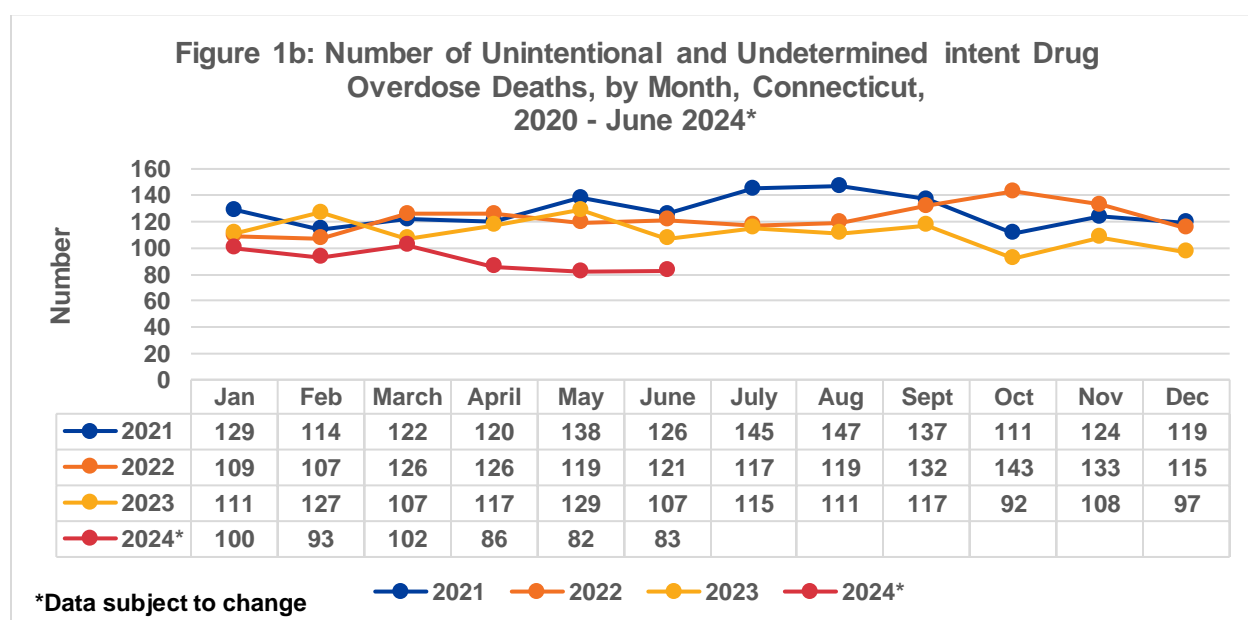
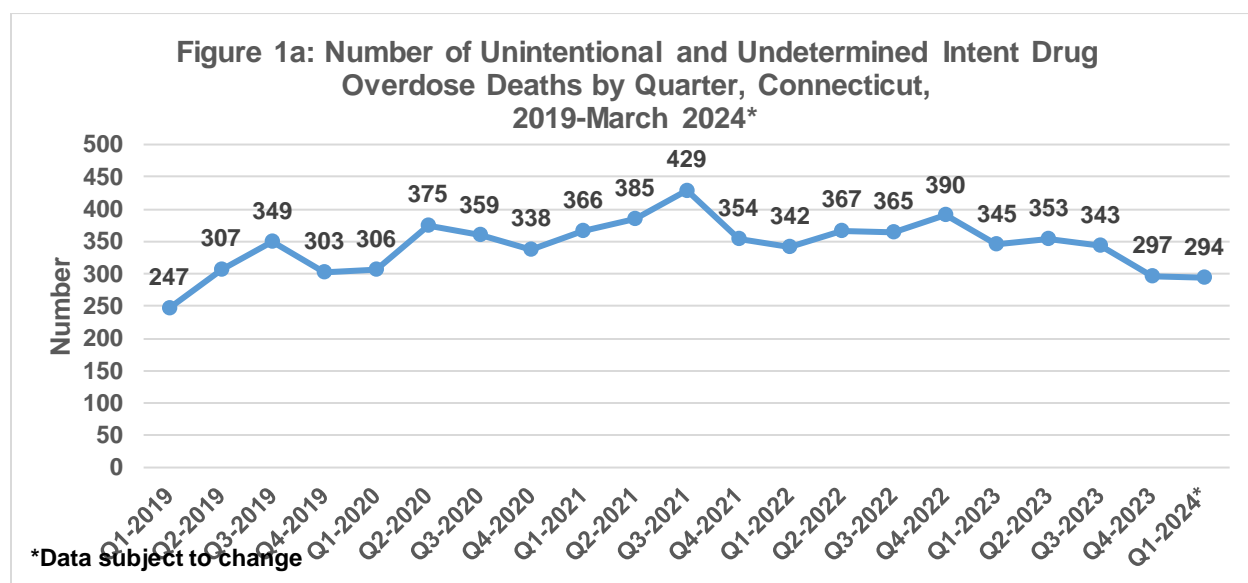


# Fatal Unintentional and Undetermined Intent Drug Overdose Report, Connecticut

| Key Findings About Drug Overdose Decedents, 2019 – July 2024*  |
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| <ul style="list-style-type: none"> <li>The current monthly report is based on confirmed fatal drug overdose cases from 2019 to the 2<sup>nd</sup> week of July 2024. Data from 2024 are preliminary and may change due to pending cases.</li> </ul>  |
| <ul style="list-style-type: none"> <li>The preliminary data show that there were 562 drug overdose deaths in 2024 (N=100 in January, 93 in February, 102 in March, 86 in April, 82 in May, 83 in June and July data are incomplete with only 16 confirmed deaths). Fentanyl- (77.8%; N=437) and fentanyl/xylazine- (35.2%; N=198) involved deaths were still a major threat and need for concern as seen in previous years.</li> </ul>   |
| <ul style="list-style-type: none"> <li><b>New and emerging substances:</b> The Injury and Violence Surveillance Unit (IVSU) at the Department of Public Health (DPH) continues to monitor for new and emerging substances.<br/> <b>Carfentanil:</b> A dangerous analog of fentanyl, carfentanil, also known as an elephant tranquilizer, was involved in 2 drug overdose deaths in 2024 and 7 in 2023. Prior to 2023, there were 7 deaths in 2017, 2 in 2020, and 1 in 2021 involving carfentanil.<br/> <b>Designer benzodiazepines:</b> As of the 2<sup>nd</sup> week of July, there were 18 deaths in 2024 and 31 deaths in 2023 involving designer benzodiazepines (e.g., bromazolam, flubromazolam) and these numbers were much higher than the previous years (2019=0; 2020=3; 2021=5; 2022=5). <b>Nitazenes (synthetic opioids):</b> In 2023 there were 10 deaths involving the nitazene family of substances. In prior years there were fewer nitazene-involved deaths (2019=0, 2021=2 and 2022=1). There were 5 nitazene-involved deaths in 2024 as of the 2<sup>nd</sup> week of July.</li> </ul> |
| <ul style="list-style-type: none"> <li><b>2023 data overview:</b> There were 1,338 overdose-related deaths in 2023, with 111 in January, 127 in February, 107 in March, 117 in April, 129 in May, 107 in June, 115 in July, 111 in August, 117 in September, 92 in October, 108 in November and 97 in December. Approximately 83.7% of these deaths (N=1,120) involved fentanyl.</li> </ul>  |
| <ul style="list-style-type: none"> <li><b>Comparison between 2022-2023:</b> There were 1,338 confirmed deaths for 2023. representing a decrease of 126 deaths (-8.6%) compared to 2022.</li> </ul>   |
| <ul style="list-style-type: none"> <li><b>Demographic data for 2023:</b> Males had a higher mortality rate than females in 2023 (57.1 vs. 17.9 per 100,000 population, respectively). In 2023, the mortality rate was highest (68.4 per 100,000 population) for the non-Hispanic Black population.</li> </ul>  |
| <ul style="list-style-type: none"> <li><b>Place of overdose in 2022 and 2023:</b> Most of the decedents overdosed at a residence (either their own or someone else's) in 2022 (76.0%) and 2023 (70.0%).</li> </ul>   |
| <ul style="list-style-type: none"> <li><b>Fentanyl-involved drug overdose deaths:</b> The average percentage of fentanyl- or fentanyl analog-involved deaths was 85% for 2020 to 2022 and a slight decrease was seen in 2023 with 83.3%.</li> </ul>  |
| <ul style="list-style-type: none"> <li><b>Xylazine, an animal tranquilizer, in drug overdose deaths:</b> In 2024, the lethal xylazine/fentanyl combination is at the highest point since it was first identified in 2019. As of the 2<sup>nd</sup> week of July 2024, 35.2% (N=198) of the deaths involved xylazine. Prior years are as follows: 2020 (N=141; 10.2%), 2021 (N=298; 19.8%), 2022 (N=354, 24.2%), and 2023 (N=285; 21.3%).</li> </ul>  |

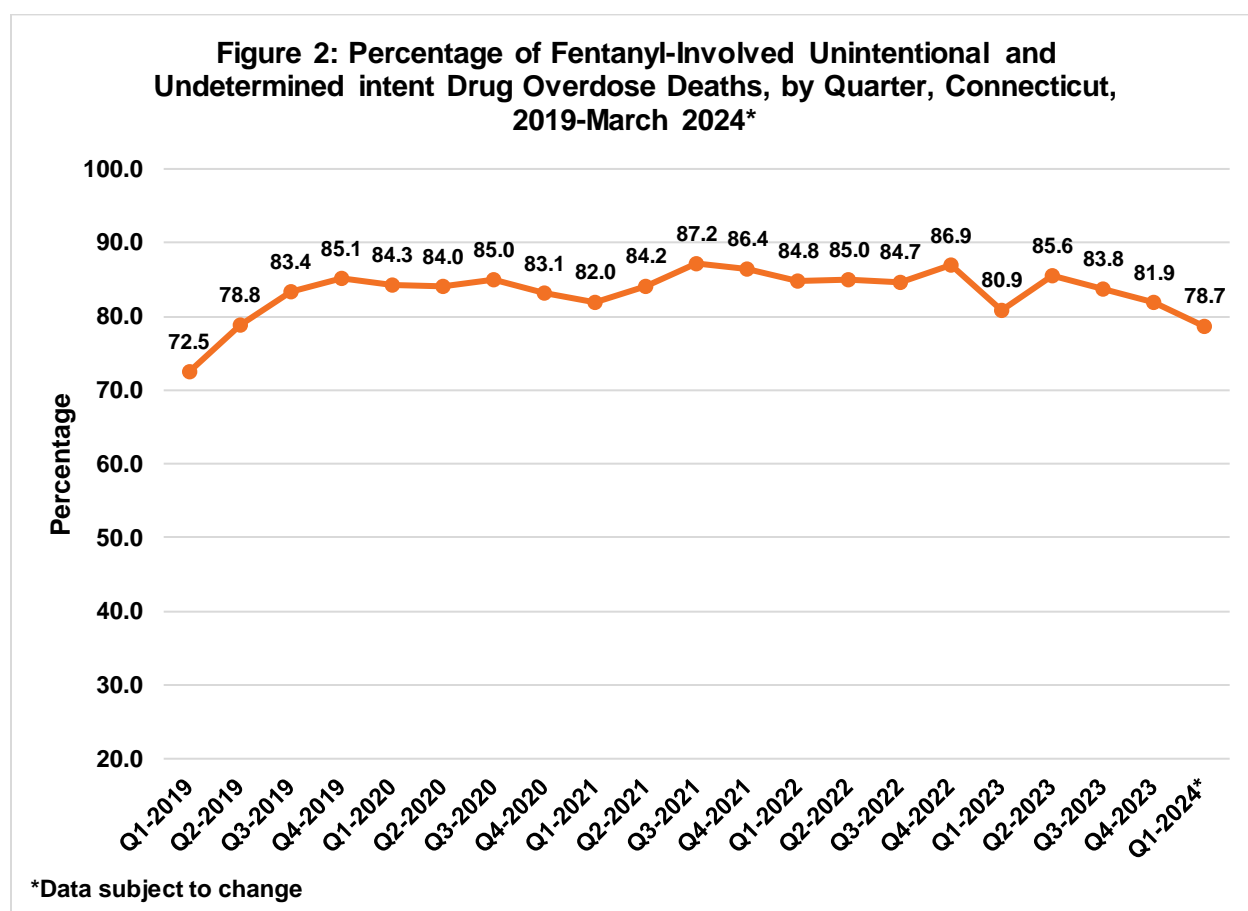
\*Data subject to change

**1: Number of Unintentional and Undetermined Intent Drug Overdose Deaths, Connecticut, 2019-June 2024\***. There was an 8.6% (N=126) decrease in drug overdose deaths in 2023 compared to the previous year of 2022. The charts below represent counts of confirmed drug overdose deaths by quarter (Figure 1a) and by month (Figure 1b). Quarterly drug overdose data (Figure 1a) show that for years 2019, 2020 and 2022, Quarter 1 had the lowest number of unintentional and undetermined intent drug overdose deaths within each specific year. In 2023, Quarter 4 had the lowest number. Monthly data (Figure 1b) show that July and August of 2021 had the highest number of deaths. In 2022, the month of October had the highest number of deaths. Overall, in 2023 the drug overdose death numbers trended lower compared to previous years and we continue to see this lower trend in Quarter 1 of 2024. Data for 2024 may change due to the processing of pending cases.

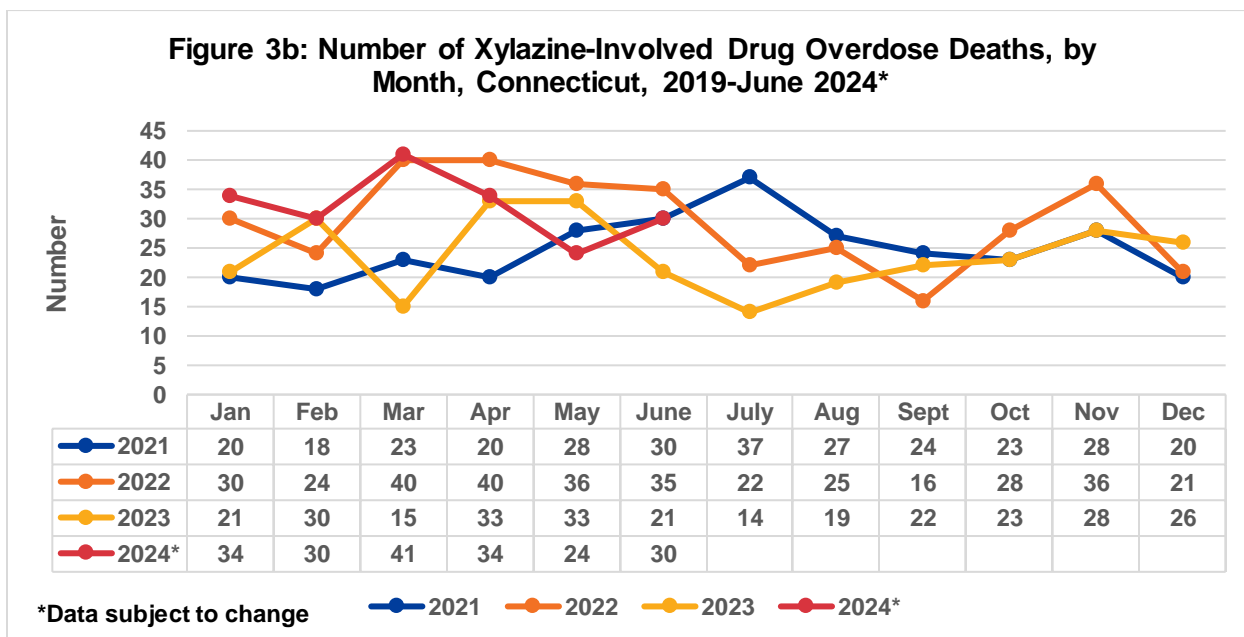
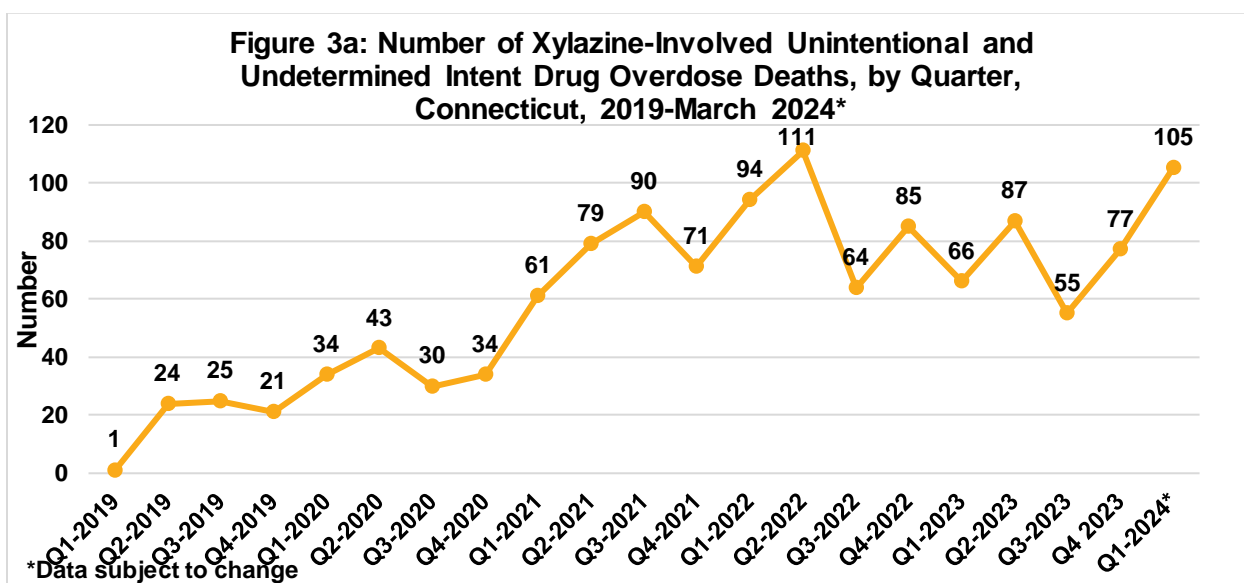


## 2: Percentage of Fentanyl-Involved Unintentional and Undetermined Intent Drug

**Overdose Deaths, by Quarter, Connecticut, 2019-March 2024\***. The average percentage of fentanyl-involved deaths remained high between 2019 and 2023. The chart below represents the percentage of fentanyl-involved drug overdose deaths by quarter (Figure 2). The average percentage of fentanyl- or fentanyl analog-involved deaths was 80% for 2019 and subsequently increased to 85% in 2020, 2021, 2022. In 2023, 83.3% of the deaths involved fentanyl. Preliminary data for-Quarter 1, 2024 show that the percentage of fentanyl-involved deaths was slightly lower (78.7%) than the previous year with an approximate reduction of 4.6%. When Q4 of 2022 (86.9%) is compared to Q1 of 2024 (78.7%), there was an 8.2% reduction of fentanyl-involved deaths. These data may change due to the processing of 2024 pending cases.



**3: Number of Xylazine-Involved Unintentional and Undetermined Intent Drug Overdose Deaths, Connecticut, 2019- June 2024.** Xylazine, a veterinary sedative not intended for human use, is added to illicit drugs for an enhanced effect. In Connecticut, xylazine first emerged as a novel adulterant in fatal drug overdoses in March 2019. The charts below represent the number of xylazine-involved drug overdose deaths by quarter (Figure 3a) and by month (Figure 3b). The number of xylazine-involved deaths was highest in Quarter 2 of 2022 and, although the numbers were fluctuating each quarter thereafter, an overall downward trend was observed in 2023. However, in Quarter 1 of 2024 (January-March), the number increased again compared to Q1-Q4 data of 2023. Figure 3b shows the monthly numbers of xylazine-involved deaths from 2021 to June 2024 and January-June 2024 numbers are higher than 2023, with the exception of May. Data from 2024 are subject to change due to pending cases.



**Other Emerging Substances in Fatal Drug Overdoses, Connecticut, 2019-June 2024\***. Illicit drug markets are constantly evolving, and new substances are being added and distributed by drug dealers. In recent times, Connecticut has seen an increase in (a) **carfentanil**, an analog of fentanyl which is 100 times more potent than fentanyl, (b) **designer benzodiazepines** (e.g. bromazolam) which have similar chemical structures and clinical effects to “traditional” benzodiazepines but have higher potency & long-lasting effects, and (c) novel synthetic opioids called **nitazenes** (e.g. isotonitazene, metonitazene and protonitazene) that have different chemical structures from fentanyl and can be much more potent than fentanyl. In year 2023, there were 7 fatal drug overdoses involving carfentanil and in 2024, as of the 2<sup>nd</sup> week of June, there were two deaths. Designer benzodiazepines sharply increased in 2023 (N=31; bromazolam=30 and bromazolam+flubromazolam=1) and in 2024 there were 18 bromazolam involved deaths so far. The novel drugs called the nitazene family of substances started emerging in 2021 with 2 deaths and that number increased to 10 in 2023. In 2024, as of the 2<sup>nd</sup> week of July, there were 5 deaths involving nitazenes. Please see Table-1 for more details. The Connecticut Department of Public Health’s IVSU remains vigilant about these new emerging substances and will inform the local communities as needed.

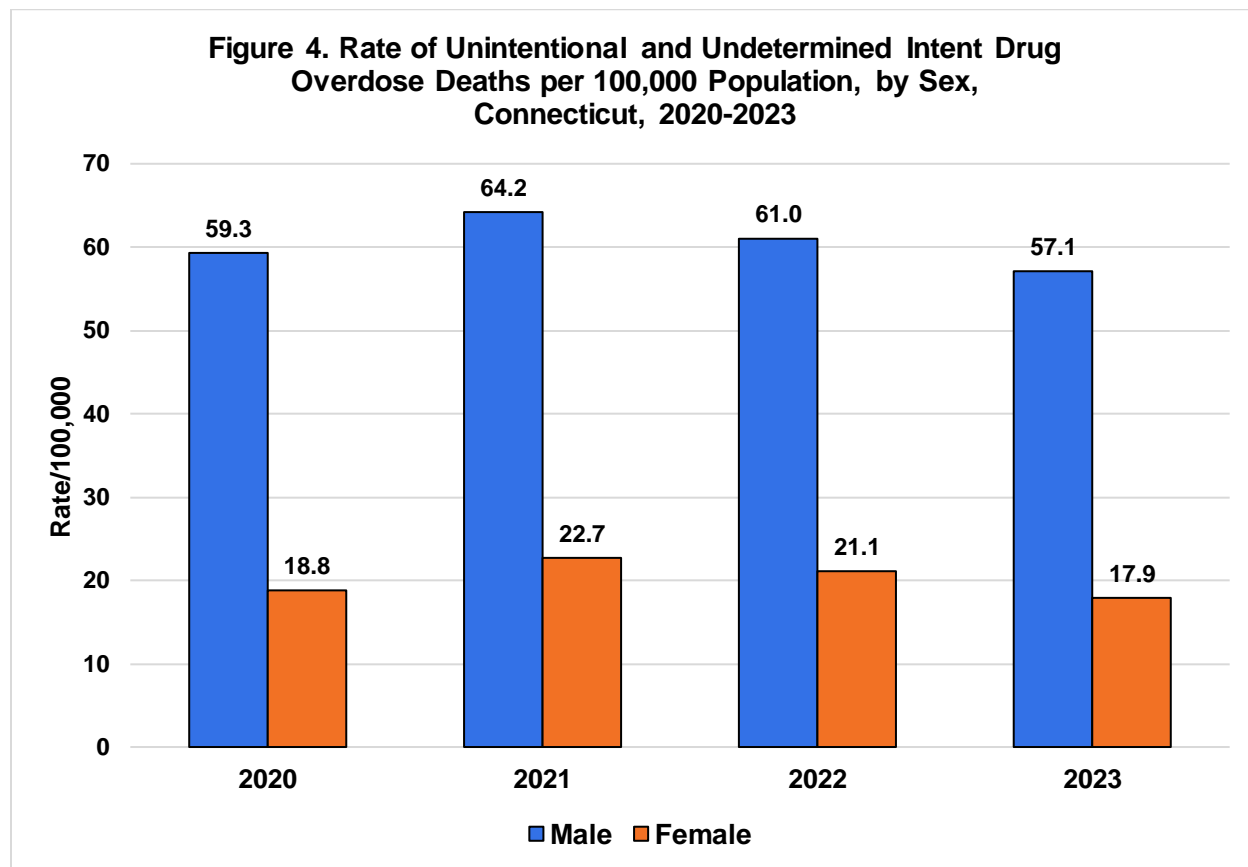
**Table 1: Other Emerging Substances in Fatal Drug Overdoses, Connecticut, 2019-2024\*.**

| Substance                  | 2019 | 2020 | 2021 | 2022 | 2023 | 2024* |
|----------------------------|------|------|------|------|------|-------|
| Carfentanil                | 0    | 2    | 1    | 0    | 7    | 2     |
| Designer benzodiazepines** | 0    | 3    | 5    | 5    | 31   | 18    |
| Nitazenes                  | 0    | 0    | 2    | 1    | 10   | 5     |

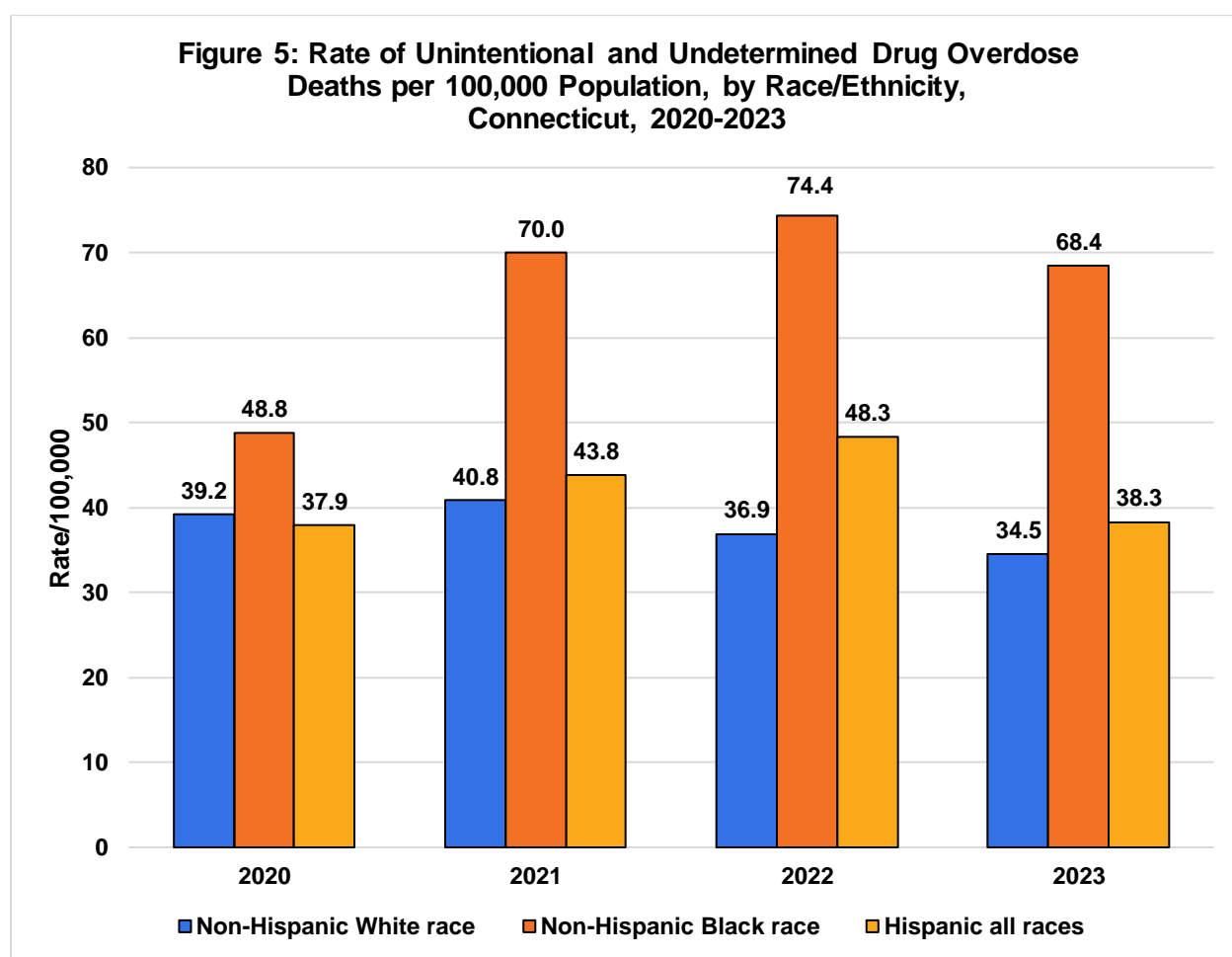
\*Data are as of the 2<sup>nd</sup> week of July 2024 and are subject to change

\*\*Designer benzodiazepines include bromazolam and flubromazolam

**4: Drug overdose death rates were higher in males compared to females during 2020 through 2023.** Rates of unintentional and undetermined intent drug overdose-related deaths were consistently higher among males when compared to females. The bar chart below (Figure 4) represents the rates of unintentional and undetermined intent drug overdose death by sex (rate per 100,000 sex-specific population) during 2020 through 2023. The data for 2023 show that drug overdose death rates in males and females trended lower compared to the previous years.

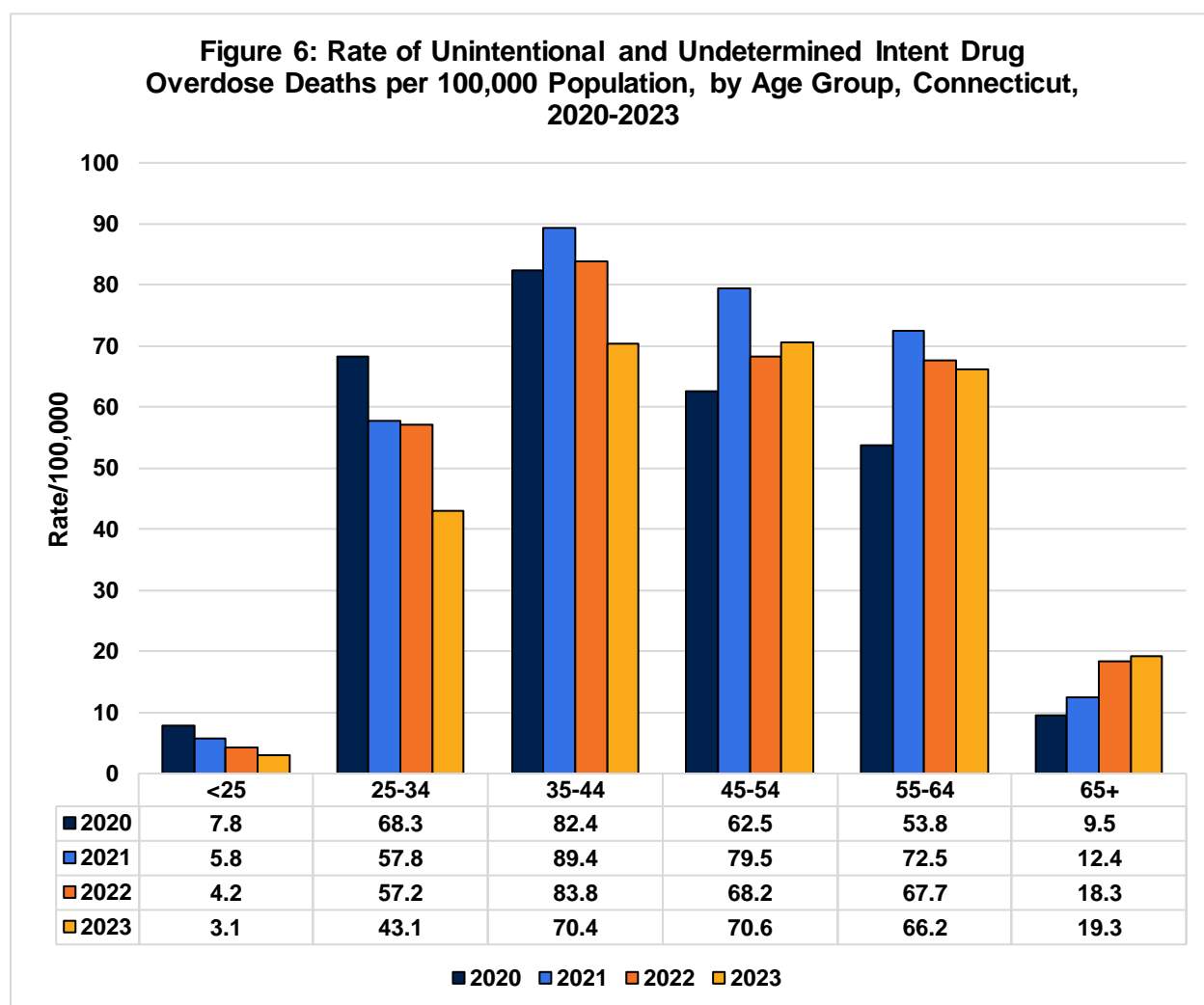


**5: Drug overdose death rates were higher among the non-Hispanic Black and Hispanic populations compared to the non-Hispanic White population.** Between 2021 and 2023, the unintentional and undetermined intent drug overdose mortality rate was substantially higher in the non-Hispanic Black population compared to 2020. The Hispanic population had a lower death rate in 2023 compared to the previous years of 2021 and 2022. The bar chart below (Figure 5) represents the unintentional and undetermined intent drug overdose mortality rate (per race/ethnicity-specific 100,000 population) in Connecticut, by race/ethnicity for years 2020-2023. Overall, year 2023 data show that rates decreased across all race/ethnicity populations compared to the previous years, 2021 and 2022.



Note: Hispanic ethnicity includes all races.

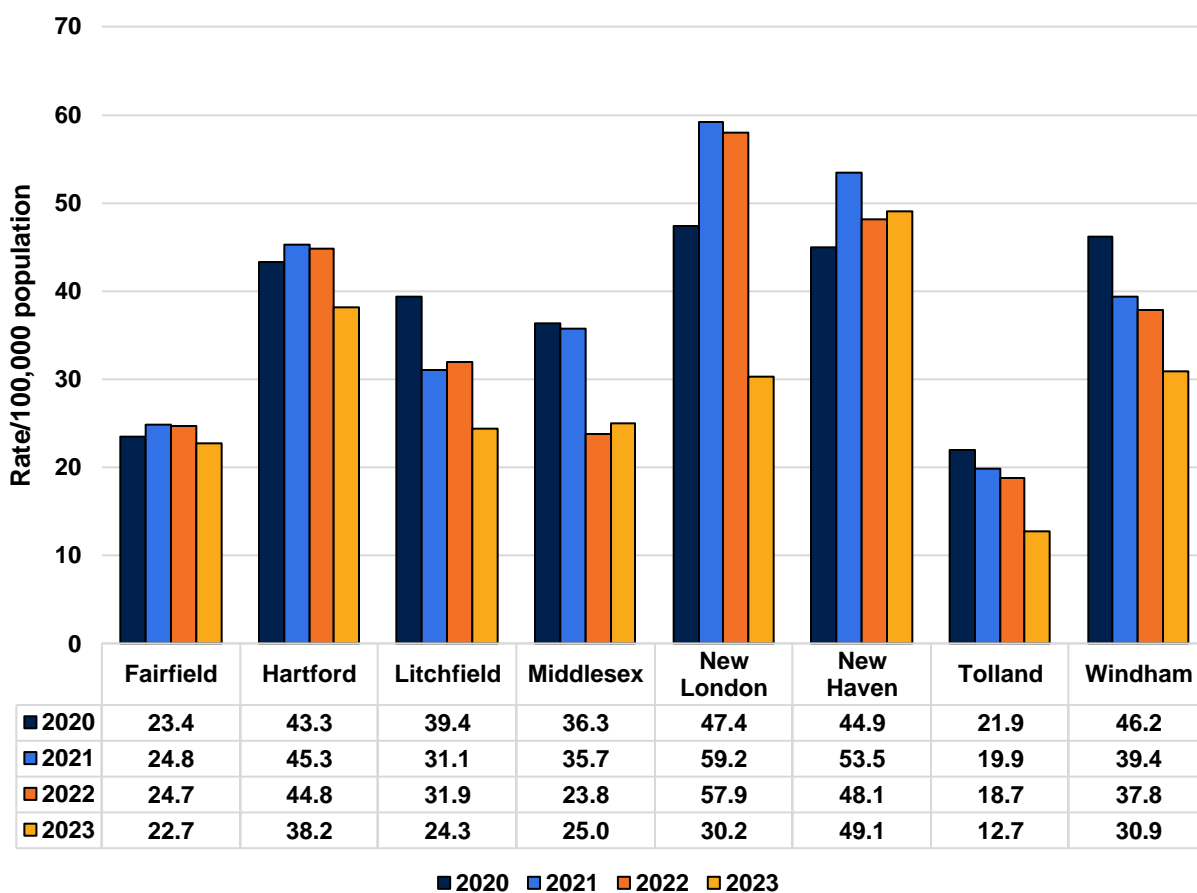
**6: Drug overdose death rates were highest in the 35–44- and 45-54-year-old age groups in Connecticut, 2020-2023.** Drug overdose death rates were calculated per 100,000 age-specific population and were highest among the middle-aged population, specifically the 35–44, 45–54 and 55–64-year-old age groups in 2020-2023. There was an increasing trend in the drug overdose death rate from 2020 through 2023\* for the 65+ year-old age group, while the other age groups were showed a decreasing trend since 2021 except for 45–54-year group. The chart below (Figure 6) represents the unintentional and undetermined intent drug overdose mortality rate in Connecticut, by age group, by year for 2020-2023.





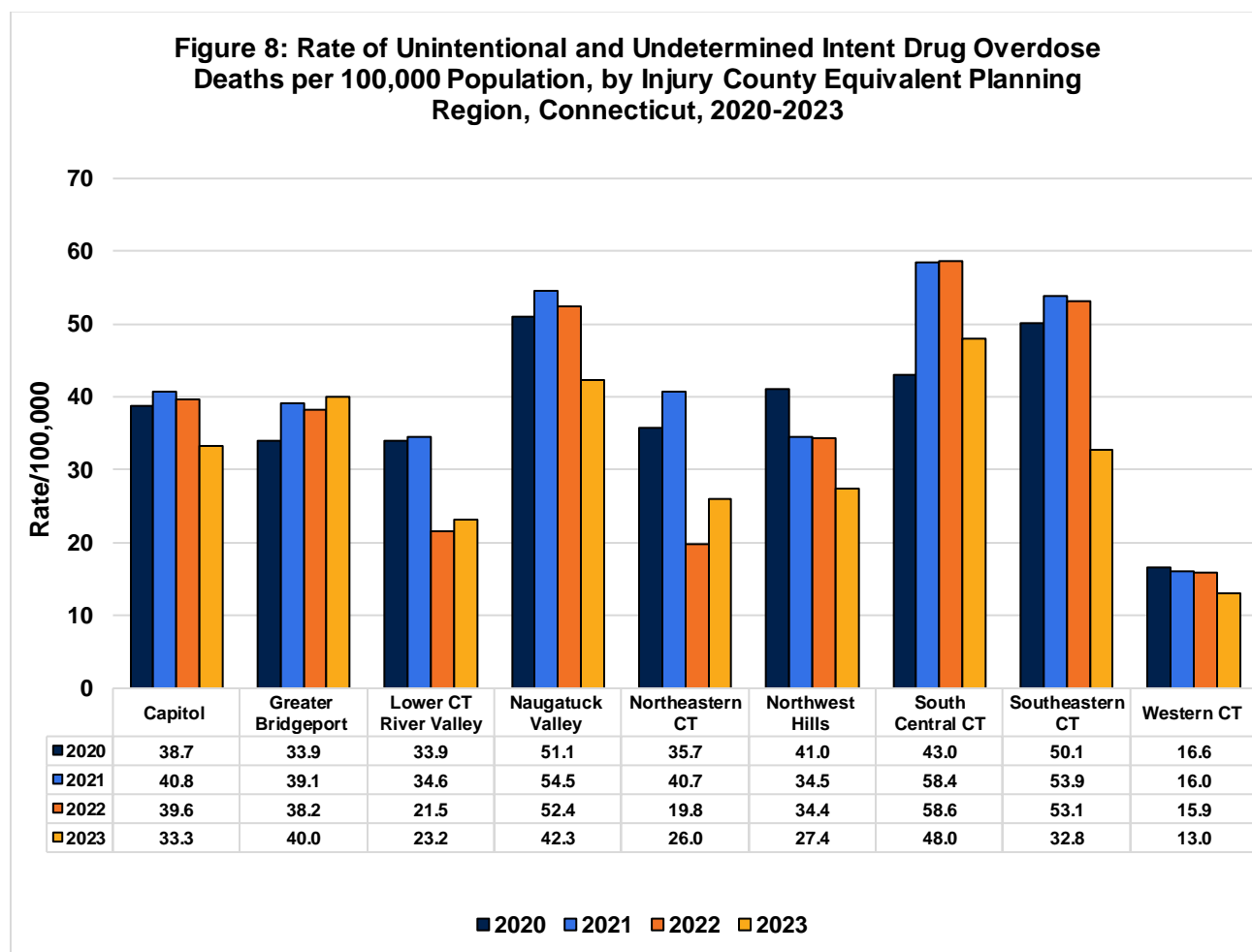
**7: Drug overdose death rates in Connecticut, by County of Injury, 2020-2023.** The chart below (Figure 7) represents the unintentional and undetermined intent drug overdose mortality rate in Connecticut, by injury county, for 2020-2023. The data show that New Haven County was trending up over a 4-year period compared to the other counties. Middlesex County had a big drop in 2022 and the rate remained low in 2023. Hartford County was trending up between 2020 and 2022 but had a drop in the 2023 rate. Tolland County and Fairfield County had the lowest death rates compared to the other counties in the last 4 years and Tolland County has seen a decline year over year since 2020.

**Figure 7: Rate of Unintentional and Undetermined Intent Drug Overdose Deaths per 100,000 Population, by Injury County, Connecticut, 2020-2023**

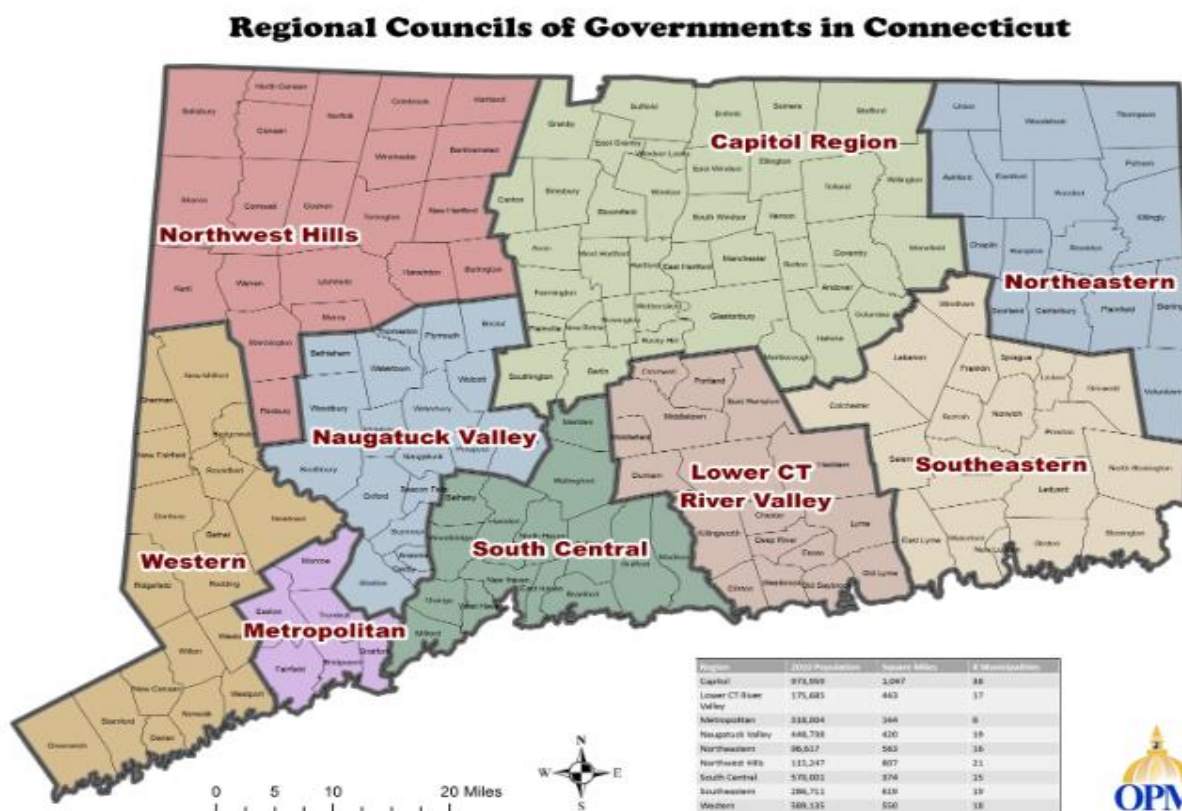


**8: Drug overdose death rates in Connecticut, by Injury County Equivalent Planning Region (CEPR), 2020-2023.** As shown in the chart below (Figure 8), the South-Central Connecticut CEPR (which includes major cities/towns such as New Haven, West Haven, and Meriden) had the highest drug overdose death rate in 2021-2022 followed by the Naugatuck Valley CEPR (which includes major cities/towns such as Waterbury and Bristol) in 2021. The lowest drug overdose death rates were seen in the Western Connecticut CEPR (which includes major cities/towns such as Danbury, Norwalk, and Stamford) and the Lower Connecticut River Valley CEPR (which includes the major city/town of Middletown) in 2020- 2023. Overall, the data from 2020 to 2023 show that Greater Bridgeport (also known as Metropolitan) is trending upwards over the past 4 years; Naugatuck Valley, Northwest Hills, and Western Connecticut show a decreasing trend. Please see the following website for more information on the CEPRs: <https://www.federalregister.gov/documents/2022/06/06/2022-12063/change-to-county-equivalents-in-the-state-of-connecticut>.

**Figure 8: Rate of Unintentional and Undetermined Intent Drug Overdose Deaths per 100,000 Population, by Injury County Equivalent Planning Region, Connecticut, 2020-2023**



**Note about the CEPRs:** In 2017, Connecticut requested the US Census Bureau to adopt the State's nine planning regions as county-equivalent geographic units for the purposes of collecting, tabulating, and disseminating statistical data, replacing the State's eight counties. Although the Connecticut planning regions and counties do not align perfectly, there is substantial overlap. The nine CEPRs are: Capitol Planning region, Greater Bridgeport (also known as Metropolitan), Lower Connecticut Valley, Naugatuck Valley, Northeastern Connecticut, Northwest Hills, South Central Connecticut, and Western Connecticut. By 2024, all internal and external Census Bureau operations and publications are expected to use the nine new planning region boundaries, names, and codes, except for 2020 decennial census data publications and other datasets referencing the eight legacy counties published before June 1, 2022. Weblink for map of Regional Councils of Governments in Connecticut: <https://libguides.ctstatelibrary.org/regionalplanning/maps>



Data last updated 08/21/2024  
 Injury and Violence Surveillance Unit  
 Community, Health, and Prevention Branch  
 Connecticut Department of Public Health

Data Source: Connecticut Office of the Chief Medical Examiner (OCME),  
 per CDC Overdose Data to Action for States grant guidelines for SUDORS data.