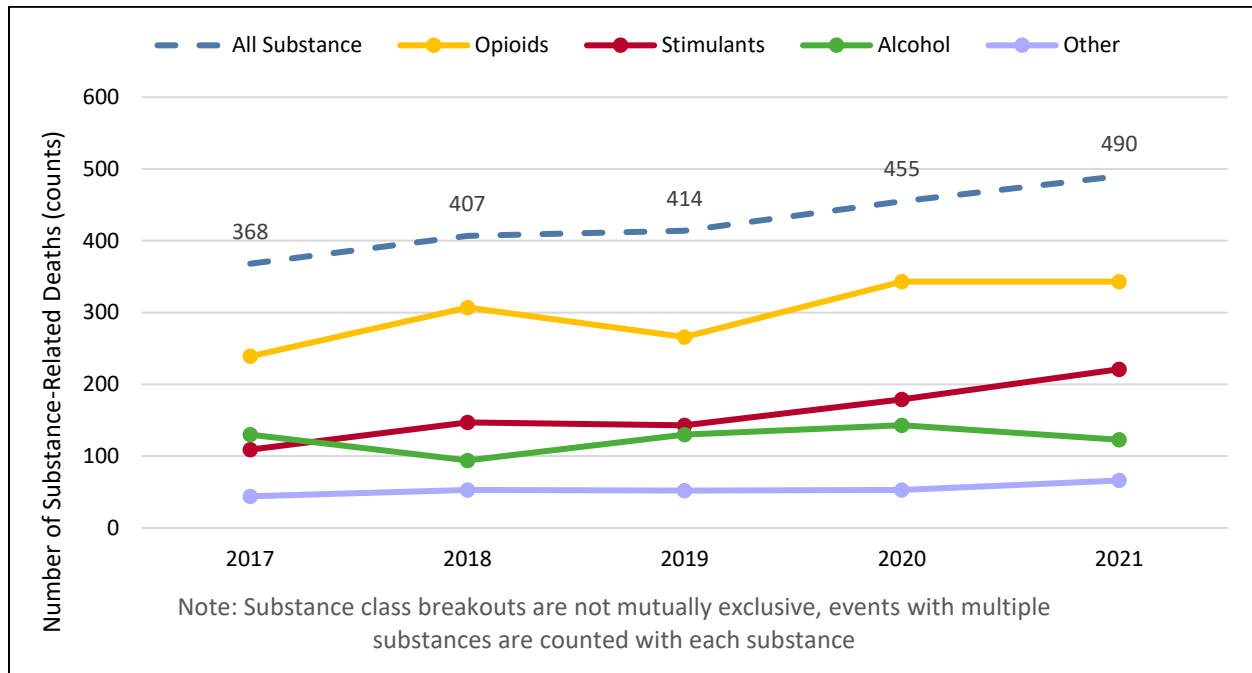


This brief is a yearly update on substance-involved deaths in St. Louis County. While visuals show 5-year trends, the primary focus of this report will be the most recent data in 2021. The mortality data utilized in this brief was provided by the St. Louis County Medical Examiner’s office.

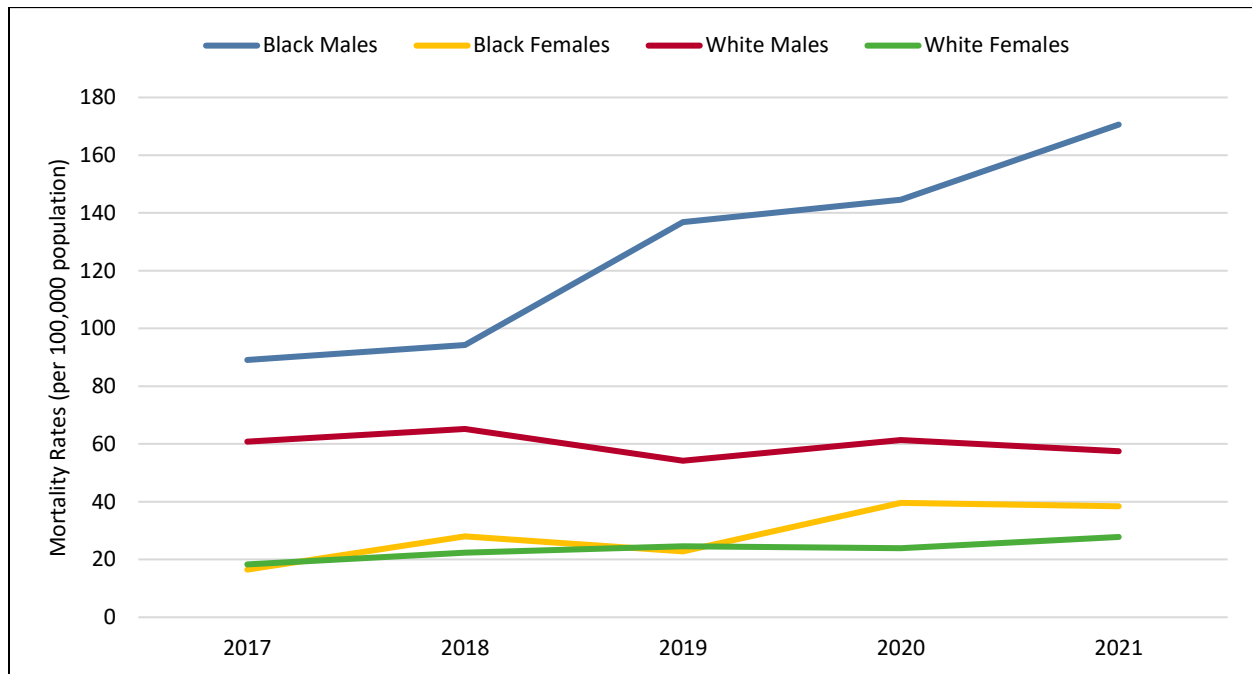
**Figure 1.** Substance-involved Deaths Occurring in St. Louis County, 2017-2021.



- 490 people died in substance-related incidents in St. Louis County in 2021, the largest number of deaths recorded since data collection began in 2012.
- The number of substance-involved deaths has grown significantly over the last 5 years. Since 2017, these deaths have increased by 33.2%.
- Opioids were the substances linked to the most deaths in 2021. The number of opioid-related deaths held at 343 in both 2020 and 2021.
- Growth in the number of substance-involved deaths during 2021 was driven primarily by a 23.5% increase in stimulant-related deaths and 24.5% increase in deaths involving “other” substances (benzodiazepines, kratom, etc.).
- 221 deaths involved a stimulant in 2021. The number of yearly deaths involving stimulants more than doubled between 2017 and 2021.
- A total of 66 deaths involved a substance that falls within the “other” category, making 2021 the deadliest year for substances in this category since 2017.
- Alcohol was the only overarching substance class involved in fewer deaths in 2021 than 2020. 123 people died from alcohol-related causes in 2021, a 14% decrease from the previous year.
- In 2021, the age-adjusted rate for substance-involved deaths was 52.3 per 100,000 population, up from 49.4 per 100,000 in 2020.

## Disparities in substance-involved deaths continue to grow each year.

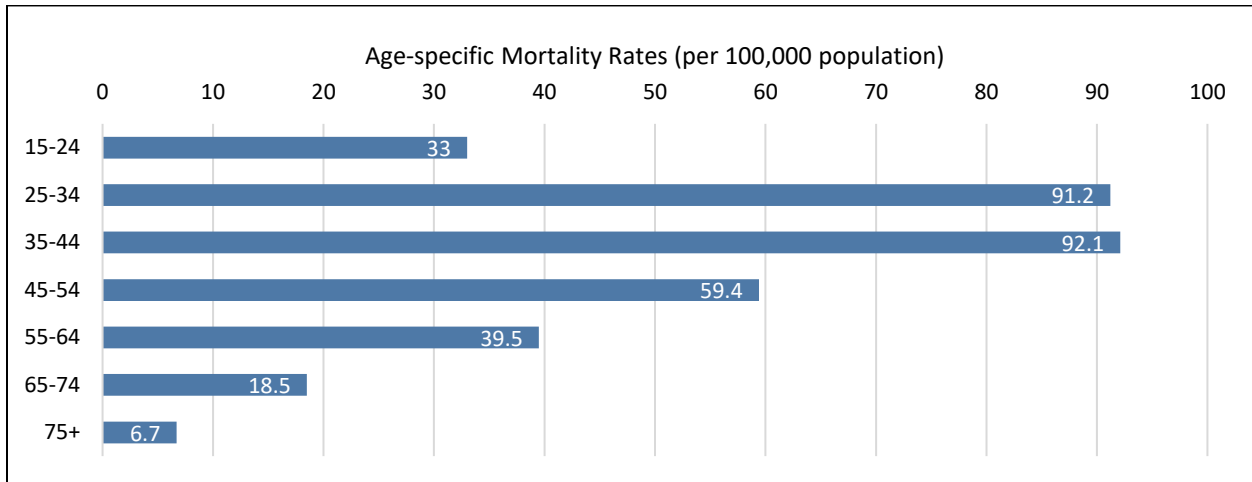
**Figure 2.** Age-adjusted Mortality Rates by Race and Sex, 2017-2021.



- Black men are more likely to die from substance-related than any other group, with an age-adjusted mortality rate of 170.6 per 100,000 population. This group experienced a 24% increase in deaths in 2021 compared to 2020 and an 86.2% increase over 2017.
- White men experienced a decline in mortality rate compared to 2020, from 61.4 down to 57.5 deaths per 100,000 population. 2021 had the second lowest mortality rate for white men in the last 5 years, behind 2019.
- The mortality rate for Black women remained very consistent for 2020 and 2021, at 39.6 and 38.4 per 100,000 population, respectively. This is a difference of one death between the two years.
- White women also experienced an increase over the course of 2021. This group's mortality rate increased by 16.3% to 27.8 deaths per 100,000 population.
- In 2021, 13 people with a race or ethnicity designation other than Black or white died from substance-involved causes. This represents an increase of 2 deaths over 2020 and the largest number among this population over the 5-year period.

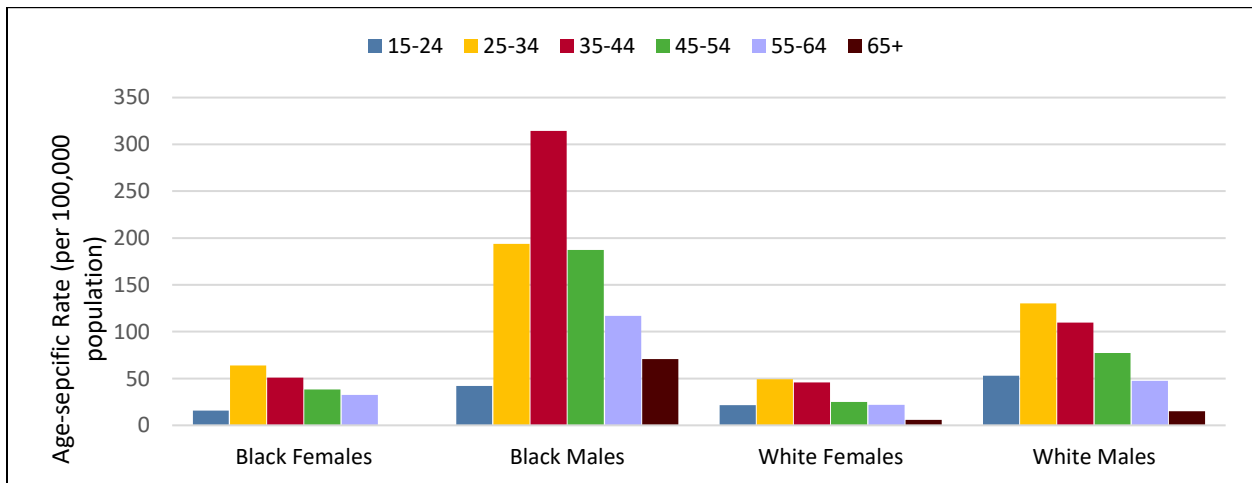
**Age group rates illustrate how substance-involved deaths impact individuals across the entire age spectrum.**

**Figure 3. Age-specific 5-year Mortality Rates by Age Group, 2017-2021**



- Five-year mortality rates were highest among people in the 24-34 and 35-44 age groups, at 91.2 and 92.1 per 100,000 population, respectively.
- An important trend not displayed in Figure 3, due to suppression standards, is the rate for individuals under 15. Nine out of the 21 of the deaths between 2017 and 2021 involving individuals younger than 15 occurred in 2021.

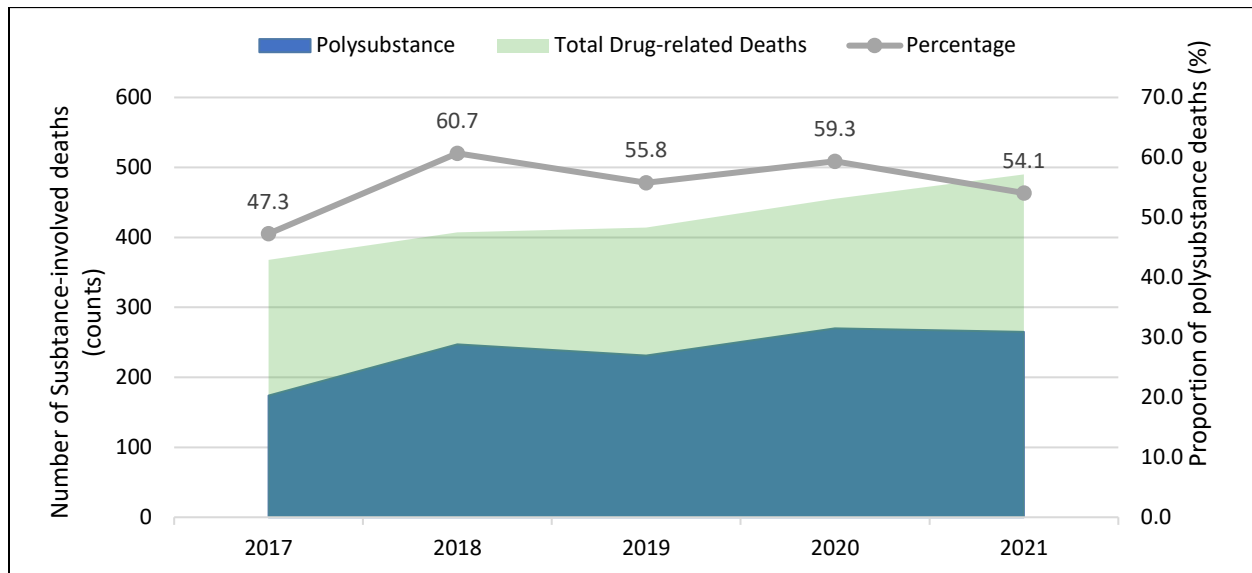
**Figure 4. 5-year Age-specific Mortality Rates by Age Group, Sex, and Race, 2017-2021.**



- When age-specific mortality rates are disaggregated by age group, sex, and race, it is possible to see that the overall aggregate trend from Figure 3. holds consistent with a few minor variations in each group.
- Most notably, Black men aged 35-44 have the highest age-specific mortality rate of any group at 314.5 deaths per 100,000 population. Black men in the 25-34 and 45-54 age groups have the next-highest mortality rates, further underlining the racial and sex disparity in substance-involved deaths.

## Polysubstance use is an important factor in rising mortality rates.

**Figure 5.** Proportion of Substance-involved Deaths that Include Multiple Substances, 2017-2021.



- 265 polysubstance deaths occurred in St. Louis County in 2021. This amounts to 54.1% of the year's substance-involved deaths.
- The number of substances involved in these deaths ranged from two to 10.
- 2021 continues a 4-year streak in which more than 50% of the yearly substance-involved deaths involved two or more substances.
- 93.2% of polysubstance deaths in 2021 involved an opioid combined with at least one other substance.
- 235 of the 247 opioid-related polysubstance deaths (95.1%) involved fentanyl.
- In 66.8% of polysubstance deaths where fentanyl appeared in the toxicology, a stimulant was also involved.
- Stimulants and alcohol were the primary substances involved in the 18 polysubstance deaths that did not include an opioid.

For questions and comments related to this brief please email [CAdams@stlouiscountymo.gov](mailto:CAdams@stlouiscountymo.gov)

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