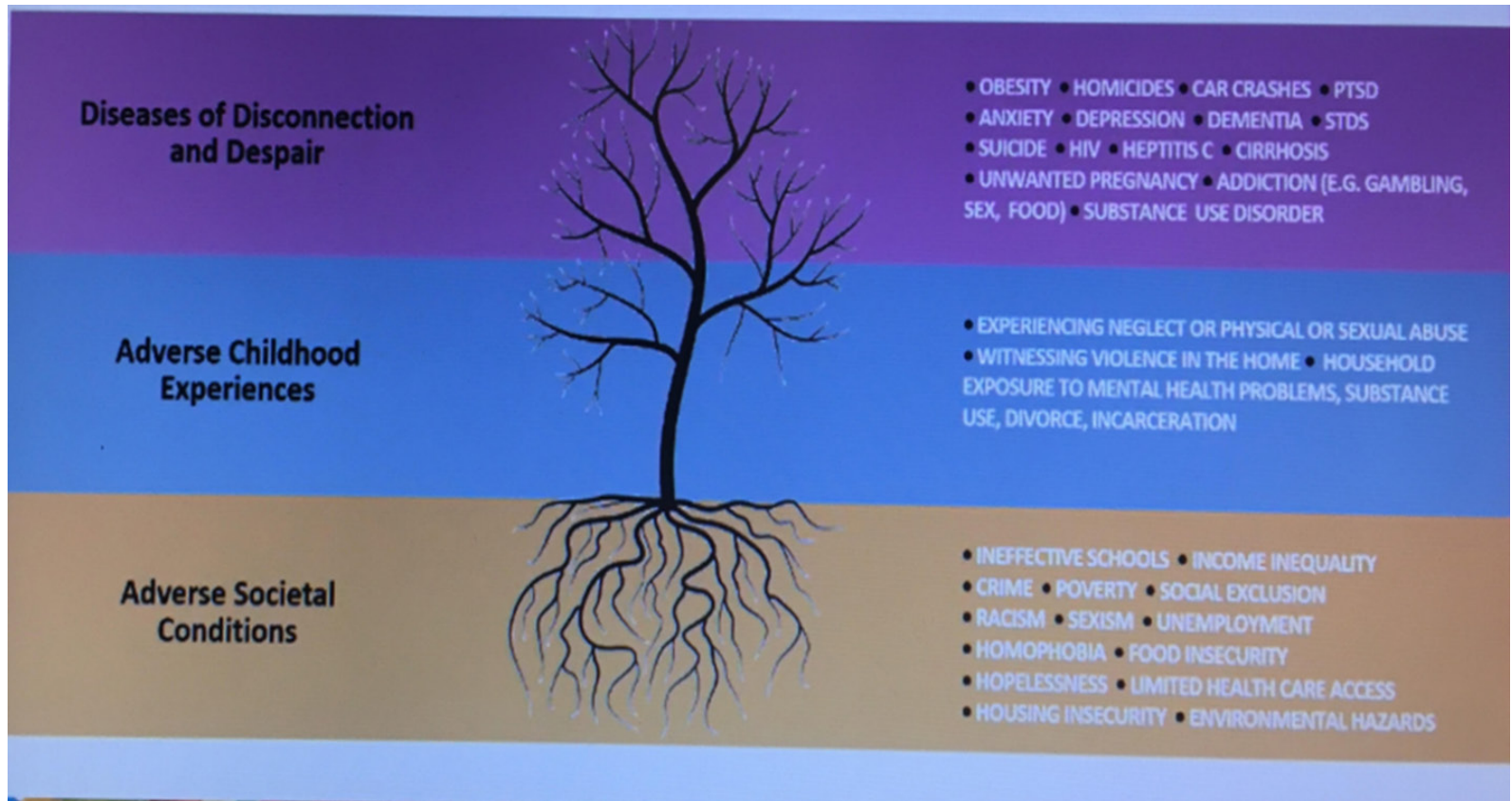
Theoretical Framework and Strategy

Pair of Aces- Adverse Childhood Experiences & Social Determinants of Health-



Ellis, W., Dietz, W. (2017) A New Framework for Addressing Adverse Childhood and Community Experiences: The Building Community Resilience (BCR) Model. *Academic Pediatrics*. 17 (2017) pp. S86-S93. DOI information: 10.1016/j.acap.2016.12.011

Linkages to Outcomes



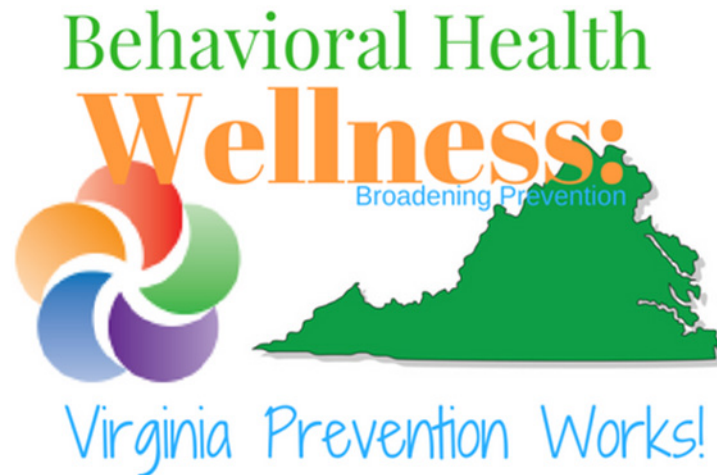
Conclusions

Data and Evidence Based Practices

Gap: Data Linkages and EBPs for Change

- Easily accessible data for and that links adverse societal conditions to adverse childhood experiences to diseases of despair
- Data at the community/neighborhood level to identify the clusters of poverty within affluent counties
- “People” magazine style research and evaluation that offers evidence based environmental strategies to include policy and implementation practices to address SDOH

Virginia DBHDS



Gail Taylor, Director
Office of Behavioral Health Wellness
gail.taylor@dbhds.Virginia.gov