**Name**: Suicide Mortality

**Short Description**: The number of deaths attributed to suicide per 100,000 people.

**Data Source(s)**:

* Name: CDC Wonder
* Link to Source: <https://wonder.cdc.gov/Deaths-by-Underlying-Cause.html>

**Year(s):** 2010-2019

**Source Geographic Level**: County

**Stratification**: Black population

**Selection Rationale:** An estimate of suicide mortality contributes to an overall understanding of mental wellbeing in an area. While CDC mortality data is only available forfatal suicide attempts, those who attempt suicide (non-fatal suicides) have been foundto experience a range of long-term outcomes such as additional suicide attempts, depression, substance use disorders, legal charges, and imprisonment. [[1]](#footnote-2) Suicide mortality provides additional depth of information alongside a suicidal ideation measure for understanding suicide risk and mental wellness.

**Strengths and Limitations**:

* **Strengths**:
  + [*Importance*]Suicide mortality is linked to occurrence of various mental health conditions, including schizophrenia spectrum disorder, bipolar disorder, depressive disorders, anxiety disorders, and ADHD.[[2]](#footnote-3)
  + [*Relevance and Usability*] This measure is easy to understand and can provide information on geographic areas with a high prevalence of fatal suicides.
  + [*Feasibility*] Mortality data is collected from all death certificates in the U.S., and it is reported yearly through CDC Wonder.[[3]](#footnote-4)
  + [*Equity*] Suicide attempts for Black Americans have increased in recent years, so this measure can help delineate where those attempts are occurring.[[4]](#footnote-5) The Emergency Task Force on Black Youth Suicide & Mental Health spearheaded by the Congressional Black Caucus cites an uptick in suicide rates among black youth over the past decade.[[5]](#footnote-6)
* **Limitations**:
  + [*Equity*] Fatal suicides of nonresidents (nonresident aliens, nationals living abroad, Puerto Rico residents, and other territories of the U.S.) are not reported in this measure.3
  + [*Feasibility*] Data are captured for a 10-year period from 2010-2019. This may make it difficult to discern mortality trends over shorter timespans. A 10-year period was selected because when this measure is stratified by race for the Black population alone, using a shorter time period would result in significant suppression of data.
  + [*Scientific Soundness*] The smallest geographic level at which this data is available is the county level, so each Zip Code Tabulation Area (ZCTA) in a given county will have the same value. As a result, ZCTA-level values may be less accurate because it is not possible to differentiate which ZCTAs have higher or lower rates within a county.
  + [*Scientific Soundness*] County-level fatal suicides with less than 10 people are suppressed, and county-level fatal suicide less than 20 people are makes as “unreliable”3. However, given that fatal suicides are sparse, a count of fewer than 20 deaths in a population can still be useful information.
  + [*Relevance and Usability*] Measuring suicide mortality deaths does not reflect the prevalence of non-lethal suicide attempts.

**Default Weight**:2.5% (*see Weighting Documentation for details on how default weights were assigned*)

**Calculation**:

*Overall Population Calculation*:

*Black Population Calculation*:

1. Beautrais, A., Joyce, P., & Mulder, R. (2000). Unmet need following serious suicide attempt: follow-up of 302 individuals for 30 months. *Unmet need in psychiatry*, 245-55. <https://doi.org/10.1017/CBO9780511543562.019> [↑](#footnote-ref-2)
2. Yeh, H. H., Westphal, J., Hu, Y., Peterson, E. L., Williams, L. K., Prabhakar, D., Frank, C., Autio, K., Elsiss, F., Simon, G. E., Beck, A., Lynch, F. L., Rossom, R. C., Lu, C. Y., Owen-Smith, A. A., Waitzfelder, B. E., & Ahmedani, B. K. (2019). Diagnosed Mental Health Conditions and Risk of Suicide Mortality. *Psychiatric services (Washington, D.C.)*, *70*(9), 750–757. <https://doi.org/10.1176/appi.ps.201800346> [↑](#footnote-ref-3)
3. Centers for Disease Control and Prevention (2021, March 11). *Underlying Cause of Death 1999-2019*. CDC Wonder. [https://wonder.cdc.gov/wonder/help/ucd.html#](https://wonder.cdc.gov/wonder/help/ucd.html) [↑](#footnote-ref-4)
4. NIMH Suicide Statistics: <https://www.nimh.nih.gov/health/statistics/suicide> [↑](#footnote-ref-5)
5. <https://watsoncoleman.house.gov/uploadedfiles/full_taskforce_report.pdf> [↑](#footnote-ref-6)