

Trends in Drug Overdose Deaths: Metro Region

2011-2019

This series of data briefs describe trends in drug overdose deaths by [Minnesota's State Community Health Services Advisory Committee \(SCHSAC\)](https://www.health.state.mn.us/communities/practice/schsac/index.html) (<https://www.health.state.mn.us/communities/practice/schsac/index.html>) regions. By having access to data, communities can better understand trends in drug overdose in their region and make data-driven decisions that influence public health policy, guidelines, and practices.

Note on the data: The data briefs cover drug overdose deaths from 2011-2019 with years grouped in three-year time periods (e.g., 2011-2013) to account for relatively small annual numbers in some regions and the necessity to make meaningful comparisons across the eight SCHSAC regions.

Metro Region Overview

The Metro region is the home to 3,152,564 Minnesotans (Minnesota State Demographic Center, 2019) and includes seven counties (Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington counties) (Figure 1). Among the eight SCHSAC regions, the Metro ranked third for the rate of drug overdose deaths from 2017-2019 (14.2 per 100,000 residents) (Chart 1). Since 2011, drug overdose deaths in the Metro region have increased 58% (312 to 492 deaths) (Chart 2). Drug overdose deaths increased 32% from 2018 to 2019 (374 to 492 deaths). From 2017-2019, the Metro region saw an increase in overdose deaths involving synthetic opioids, psychostimulants, and cocaine. Over this time period, the greatest burden of drug overdose deaths was among 25-34-year-old, male, and American Indian and Black residents.

METRO REGION: TRENDS IN DRUG OVERDOSE DEATHS

Figure 1. The Metro region includes seven Minnesota counties.

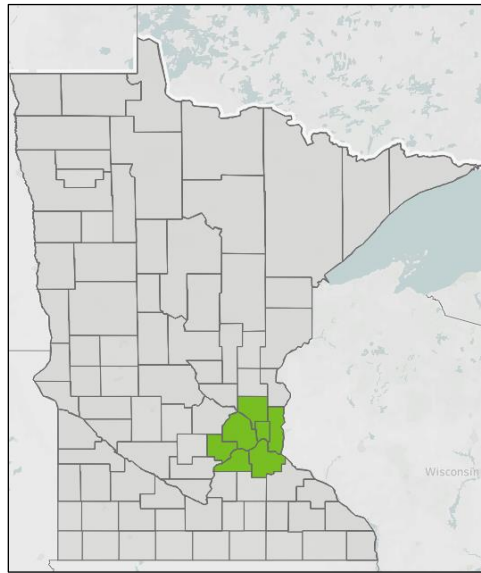
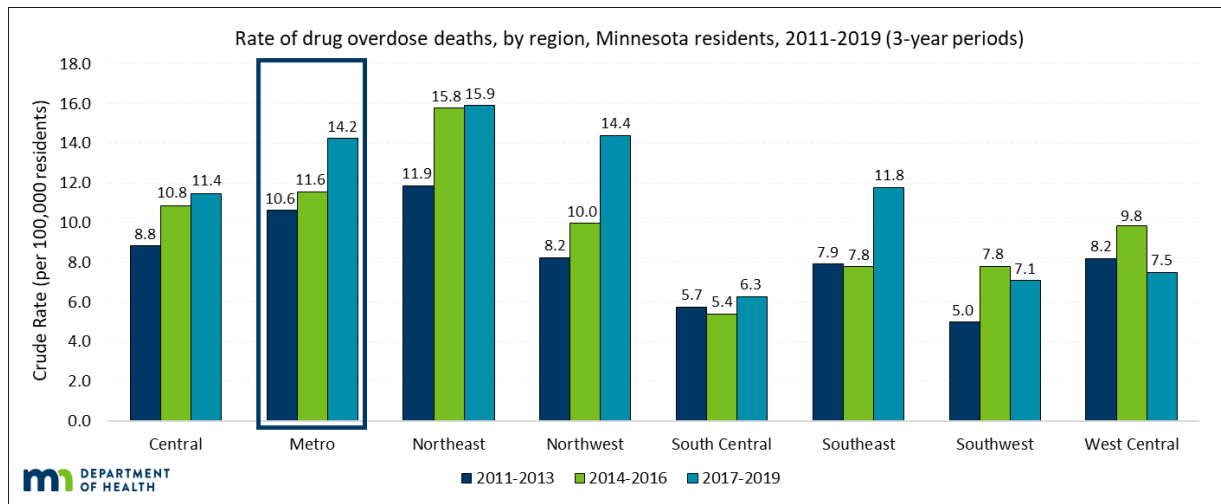
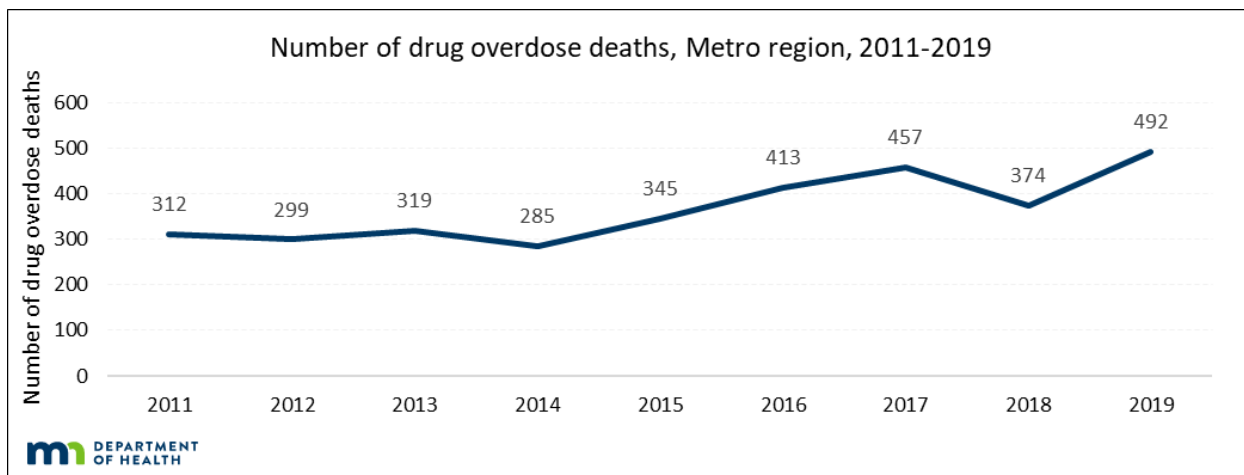


Chart 1. From 2017 to 2019, the Metro region ranked third in the state for the drug overdose death rate.



SOURCE: Minnesota death certificates, Injury and Violence Prevention Section, Minnesota Department of Health, 2011-2019

Chart 2. Drug overdose deaths have increased since 2011 and reached their highest number in 2019.



SOURCE: Minnesota death certificates, Injury and Violence Prevention Section, Minnesota Department of Health, 2011-2019

Drug overdose deaths by drug category

Opioid-involved drug overdose deaths

All opioid-involved deaths have increased 39% since 2011-2013 (565 to 783 deaths) (Chart 3). However, the types of opioids involved have changed. From 2011-2016, other opioids and methadone (i.e., commonly prescribed opioids) accounted for the largest number of opioid-involved overdose deaths. Beginning in 2017-2019, synthetic opioid-involved deaths substantially increased and surpassed the number of commonly prescribed opioid-involved overdose deaths. Heroin-involved deaths initially increased but have decreased since 2014-2016. From 2014-2016 to 2017-2019:

- All opioid-involved overdose deaths increased 23% (636 to 783 deaths)
- Synthetic opioid-involved overdose deaths increased 340% (107 to 471 deaths)
- Commonly prescribed opioid-involved overdose deaths decreased 10% (320 to 288 deaths)
- Heroin-involved overdose deaths decreased 15% (252 to 215 deaths)

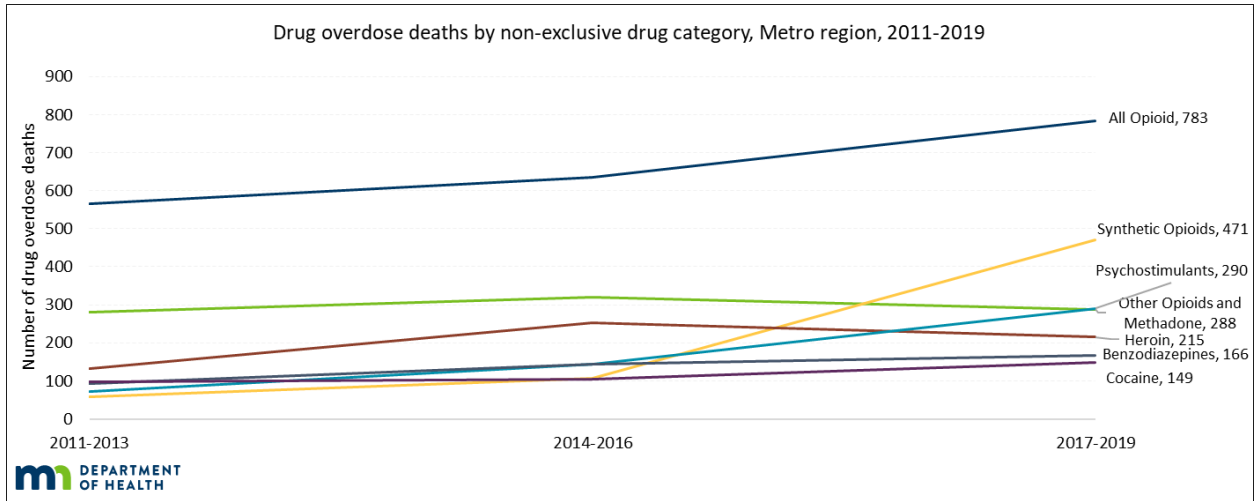
Non-opioid involved drug overdose deaths

Among drug overdose deaths involving non-opioids, the Metro region has seen a sharp increase in psychostimulant-involved drug overdose deaths (Chart 3). Additionally, benzodiazepine-involved deaths have increased since 2011-2013. Cocaine-involved deaths have also increased. From 2014-2016 to 2017-2019:

- Psychostimulant-involved deaths doubled, increasing 100% (145 to 290 deaths)
- Benzodiazepine-involved deaths increased 15% (144 to 166 deaths)
- Cocaine-involved deaths increased 43% (104 to 149 deaths)

METRO REGION: TRENDS IN DRUG OVERDOSE DEATHS

Chart 3. From 2014-2016 to 2017-2019, there were large increases in synthetic opioid and psychostimulant-involved deaths.



SOURCE: Minnesota death certificates, Injury and Violence Prevention Section, Minnesota Department of Health, 2011-2019

Co-involvement of multiple substances

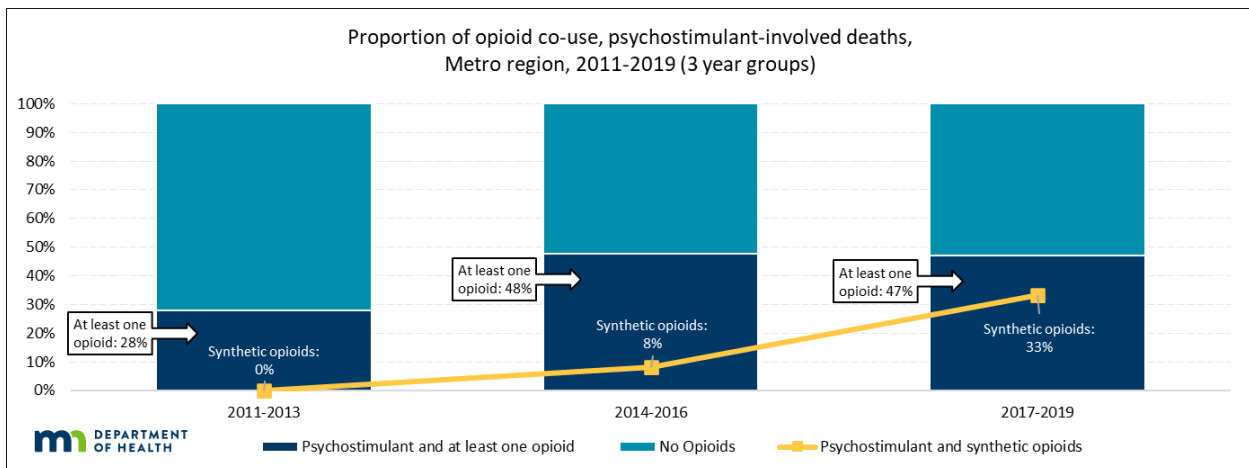
The presence of multiple drugs involved in a death has several implications. One of the major concerns is the challenge of responding to an overdose when multiple substances are present, especially when there are opioids and non-opioids together. There are no medications to reverse a non-opioid (e.g., psychostimulant, benzodiazepine, cocaine) overdose, whereas opioid overdoses can be reversed with the life-saving medication naloxone. Understanding trends in the co-use of non-opioids and opioids can help us to better interpret trends in drug overdose deaths and inform prevention and response efforts.

Psychostimulant- and Opioid-involved Deaths

Psychostimulant-involved deaths have continued to increase statewide and in the Metro region. The co-involvement of opioids in psychostimulant-involved deaths has increased from 2011-2013 to 2017-2019 (Chart 4). In 2011-2013, opioids were involved in 28% of psychostimulant-involved deaths (20 out of 72 deaths). In 2014-2016, the proportion of psychostimulant-involved deaths with at least one opioid present increased to 48% (69 out of 145 deaths). In 2017-2019, the proportion of psychostimulant-involved deaths involving at least one opioid accounted for 47% of psychostimulant-involved deaths (136 out of 290 deaths).

A concerning trend in the Metro region is the co-involvement of synthetic opioids in psychostimulant-involved deaths. From 2011-2013, there were no psychostimulant-involved deaths that also involved a synthetic opioid. By 2017-2019, synthetic opioids were involved in 33% of psychostimulant-involved deaths in the Metro region (96 of 290 deaths) and accounted for 71% of overall opioid co-involvement in psychostimulant-involved deaths (96 of 136 deaths; not shown in chart).

Chart 4. The proportion of psychostimulant-involved deaths that also involved synthetic opioids has increased.

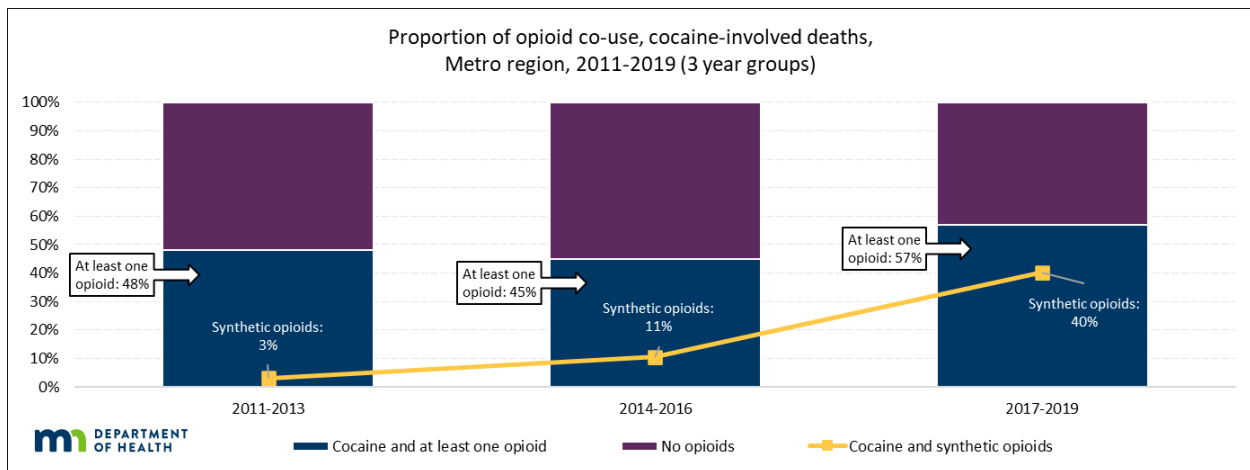


SOURCE: Minnesota death certificates, Injury and Violence Prevention Section, Minnesota Department of Health, 2011-2019

Cocaine- and Opioid-involved Deaths

Co-involvement of opioids, particularly synthetic opioids, in cocaine-involved deaths has increased since 2011. Opioids were involved in 48% of all cocaine-involved deaths from 2011-2016 (Chart 5). In 2017-2019, the proportion of cocaine-involved deaths involving at least one opioid increased to 57% (85 out of 149 deaths). As mentioned previously, there has been a substantial increase in the co-involvement of synthetic opioids in cocaine-involved deaths. From 2011-2013, synthetic opioids were involved in 3% of cocaine-involved deaths. The proportion of cocaine-involved deaths with synthetic opioid involvement rose substantially to 40% of cocaine-involved deaths (60 out of 149 deaths) and accounted for 71% of overall opioid co-involvement in cocaine-involved deaths (60 out of 85 deaths; not shown in chart) in 2017-2019.

Chart 5. The co-involvement of synthetic opioids in cocaine-involved deaths has substantially increased in the Metro region.

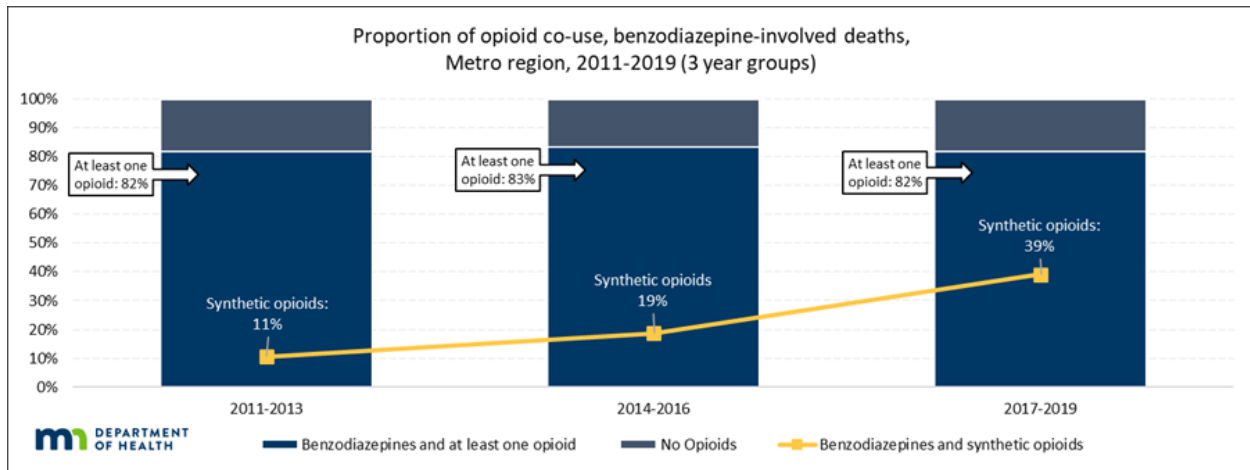


SOURCE: Minnesota death certificates, Injury and Violence Prevention Section, Minnesota Department of Health, 2011-2019

Benzodiazepine- and Opioid-involved Deaths

The co-involvement of opioids in benzodiazepine-involved deaths has been high since 2011-2013 (Chart 6). However, the trend in the type of opioid present has shifted. In 2011-2013, synthetic opioids were involved in a small proportion of benzodiazepine-involved deaths (11%, 10 out of 94 deaths). By 2017-2019, synthetic opioids were involved in 39% of all benzodiazepine deaths (65 out of 166 deaths) and accounted for 48% of overall opioid co-involvement (65 out of 136 deaths; not shown on chart).

Chart 6. The co-involvement of synthetic opioids in benzodiazepine-involved deaths have substantially increased in the Metro region.



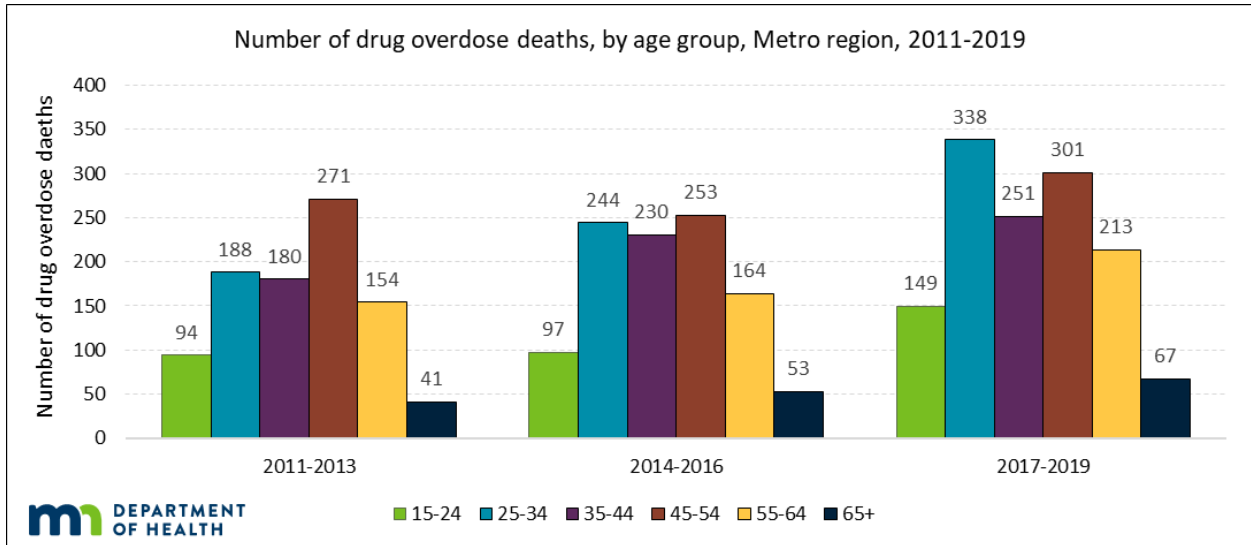
SOURCE: Minnesota death certificates, Injury and Violence Prevention Section, Minnesota Department of Health, 2011-2019

Age of drug overdose deaths

In the Metro region, the age distribution of drug overdose deaths has continued to change over time. From 2011-2013, 45–54-year-old Minnesotans from the Metro region experienced the largest number of drug overdose deaths (Chart 7). Beginning in 2014-2016, 25-34 and 45-54-year-old Minnesotans from the Metro region experienced the largest number of drug overdose deaths. From 2017-2019, 25-34- and 45-54-year-old Minnesotans from the Metro region again experienced the largest number of drug overdose deaths; however, drug overdose deaths increased across all age groups in the Metro region. From 2014-2016 to 2017-2019:

- the 15-to-24-year age group experienced a 54% increase in drug overdose deaths (97 to 149 deaths)
- the 25-to-34-year age group experienced a 39% increase in drug overdose deaths (244 to 338 deaths)
- the 35-to-44-year age group experienced a 9% increase in drug overdose deaths (230 to 251 deaths)
- the 45-to-54-year age group experienced a 19% increase in drug overdose deaths (253 to 301 deaths)
- the 55-to-64-year age group experienced a 30% increase in drug overdose deaths (164 to 213 deaths)
- those 65 and older experienced a 26% increase in drug overdose deaths (53 to 67 deaths)

Chart 7. In 2017-2019, 25–34 and 45-54-year-old Minnesotans from the Metro region experienced the largest number of drug overdose deaths.

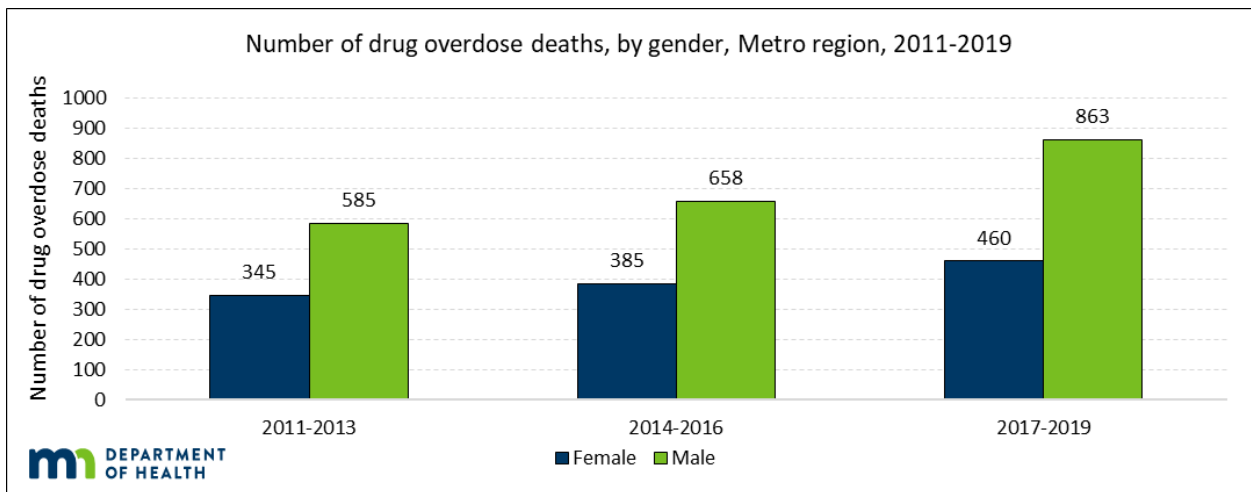


SOURCE: Minnesota death certificates, Injury and Violence Prevention Section, Minnesota Department of Health, 2011-2019

Drug overdose deaths by gender

Since 2011-2013, males have experienced a larger number of drug overdose deaths than females in the Metro region (Chart 8). The gap between male and female overdose deaths has continued to increase. From 2017-2019, males accounted for 65% of drug overdose deaths (863 deaths) and females accounted for 35% of drug overdose deaths (460 deaths).

Chart 8. Males have experienced more drug overdose deaths than females since 2011.



SOURCE: Minnesota death certificates, Injury and Violence Prevention Section, Minnesota Department of Health, 2011-2019

Drug overdose deaths by race

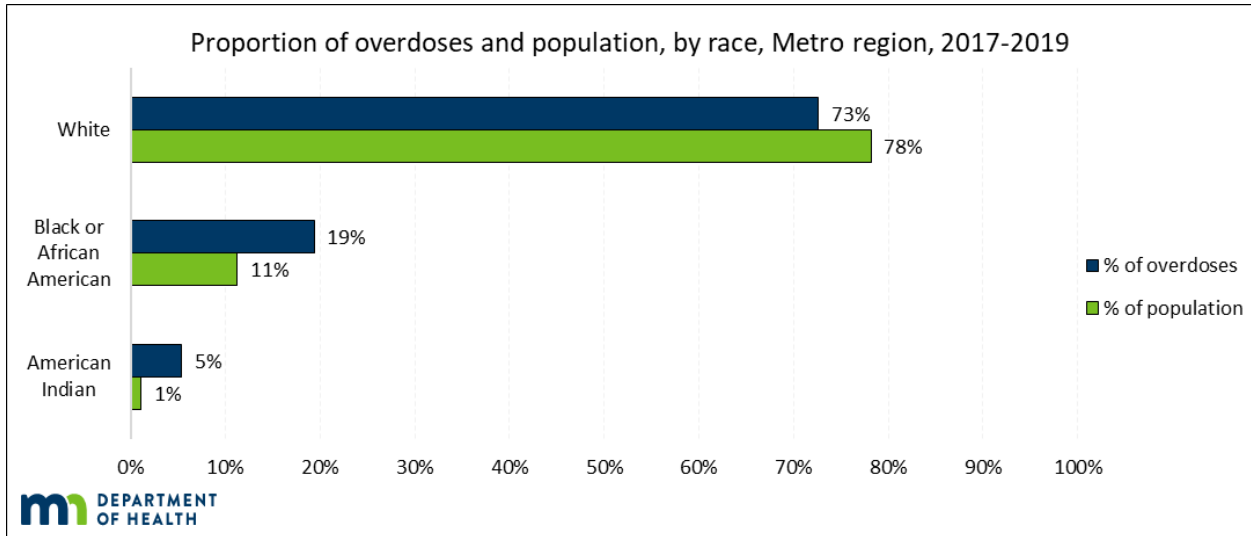
Since 2011, white residents experienced the largest number of drug overdose deaths in the Metro region (Table 1). However, Black and American Indian residents experienced a disproportionate number of overdose deaths when compared to the proportion of the population in the Metro region – in 2017-2019, Black residents represented 11% of the Metro region population but accounted for 19% of all overdose deaths (Chart 9). American Indian residents represented 1% of the Metro region population; however, they accounted for 5% of all overdose deaths. Conversely, white residents represented 78% of the Metro region population, but accounted for 73% of drug overdose deaths from 2017-2019.

Table 1. Number of drug overdose deaths by race, Metro region, 2011-2019

Race of Decedent	2011-2013	2014-2016	2017-2019
American Indian	54	51	71
Black	124	166	256
White	733	810	960

SOURCE: Minnesota death certificates, Injury and Violence Prevention Section, Minnesota Department of Health, 2011-2019

Chart 9. American Indian and Black residents experienced a disproportionate number of overdose deaths in the Metro region.



SOURCE: Minnesota death certificates, Injury and Violence Prevention Section, Minnesota Department of Health, 2011-2019

References

Minnesota State Demographic Center. (2021, April). PopFinder For Minnesota, Counties, & Regions. PopFinder For Minnesota, Counties, & Regions. Retrieved February 14, 2022, from <https://mn.gov/admin/demography/data-by-topic/population-data/our-estimates/pop-finder1.jsp>

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