

Needs Assessment Tool for Drug Overdose and Related Outcomes

Virginia Department of Health

Updated: 9/11/2023

What is the new tool?

- The Virginia Department of Health (VDH) developed the **Needs Assessment Tool** for Drug Overdose and Related Outcomes
 - Originally called the Right Help, Right Now Prioritization Model
- To help identify which Virginia communities may need extra support from **targeted drug overdose-related prevention and intervention strategies**
 - Drug overdose and substance use affect all communities in Virginia

How can the tool be used?

- Localities and communities are encouraged to use tool to better understand vulnerability to higher rates of overdose and other negative health outcomes
 - Does not assess a locality's capacity, readiness, or ability to implement prevention and intervention strategies
- VDH uses this tool along with other information to carry out public health programs to reduce the harms associated with drug use:
 - Naloxone distribution
 - Comprehensive harm reduction program expansion
 - Fentanyl wastewater surveillance piloting

How was the tool developed?

- Uses 12 data indicators related to drug overdose and misuse, drug-related infectious disease outcomes, and socioeconomic indicators
- Each city/county locality was ranked, or "scored", compared to the state value for each indicator
- **2021** was used as the data year for all indicators.
 - Data sources: Virginia Department of Health, Virginia Health Information (through VDH), Virginia State Police, Virginia Department of Behavioral Health and Developmental Services, United States (U.S.) Census Bureau, U.S. Bureau of Labor Statistics

Which data indicators are included?

Indicator 1: All-drug overdose deaths (death certificates)

Indicator 2: All-drug overdose emergency department visits

Indicator 3: All-drug nonfatal overdose inpatient hospitalizations

Indicator 4: Poverty estimates

Indicator 5: Unemployment estimates

Indicator 6: Persons prescribed prescription opioids

Indicator 7: Persons prescribed buprenorphine

Indicator 8: Newly reported hepatitis C cases among persons aged 18-30 years

Indicator 9: Newly diagnosed HIV cases

Indicator 10: New all-substance use disorder admissions to community service boards

Indicator 11: Arrestees for drug/narcotic violations

Indicator 12: Naloxone administrations with positive responses

Scoring process

- **Step 1:** State rate, state average count, or state percentage was calculated for each indicator.
 - State average count = total count divided by 133 localities
- **Step 2:** Counts, rates, and percentages for all 133 localities were calculated for each indicator.

Scoring process

- **Step 3:**
 - If locality value is above the state value for an indicator, the locality received one (1) point.
 - If the locality value was equal to or below the state value for an indicator, the locality received zero (0) points.

Brief

Example

(not all indicators included in example):

Green indicates above the state threshold

Red indicates equal to or below the state threshold

	State Average Count for Drug Overdose Deaths: 20	State Drug Overdose Death Rate per 100,000 Population: 30.5	State Percent for Poverty: 10.3%	Score
Locality A	59	23.9	8.3%	1
Locality B	19	61.6	10.9%	2
Locality C	25	31.3	10.3%	2

Scoring process

- **Step 4:** The points that each locality received from the 12 indicators are summed together to provide an overall score for that locality.
 - The minimum score a locality could get was zero (0).
 - The maximum score a locality could get was 22 (Indicators 1-3 and 6-12 had counts and rates; Indicators 4 and 5 had percentages only for a total of 22 possible points).
- **Step 5:** A state average indicator score was calculated.
 - State average indicator score = total number of points for the state divided by 133 localities
 - The state average indicator score was **9**.

Scoring process

- Step 6:** If the locality's indicator score is above the state average score (10 or higher), the locality was identified as **at higher need for drug overdose-related outcomes and substance use.**

Brief Example:



Green indicates above the state threshold

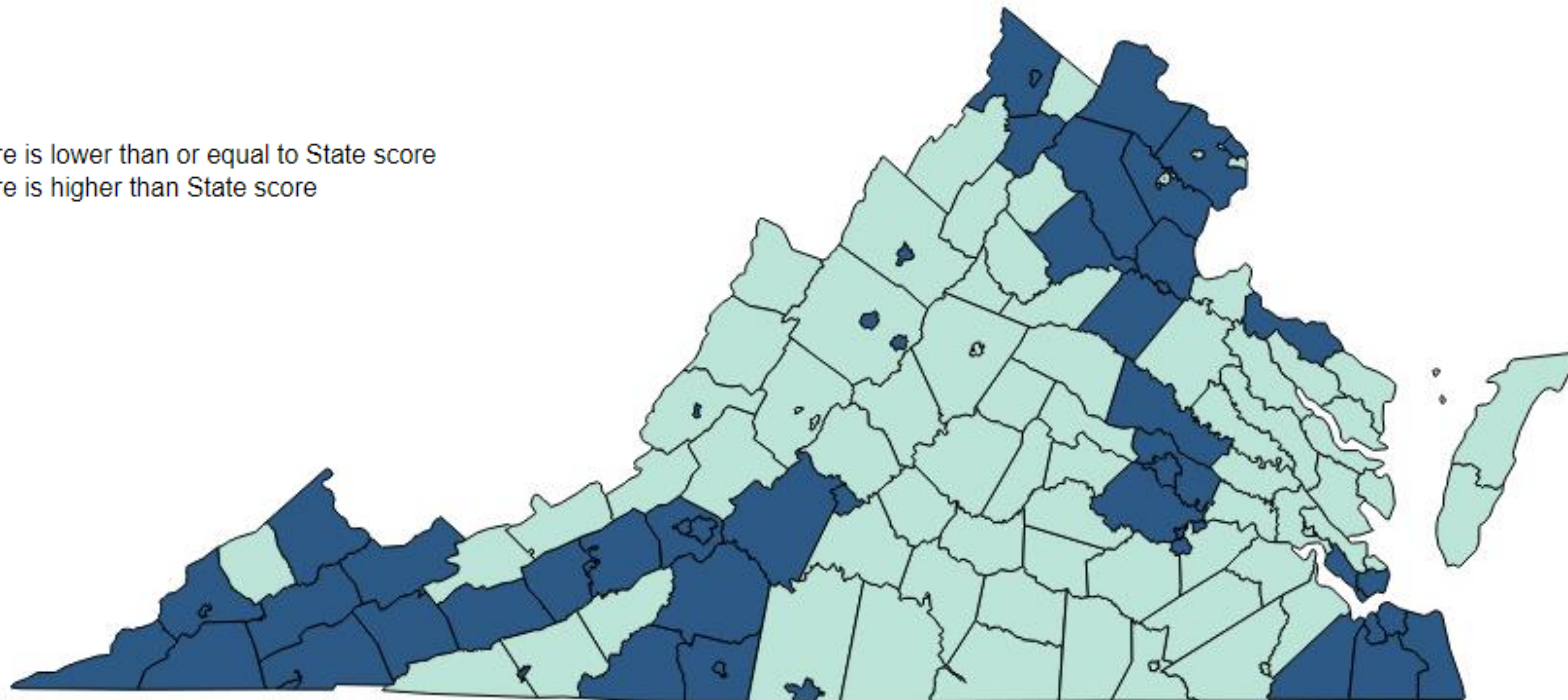
Red indicates equal to or below the state threshold

	State Average Indicator Score: 9	Priority?
Locality A	20	Yes, <u>above</u> state average score
Locality B	9	No, <u>equal to</u> state average score
Locality C	4	No, <u>below</u> state average score

Scoring results

- 56 Virginia localities were identified at higher need and may benefit from **targeted resources and support for prevention and intervention services.**

(N = 77)  Vulnerability Score is lower than or equal to State score
(N = 56)  Vulnerability Score is higher than State score



Assessment scores by locality

Score of 22

Roanoke City

Score of 21: None

Score of 20

Richmond City

Score of 19

Lynchburg City

Portsmouth City

Score of 18

Henry County

Newport News City

Score of 17

Henrico County

Martinsville City

Roanoke County

Score of 16

Chesterfield County

Danville City

Hampton City

Norfolk City

Petersburg City

Spotsylvania County

Score of 15

Stafford County

Tazewell County

Score of 14: None

Score of 13

Bedford County

Chesapeake City

Colonial Heights City

Culpeper County

Franklin County

Frederick County

Harrisonburg City

Pulaski County

Washington County

Score of 12

Bristol City

Buchanan County

Hanover County

Hopewell City

Suffolk City

Warren County

Winchester City

Wise County

Wythe County

Score of 11

Arlington County

Fredericksburg City

Lee County

Montgomery County

Norton City

Patrick County

Prince William County

Salem City

Virginia Beach City

Waynesboro City

Score of 10

Covington City

Fairfax County

Fauquier County

Galax City

Loudoun County

Radford City

Russell County

Scott County

Staunton City

Westmoreland County

Recommendations

- VDH recommends using the Vulnerability Assessment Tool to identify localities at higher need for targeted drug overdose prevention and intervention strategies across Virginia.
 - User-friendly
 - Assess rates *and* counts
 - Includes indicators that show the burden of drug overdose and substance use disorder across localities, infectious disease outcomes associated with drug use, and related socioeconomic factors

Recommendations

- Regardless of score, drug overdose and substance use impact all Virginia communities.
 - Localities and communities are eligible for support from state agencies.
- This tool does not assess a locality's capacity or ability to implement drug overdose prevention and intervention strategies.
- Communities may also want to consider other locally available data, existing programs and partnerships, and known areas of increased need when determining the approaches and strategies that best fit their communities.

Frequently asked questions

- Why were these indicators selected?
 - Indicators are directly associated with drug overdose morbidity (i.e., nonfatal drug overdoses) and mortality (i.e., drug overdose death), and infectious disease outcomes associated with drug use (i.e., HIV and hepatitis C).
 - Socioeconomic indicators (i.e., poverty and unemployment) are included because these factors are related with a locality being at higher risk for drug overdose and misuse.

Higher poverty and/or unemployment  Risk for drug overdose and substance use 

- Why does the hepatitis C indicator only include 18–30-year-olds?
 - Injection drug use is the most common risk factor for hepatitis C in younger age groups.

Frequently asked questions

- Why were counts and rates considered?
 - Counts and rates can more comprehensively identify localities at higher need, than looking only at one option or the other.

Rates	Counts
<p>Benefits:</p> <ul style="list-style-type: none"> • Used to compare equally across different population sizes • Allows for smaller, and sometimes more rural, localities to be considered 	<p>Benefits:</p> <ul style="list-style-type: none"> • Reflects higher morbidity (like nonfatal drug overdose) and mortality (death) to assess burden • Easy to understand by the public
<p>Limitations:</p> <ul style="list-style-type: none"> • May underestimate burden in localities with larger population sizes 	<p>Limitations:</p> <ul style="list-style-type: none"> • Counts are typically higher in larger population sizes (more drug overdoses when there are more people) and may leave out smaller, and sometimes more rural localities from being considered

Frequently asked questions

- Why do the indicators include all drugs versus only opioids (e.g., all-drug overdose deaths, all-drug overdose emergency department visits, etc.)?
 - Increasing polysubstance use
 - Increasing trend in stimulant-related drug overdose death (i.e., cocaine, methamphetamine)
 - Less lethal drug used by a person is unknowingly mixed with a more lethal drug (e.g., fentanyl)
 - Not all drug overdose deaths involve an opioid (15% did not involve an opioid in 2021)