

Housing is Health

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SAW Housing Summit, October 11, 2023

Neighbor #1

Moved in Spring 2019

Died Summer 2022

Age: 48

- Lived with serious mental illness, substance use disorder, congestive heart failure, and kidney failure
- Prior involvement with criminal justice system
- Only received income in last 3-4 months of life; had been employed until kidney disease advanced; was denied SSI multiple times
- Able to pass in home with hospice care
- Very limited family supports
- Member of LGBTQ community
- No family supports to make funeral arrangements





Our Mission:

To strengthen the health and well-being of
all people in our communities.



Our primary focus is advancing health in our community. This has us asking better questions.

- Who is not doing well in our community?
- Where are the disparities?
- Can we understand the local drivers underlying health disparities?
- Who are our partners in resolving health disparities?



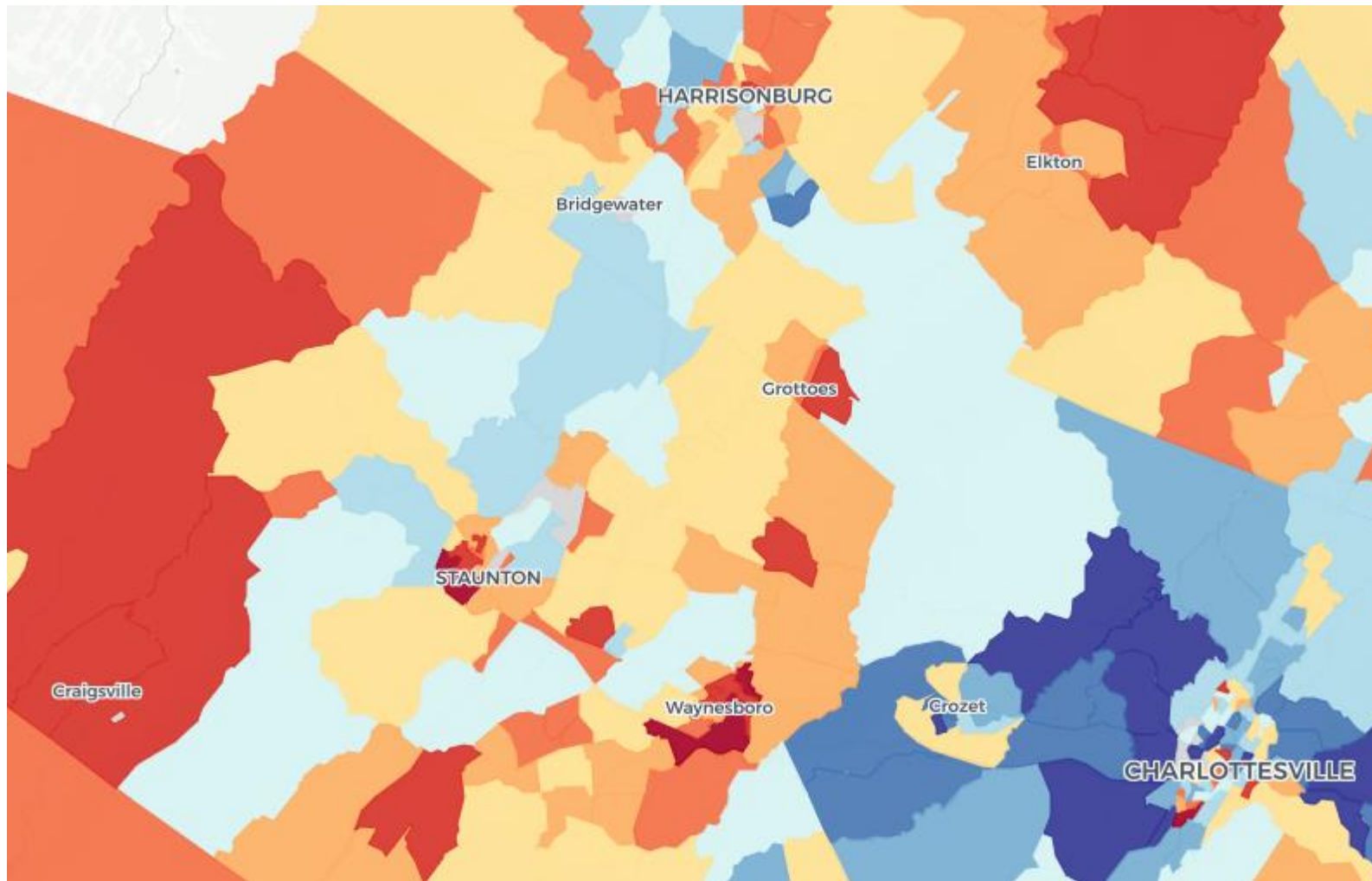
*Food Insecurity & Diabetes
Waynesboro, 2022*

How do we understand the drivers of health status?



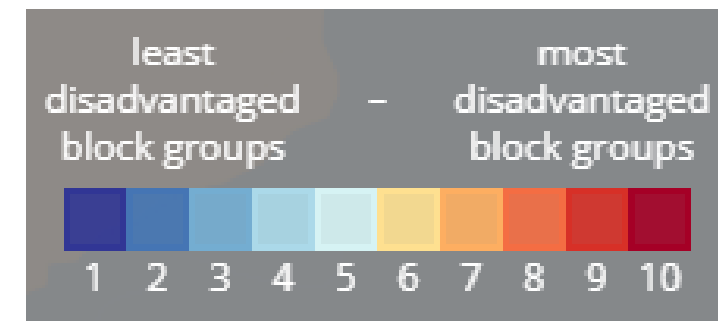
The Area Deprivation Index– A Metric for Social Risk

Neighborhood Atlas, University of Wisconsin



Combines 17 metrics on housing quality, employment, poverty and education.

Measured at the level of census block groups → roughly 1500 persons. Close to neighborhood level



Our region's map of census tract ADI scores, 4/27/23

Source: <https://www.neighborhoodatlas.medicine.wisc.edu/mapping>

Do Local ADI Scores Predict Local Clinical Outcomes?

Lack of Primary Care in the Past Two years

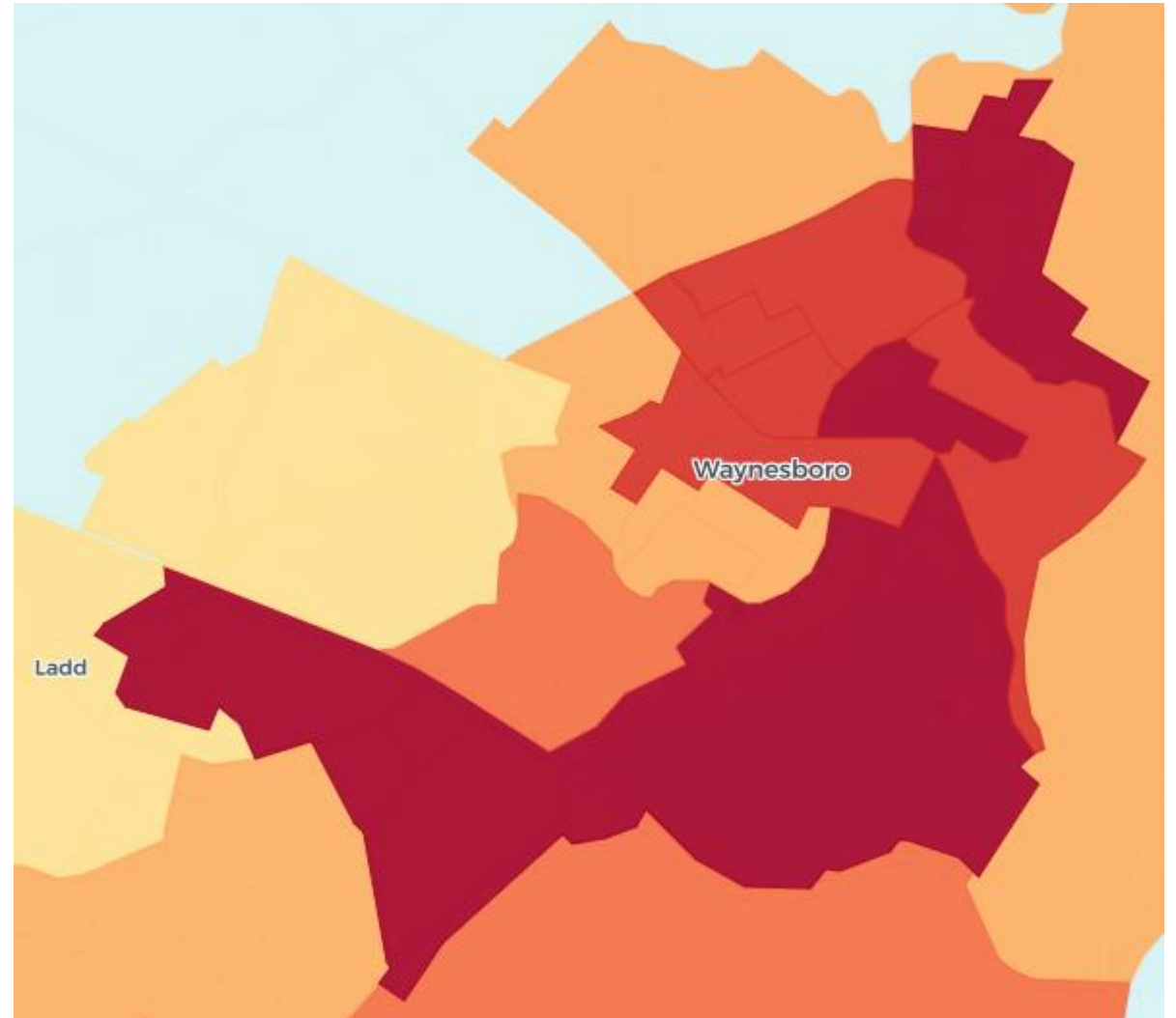
$r = 0.914$ $p = 0.004$

ED visits for mental health

$r = 0.758$ $p = 0.011$

In-Hospital Mortality

$r = 0.831$ $p = < 0.05$



Augusta Health's Mobile Primary Care Clinic

Fall 2023

Gypsy Hill House

Valley Mission Shelter

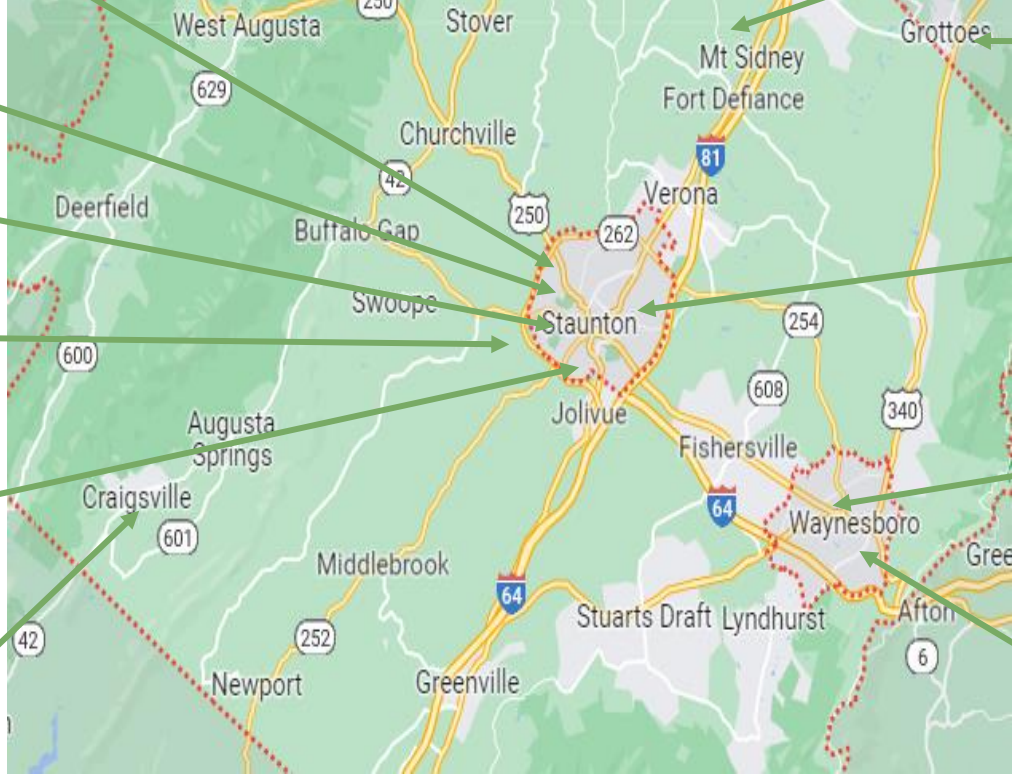
Allen Chapel

Elizabeth Miller Gardens

Plaza Apartments

Craigsville Community Center

Magnolia Rose Human Trafficking Shelter



Verona Community Center

Grottoes Firehouse

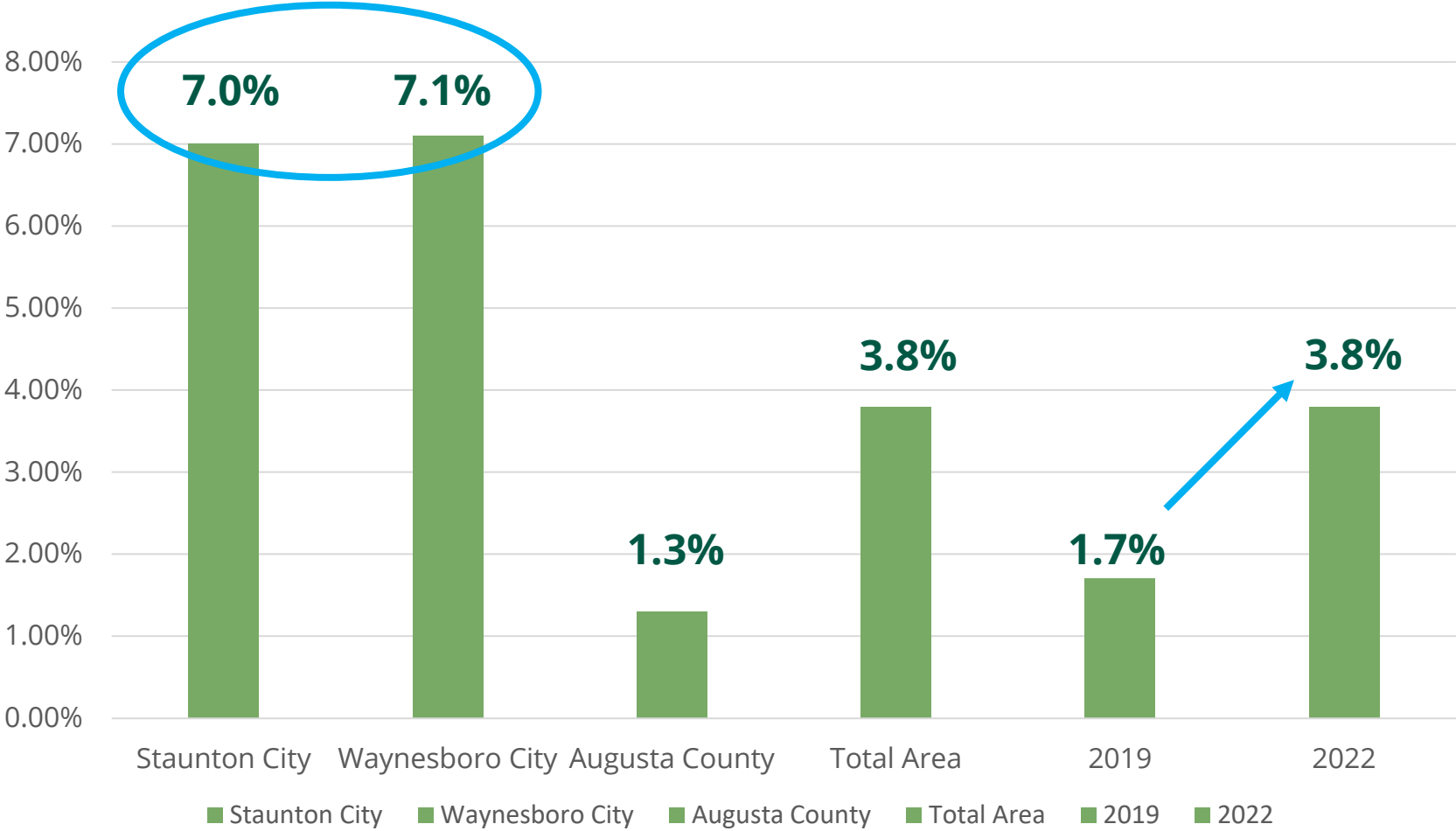
Shenandoah LGBTQ Center

Embrace Community Center

Disciple's Kitchen

All locations have community partners supporting our work.

Increase in Percent Homeless at Some Point in the Past 2 Years



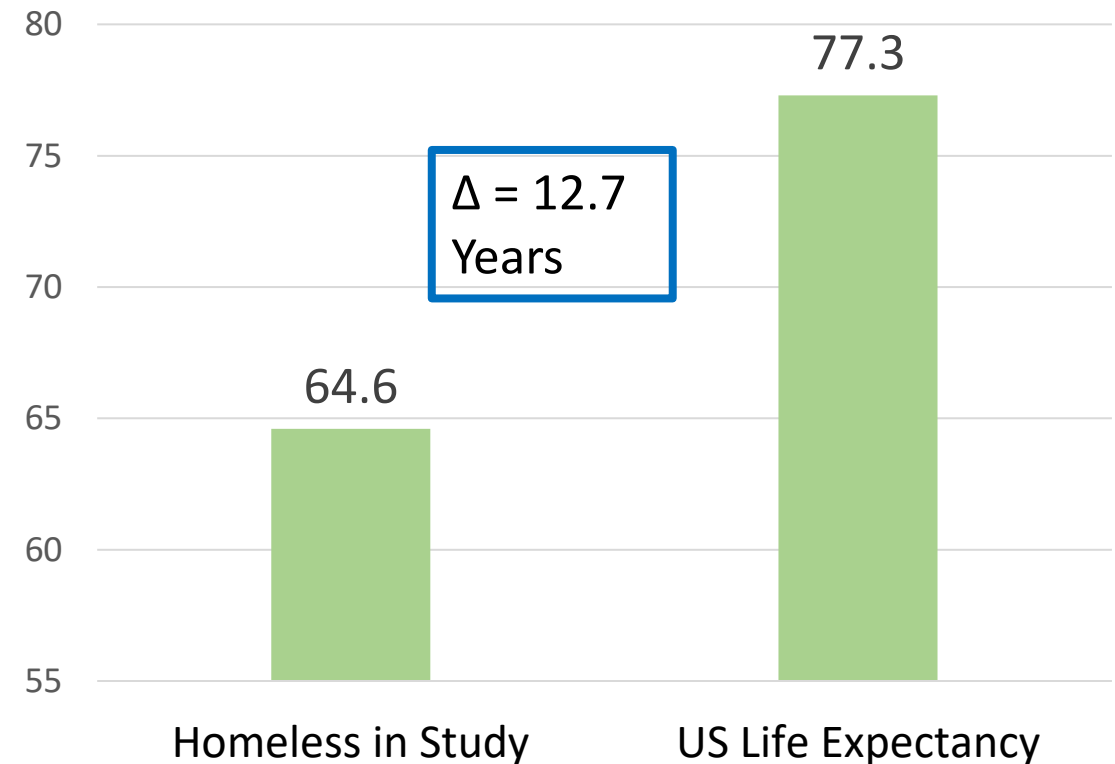
Source: 2022 PRC Community Health Survey, PRC, Inc.
Note: Asked of all respondents

The Lifespan Impacts of Homelessness

- 452 homeless individuals over age 50 were followed for 8 years
- 117 individuals died during the follow-up window
- Mortality rate was 3.5X the general population, and higher for women in this study (5.2X)
- The main causes of death were heart disease, cancer and drug overdose
- First episode of homelessness at age 50 or older was an independent predictor of early mortality.

Life Expectancy Comparison

Hope Study: Homeless vs US Population



Source: Factors Associated with Mortality Among Homeless Older Adults in California, The HOPE Home Study, JAMA Internal Medicine, 2022; 182 (10): 1052 – 1060.



Questions: I hear from healthcare team members, “Why are we asking about homelessness?”

And we know from our data that we often get responses lower than community rates for food or housing insecurity.... How do we ask in a way that builds trust?



Neighbor #2

Moved in end of 2021

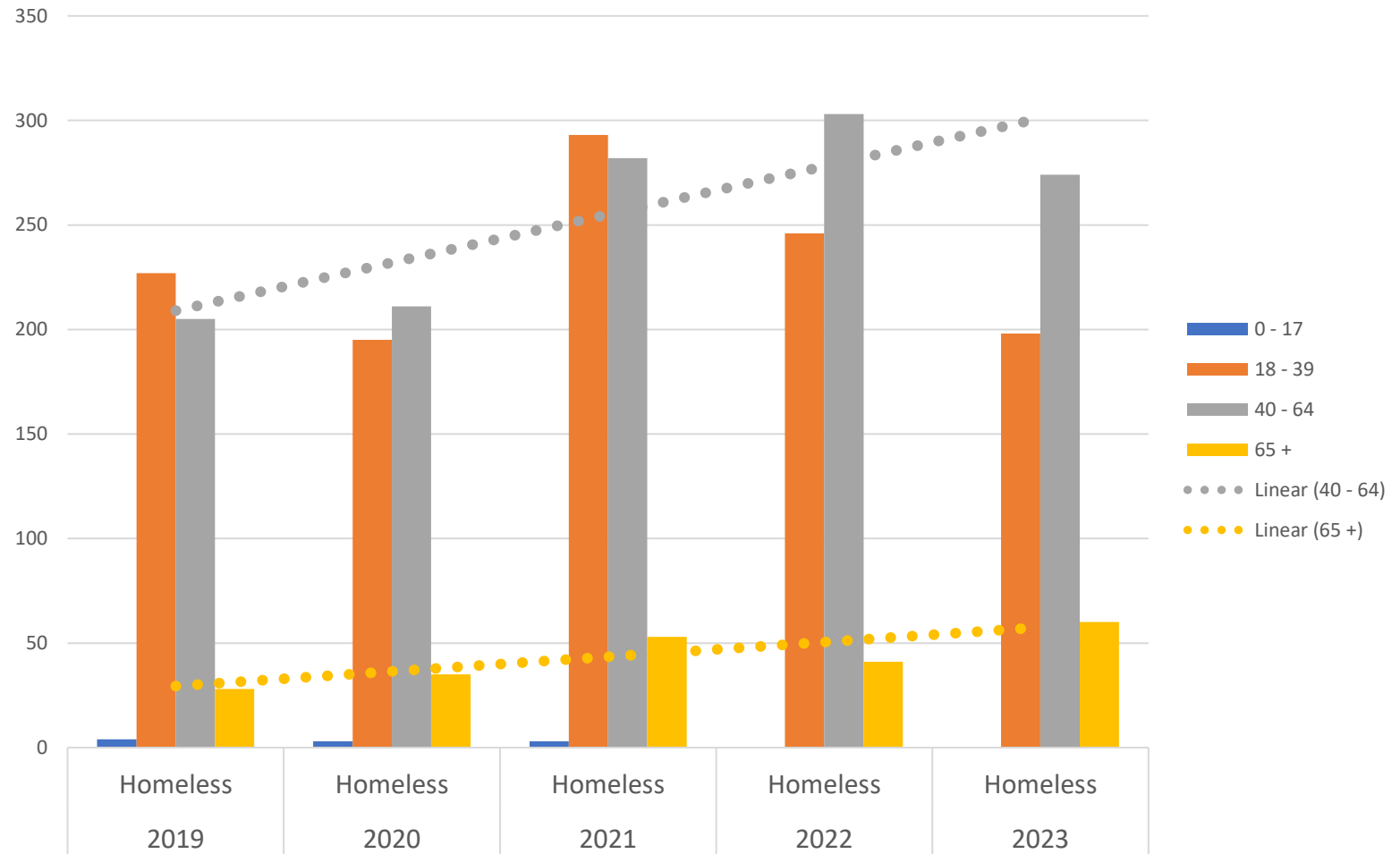
Died early Spring 2022

Age: 66

- Lived with developmental disability, severe substance use disorder, liver and kidney failure.
- Literally homeless with mixed periods of severe housing instability for at least 12 years prior to move in.
- Prior involvement with criminal justice system
- No family supports.
- Received minimal SSI/SSDI income.

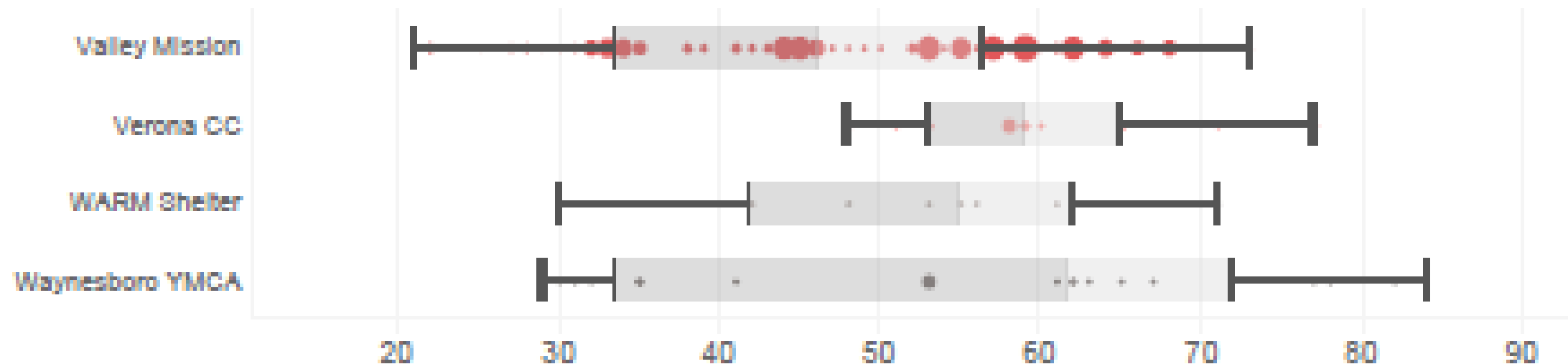
The Rising Age of Individuals Experiencing Homelessness

Homeless Persons Receiving Care at Augusta Health
by Age Groups



Source: Athena and Meditech data sets, Augusta Health, 2019 – 23. 2023 is YTD

Age Distribution at AH Mobile Clinic Visits



Augusta Health Mobile Clinic Encounters from Sept 2022 to Sept 2023
Middle shaded range is the middle 50% of patients
Where the shading turns from dark to lighter– this is the median age
Each bar outside of the shaded middle area is the top and bottom 25%

*Allostatic Load...
How chronic
stress impacts
physiology*



*Trade-off
Decisions...
Rent, nutrition,
medicines,
utilities*

Homelessness as a Predictor of Cardiovascular Mortality

- 2 -3 X Increase in cardiovascular mortality in persons who report being homeless.
- Many convergent factors:
 - Decrease diagnosis and control of high blood pressure
 - Decrease control of diabetes
 - Increase incidence of tobacco use
 - Increase rates of HIV and HIV-associated CV disease
 - Higher rates of illegal drug use disorder, associated with CV mortality
 - Higher rates of allostatic load due to chronic stress, causing more CV disease
 - Higher rates of exposure to physical and sexual violence
 - Roughly ¼ have chronic serious mental illness (schizophrenia, bipolar disorder or severe depression)
- As many as ½ of homeless persons do not have access to regular health care
- Care plan to reduce these disparities has to be tailored to the above barriers and coinciding health problems

Source: *Cardiovascular Disease and Homelessness*, J Am Coll Cardiology, 71(22); June 2018: 2585 – 2597.



Question: We just shared data around homelessness and chronic disease management. How should we be thinking the challenges of chronic diseases while homeless?





Neighbor #3

Moved in Early 2019

Died Fall 2021

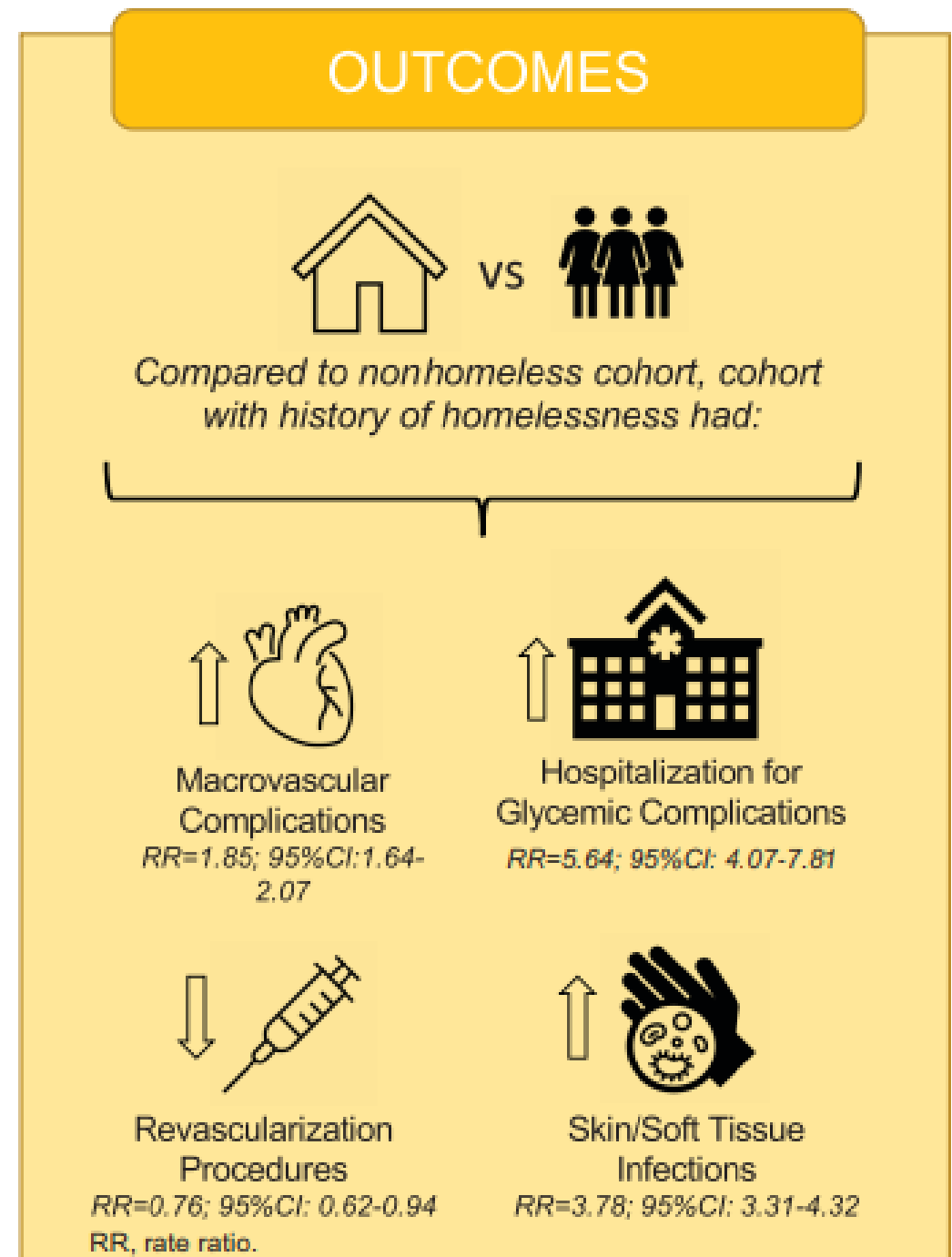
Age: 49

- Lived with serious mental illness, substance use disorder, and diabetes
- Long term involvement with criminal justice system
- Very limited SSI income
 - Was evicted and rehoused
 - Limited social relationships

Homeless & Diabetes

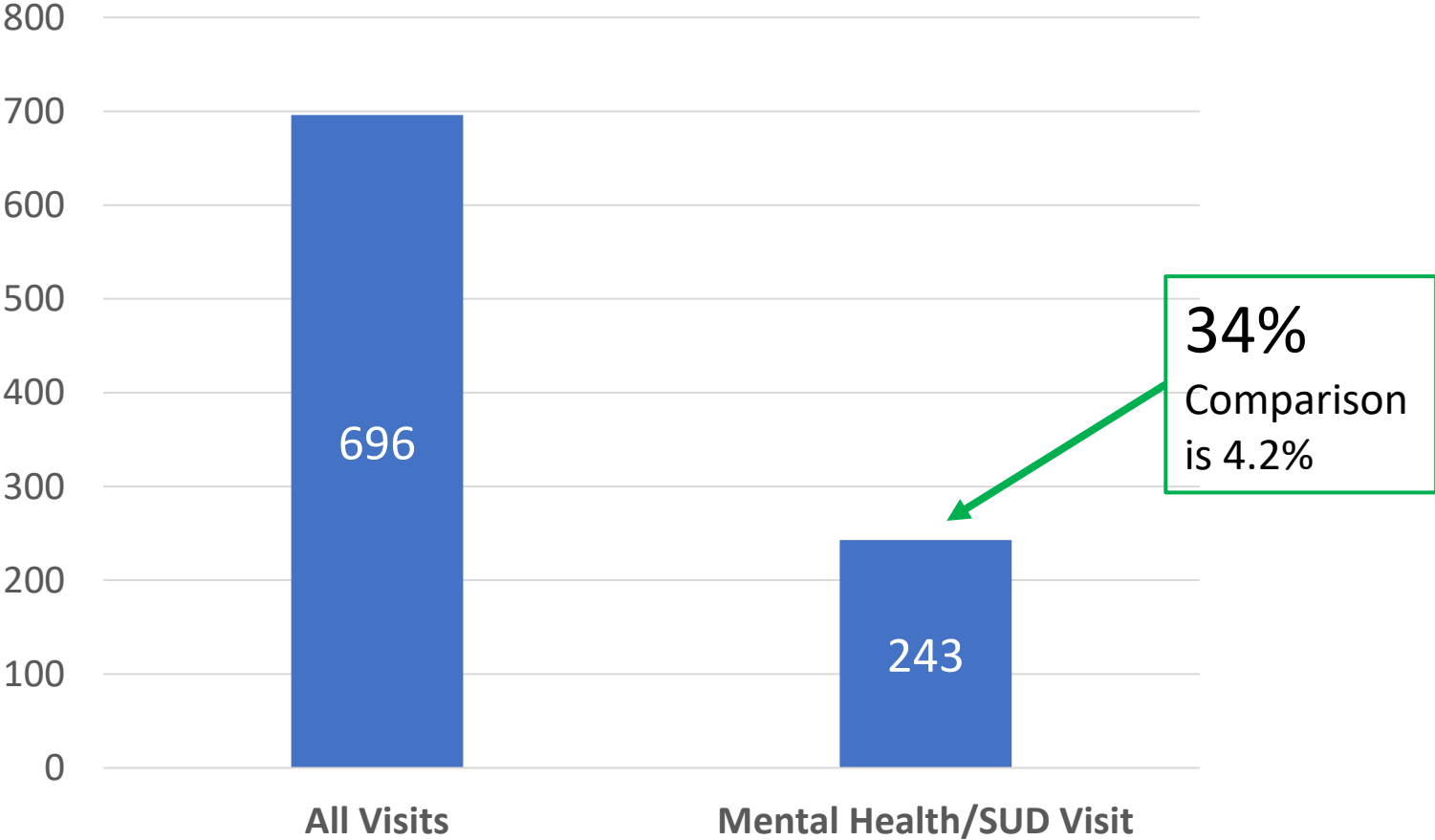
- Macrovascular complications = MI, Stroke, Limb ischemia or heart failure
- Hospitalizations for glycemc complications includes DKA and severe hyperglycemia
- Rate of extremity amputations was 2.3 X higher in those experiencing homelessness
- Revascularizations Procedures = stenting & bypass surgeries

Source: The Association of Homelessness With Rates of Diabetes Complications: A Population-Based Cohort Study, Diabetes Care 2023; 46(8): 1469 - 1476



Mental Health Disparities experienced by Homeless Persons

of ED Visits at Augusta Health
By Persons Experiencing Homelessness, 2022 & 2023



Source: Athena and Meditech data sets, Augusta Health, 2019 – 23. 2023 is YTD

Hospital Course for Those Experiencing Homelessness

Augusta Health, 2022 & 2023

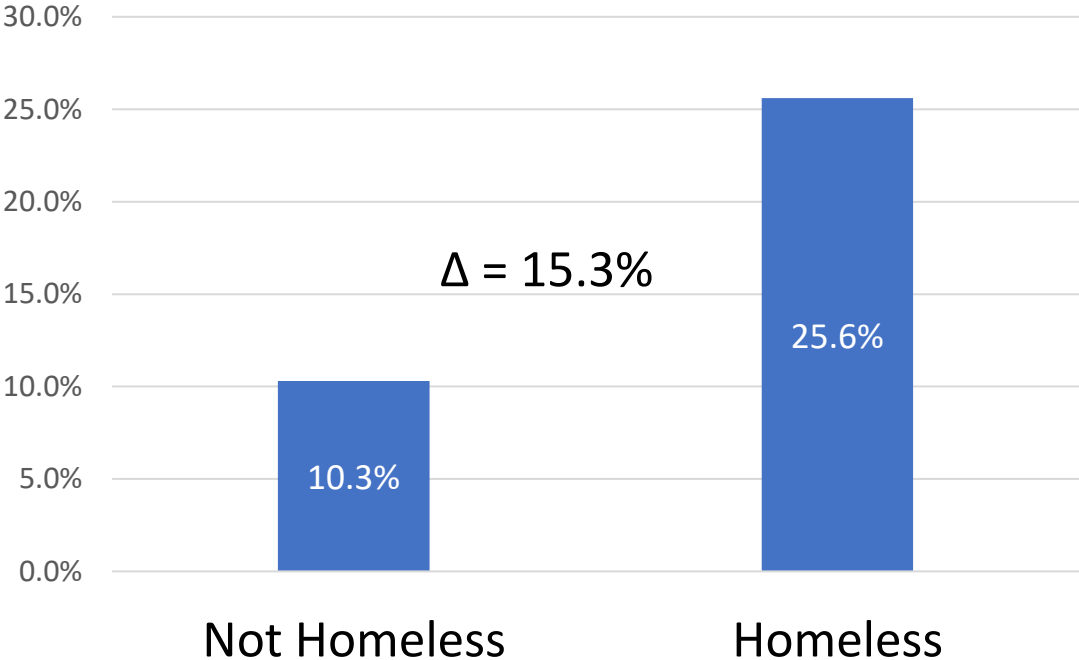
Avg Hospital Length of Stay, in days

2022 & 2023



30-Day Hospital Readmission Rates

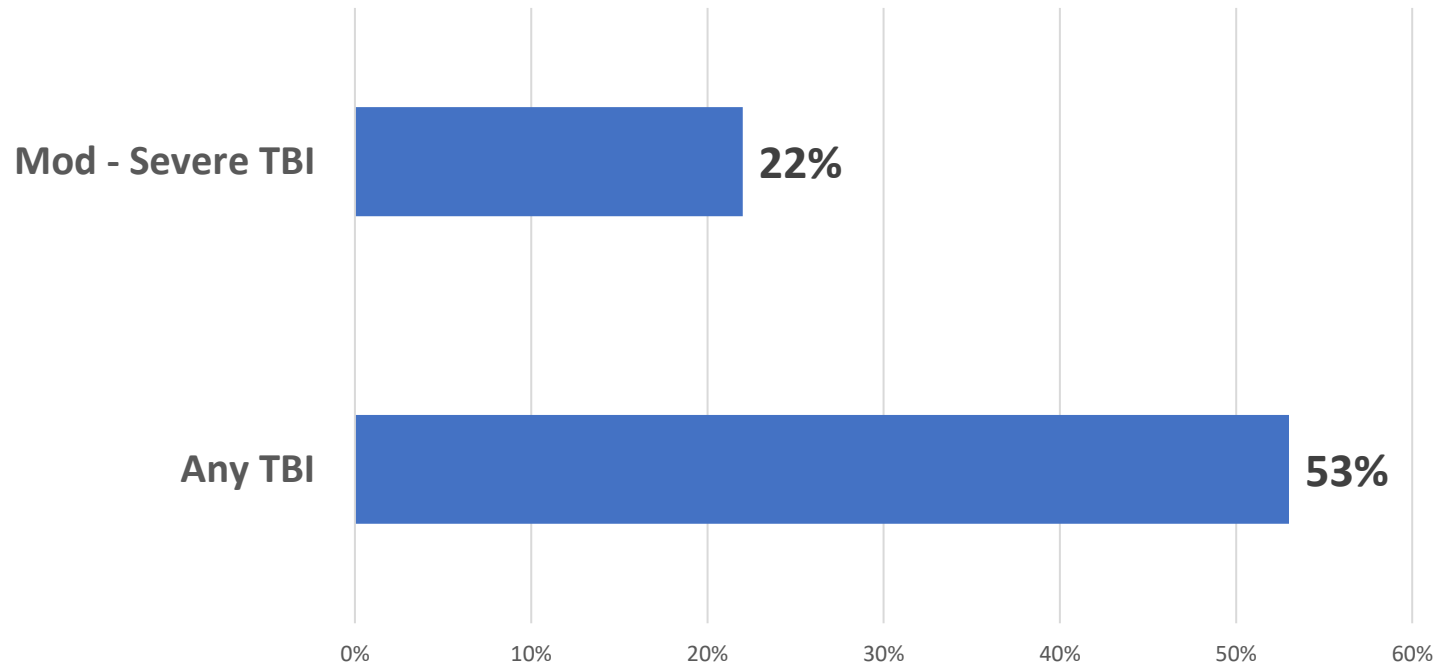
2022 & 2023



Source: Athena and Meditech data sets, Augusta Health, 2019 – 23. 2023 is YTD, not annualized.

Intersection of Traumatic Brain Injury & Homelessness

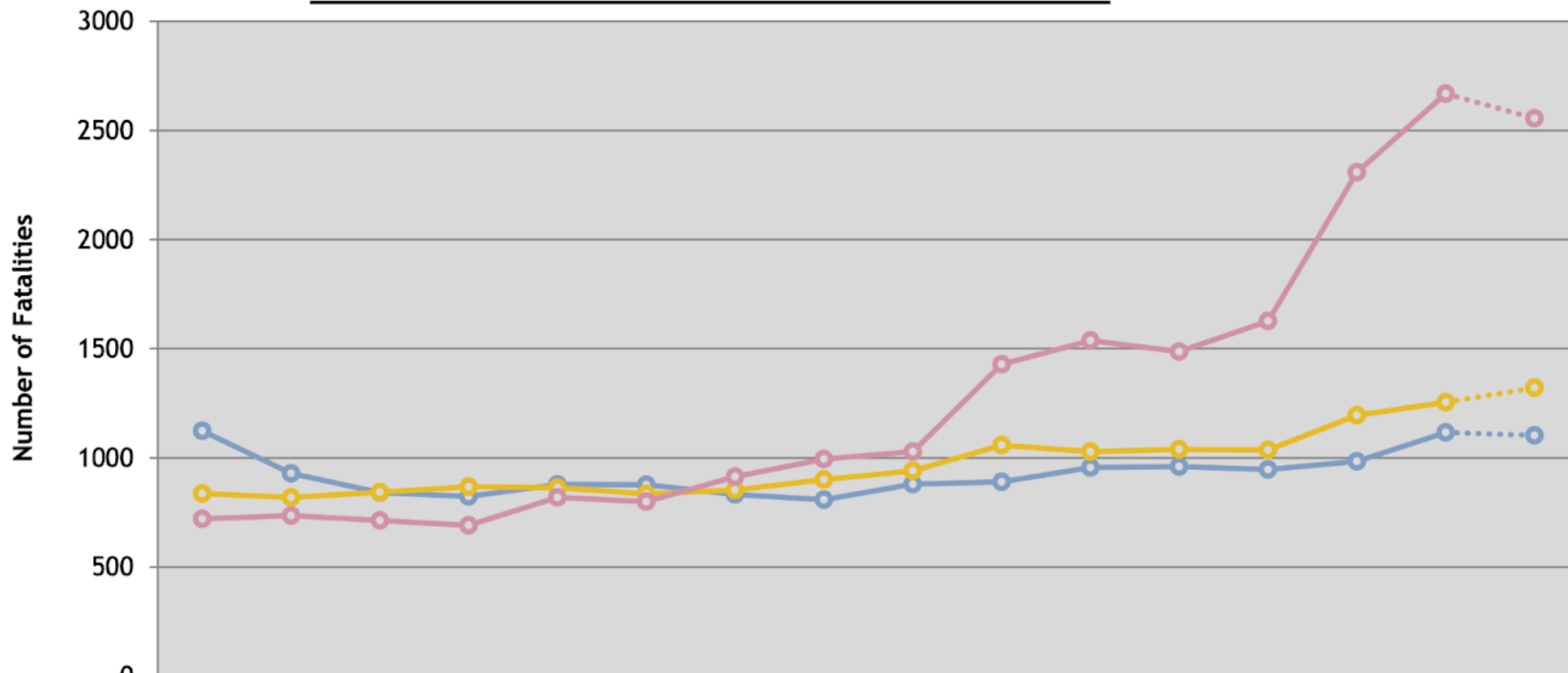
Lifetime Prevalence of Traumatic Brain Injury In Homeless or Marginally Housed Individuals



Source: Lancet Public Health, Jan 2020; 5(1): e19 – e32.

Total Number of Motor Vehicle, Gun, and Drug Related Fatalities by Year of Death, 2007-2022*

Data for 2022 is a Predicted Total for the Entire Year

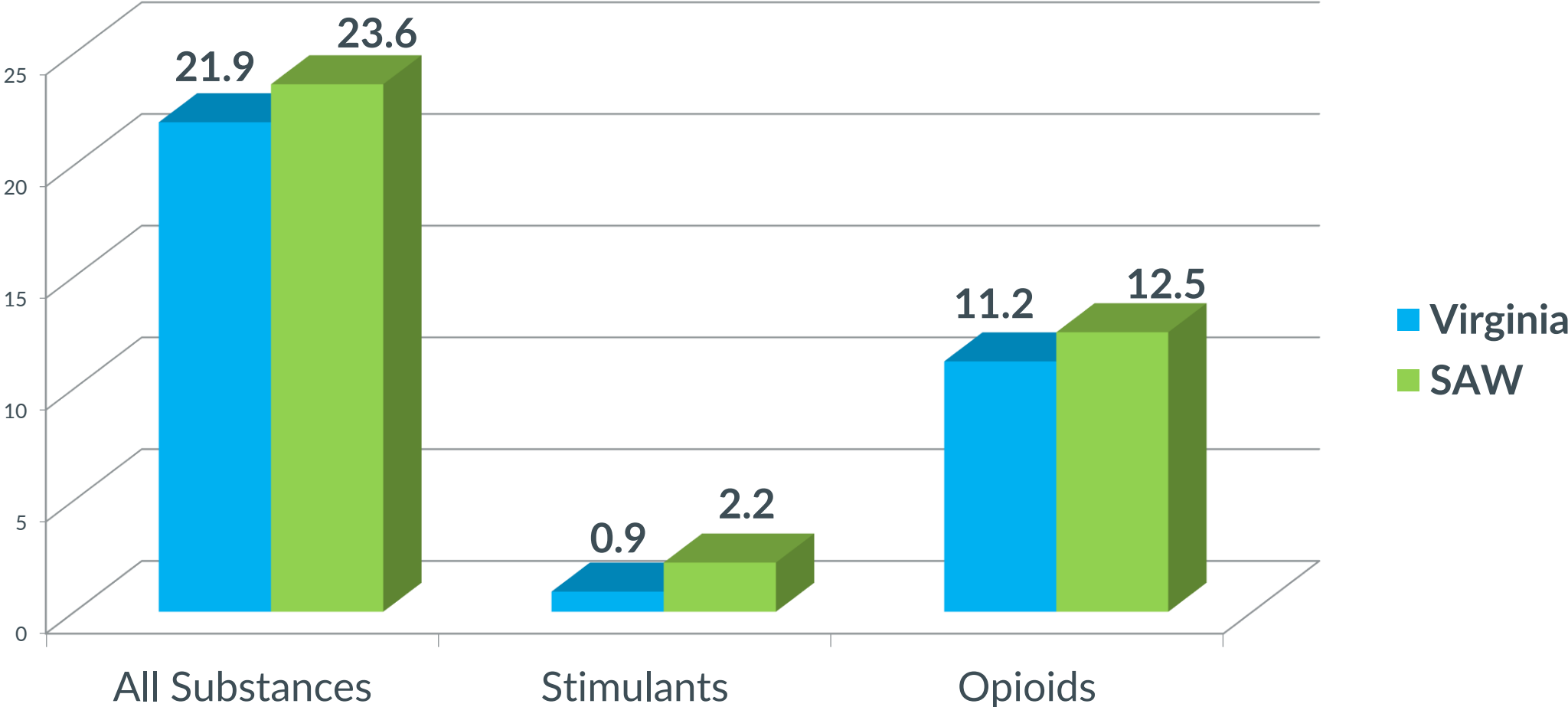


	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*
Motor Vehicle Related	1124	928	841	823	878	877	832	808	879	890	955	960	947	984	1116	1103
Gun Related	836	818	843	868	863	835	852	901	940	1058	1028	1038	1036	1195	1255	1322
Fatal Drug Overdose	721	735	713	690	819	799	914	994	1028	1428	1537	1486	1627	2309	2669	2557

¹ Top 3 methods of death (motor vehicles, guns, and drugs) include all manners of death (accident, homicide, suicide, and undetermined)

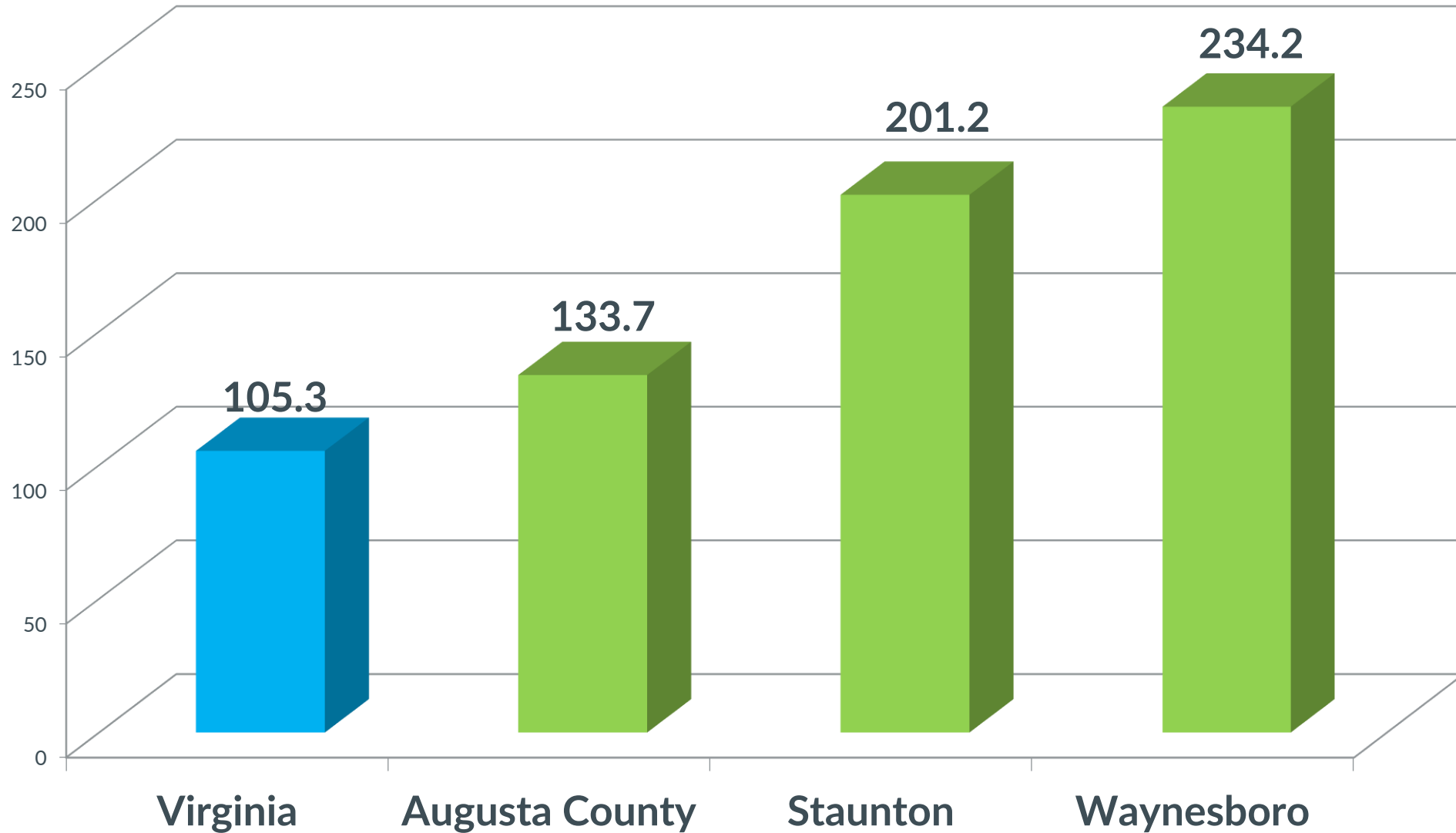
Overdose ED Visit Rates, SAW & Virginia

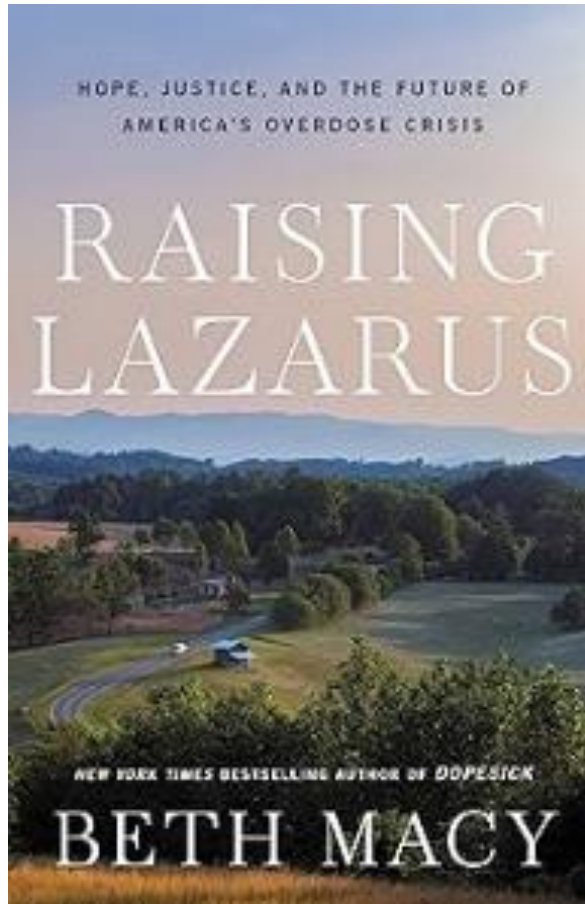
VDH, 2022 data, overdose visits/month/100K



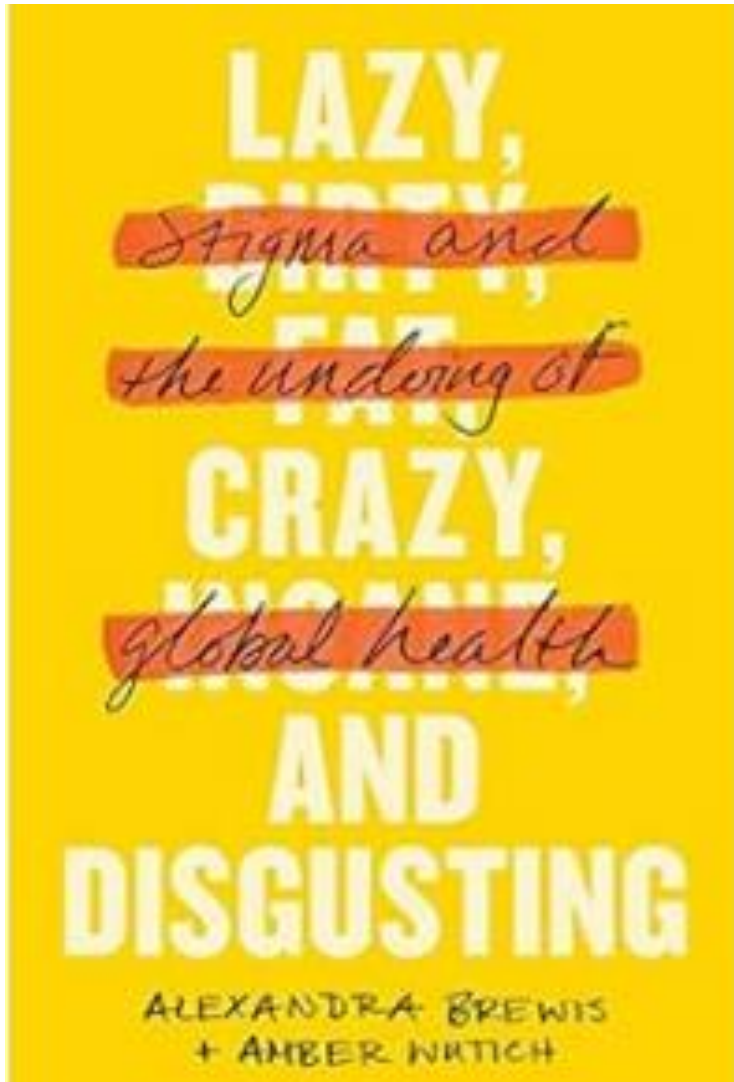
Local & Virginia Hepatitis C Rates

VDH, 2020 data, cases/100K





You have a treatable
chronic health condition...
we can help.



Question: What are the common biases we carry around homelessness?

How does this extend to the biases we have about substance use disorders?

Neighbor #4

Moved in mid 2023

Still housed!

Age: 57

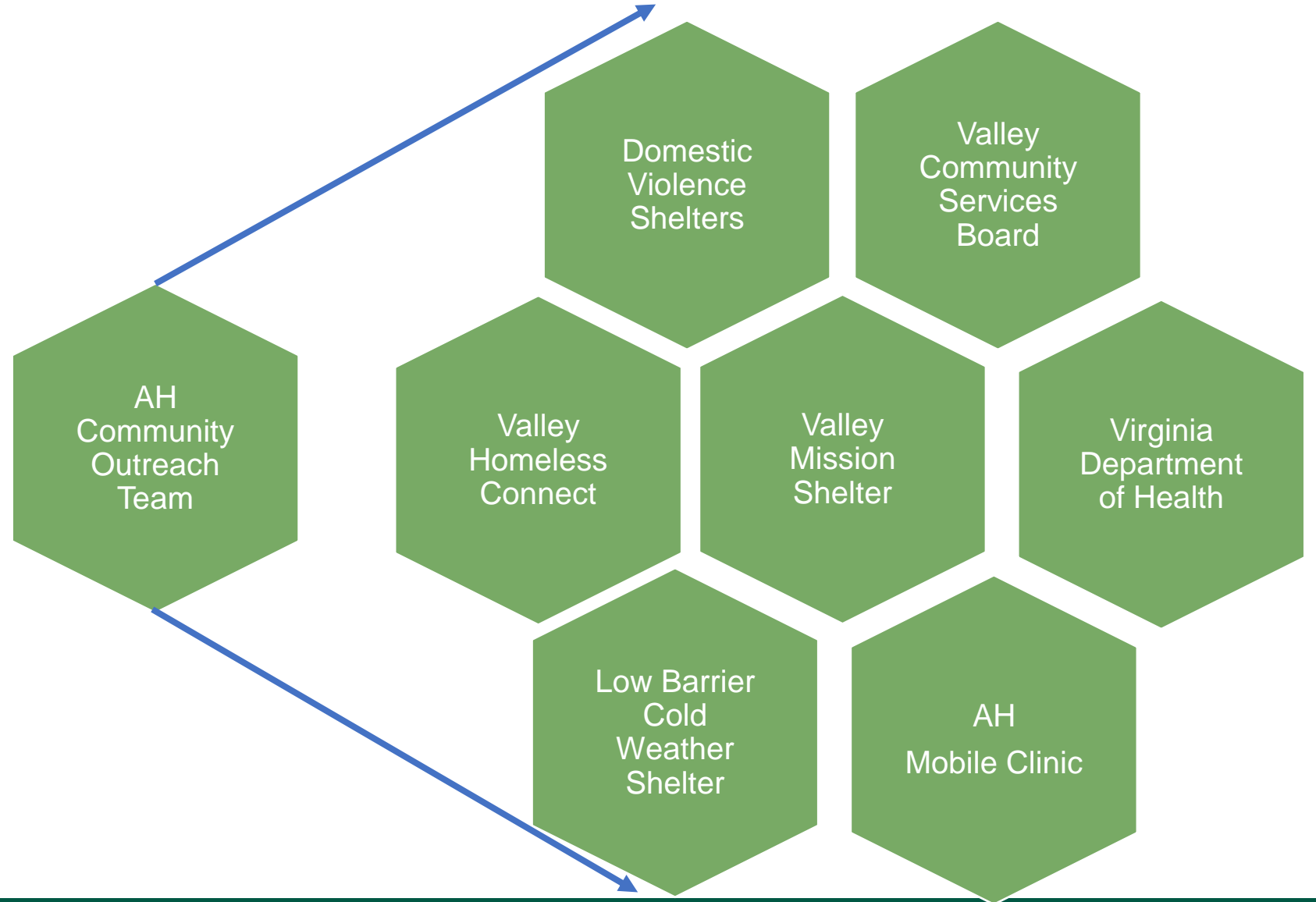
- Experienced homelessness for at least 2 years prior to move-in, that we know about.
- Incredible interagency teamwork between street outreach, AH mobile clinic, AH community outreach, AH case management, VDH CHW, rapid rehousing.
- Does not have income (in process)
- Has needed surgical procedure for several years but was unable to receive without a place to recover.
- In prepping for the procedure, additional health concerns have been uncovered that require treatment.





Homeless Healthcare Connection

We extend our reach and our help...by partnering with community organizations.





Can you speak to the common perception that homelessness is a problem too large & too complicated to solve?

Questions from Summit Participants

Thank you