



# Opioid-Involved Overdose Deaths in Cook County, IL 2021

May 2025

In 2016, Cook County and Chicago Public Health Departments began working with the Cook County Medical Examiner's Office and Cook County Health to produce an annual joint report of the overall opioid overdose deaths throughout Cook County. This report describes opioid deaths from 2020 and 2021 that have gone through a fatality review process.

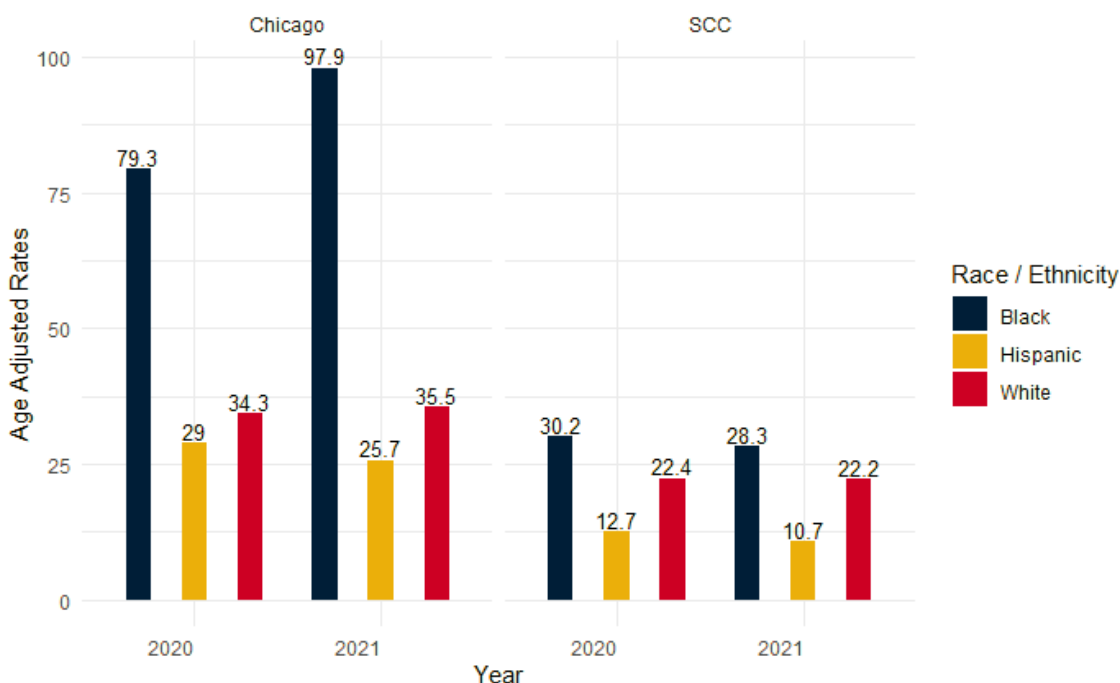
## OVERALL

In 2021, Cook County experienced 1,919 opioid-involved overdose deaths: 1,441 in Chicago and 442 in Suburban Cook County (SCC). During this period, SCC had an overall opioid-involved death rate of 18 per 100,000 people, and Chicago had a rate of 49.3 per 100,000 people, while Illinois had a rate of 24 per 100,000 people<sup>1</sup>, and the national rate was 24.7 per 100,000 individuals<sup>2</sup>. Chicago had about two times the rate of Illinois and the national average for opioid involved deaths. Chicago reported higher rates in 2021 compared with 2020 (49.3 and 47.8 per 100,000 people, respectively). While SCC reported similar rates in 2021 and 2020 (18 and 18.1 per 100,000 people, respectively).

## RACE & ETHNICITY\*

In 2021, Cook County, Illinois, there were variations in reported rates of opioid deaths among different racial and ethnic groups. In Suburban Cook County, the rate for Non-Hispanic African American or Black individuals decreased from 30.2 in 2020 to 28.3 per 100,000 in 2021 (a 3.9% decrease). Similarly, in the city of Chicago, Black individuals had the highest opioid-involved death rate of 97.9 per 100,000, representing a 18.3% increase from 2020 (79.3 per 100,000), as shown in Figure 1.

Figure 1: Rates of Opioid Deaths in Suburban Cook by Race / Ethnicity (2020 - 2021)



## SEX & AGE GROUP

In Cook County (2021), males had more than three times the rates of opioid-involved overdose deaths among females. In Chicago there were 77.2 per 100,000 for males compared with 22.9 per 100,000 for females. Similarly in Suburban Cook County, males had 27.7 deaths per 100,000 compared to 8.7 per 100,000 for females. In Chicago, individuals aged 55-64 had the highest rates at 140.4 per 100,000, followed by those aged 45-54 at 111.8 per 100,000. Both groups saw an increase in 2021. However, in Suburban Cook County, individuals who were 25-34 years old had the highest rates of opioid-involved overdose deaths compared to other age groups, with 34.7 per 100,000 individuals.

## TYPE OF OPIOID INVOLVED

In 2021, in Chicago, fentanyl had the highest rate of opioid-involved deaths at 45.1 per 100,000 individuals. Similarly, in Suburban Cook County, fentanyl was responsible for the highest rates of overdose deaths at 16 per 100,000 individuals. Both jurisdictions had an overall increased rate from 2020.

**Table 1: Percentage of all Opioid-involved Overdose Deaths by Opioid Type - Cook County, IL (2021)**

Opioid-Involved Types <sup>I</sup>	City of Chicago Population = 2,745,830 (n = 1,441)	Suburban Cook Population = 2,529,711 (n = 442)
Fentanyl-involved	1316 (91.3%)	389 (88.0%)
Heroin-involved	477 (33.1%)	124 (28.1%)
Opioid pain reliever-involved <sup>II</sup>	143 (9.9%)	66 (14.9%)
Methadone-involved <sup>III</sup>	89 (6.2%)	26 (5.9%)

Data Source: Cook County Medical Examiner's Office, 2020 U.S. Census Bureau

Note: Geographic designations are based on address of incident, regardless of decedent's residence address. Missing addresses were NOT accounted for in the calculations of frequencies and rates.

I Categories are not mutually exclusive as some deaths involved more than one type of opioid. Percentages will not add up to 100%.

II Opioid pain reliever: buprenorphine, codeine, hydrocodone, hydromorphone, meperidine, morphine, oxycodone, oxymorphone, or tramadol. Buprenorphine is included in this category, but it is not possible to determine if it was prescribed for pain or opioid use disorder treatment or used illicitly.

III Methadone: it is not possible to determine if methadone was prescribed for opioid use disorder treatment or used illicitly.

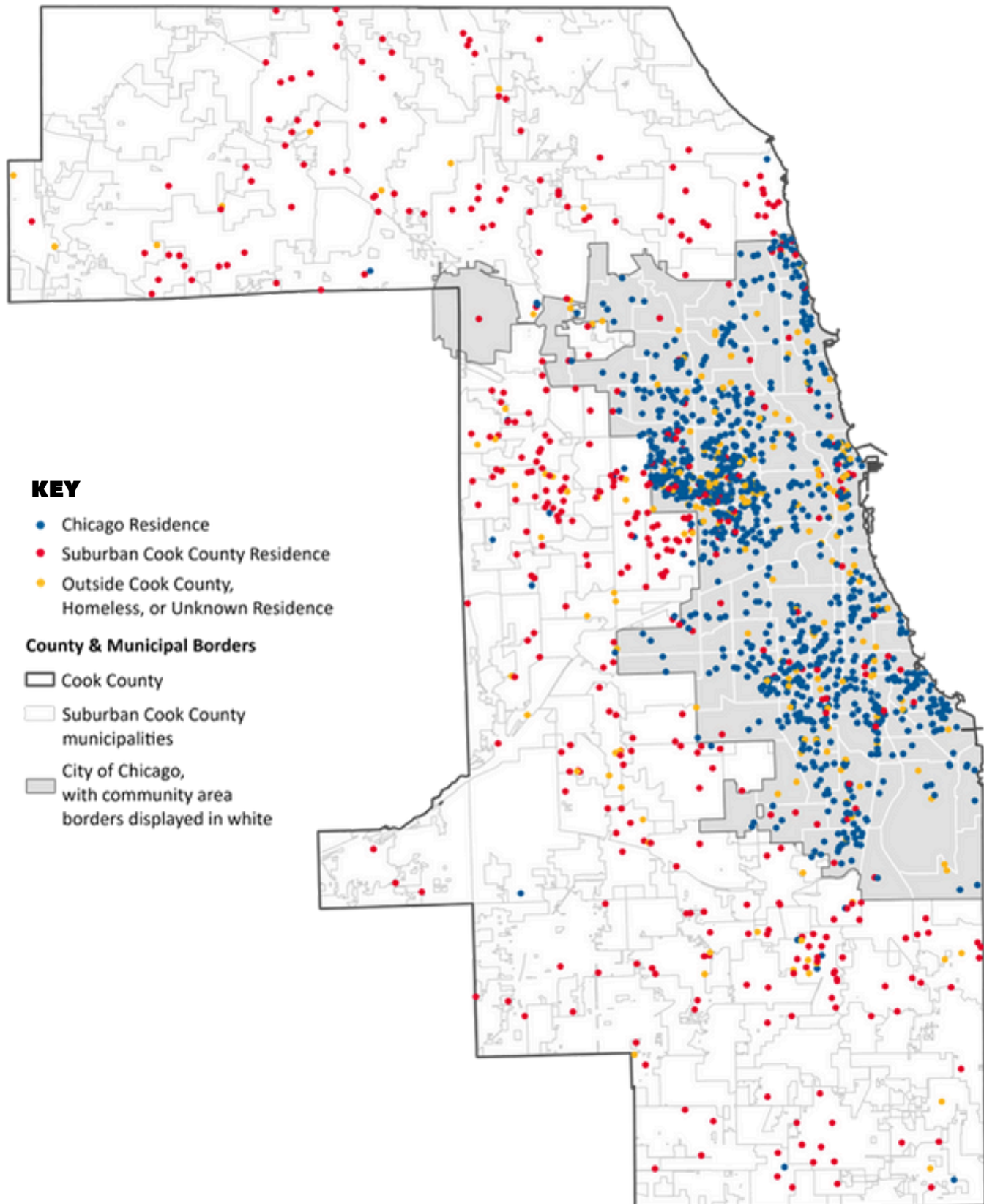
**Table 2: Opioid-Related Overdose Deaths by Residence, Cook County, IL (2021)**

Home Residence Locations	City of Chicago Population = 2,745,830 (n = 1,441)	Suburban Cook Population = 2,529,711 (n = 442)
Residence in Chicago	1,119 (78%)	30 (6.8%)
Homeless	8 (0.6%)	4 (0.9%)
Residence outside of Cook County	147 (10%)	44 (10.0%)
Residence in SCC	111 (7.7%)	356 (81%)
Residence Unknown	56 (3.9%)	8 (1.8%)

Beginning in 2016, the Cook County Medical Examiner's Office provided decedent's address of residence and of overdose incident. The address of residence is obtained from a variety of sources including the hospital records, police records, family, and government ID. Missing addresses were not accounted for in the calculations of frequencies and rates.



Figure 2: Opioid-Related Overdose Deaths by Incident Location



Data Source: Cook County Medical Examiner, US Census Bureau.  
Note: Dots do not represent exact incident addresses.



Table 3: Opioid Involved Overdose Deaths, Chicago and SCC, IL (2020 & 2021)

Opioid-involved overdose deaths by demographics								
INDICATOR	CHICAGO				SUBURBAN COOK COUNTY			
	2020		2021		2020		2021	
	#	RATE <sup>II</sup>	#	RATE <sup>II</sup>	#	RATE <sup>II</sup>	#	RATE <sup>II</sup>
<b>DRUG TYPE<sup>I</sup></b>								
All Opioids	1302	47.8	1441	49.3	487	18.1	442	18.0
Fentanyl-involved	1122	41.1	1316	45.1	405	15.1	389	16.0
Heroin-involved	637	23.6	477	16.3	107	6.2	124	4.9
Opioid-pain- reliever-involved <sup>III</sup>	109	3.7	143	5.0	74	2.7	66	2.7
Methadone-involved <sup>IV</sup>	131	4.8	89	3.0	37	1.3	26	1
<b>SEX<sup>V</sup></b>								
Male	1021	78.1	1100	77.2	357	26.9	332	27.7
Female	278	19.7	341	22.9	130	9.6	110	8.7
<b>RACE/ETHNICITY</b>								
No-Hispanic Black	745	79.3	881	97.9	127	30.2	122	28.3
Non-Hispanic White	342	34.3	333	35.5	290	22.4	250	22.2
Hispanic	199	29.0	213	25.7	63	12.7	61	10.7
Non-Hispanic Asian or Pacific Islander	6	3.3+	<5	++	<5	++	<5	++
<b>AGE</b>								
0-14	-	-	<5	++	-	-	<5	++
15-24	55	13.5	74	20.2	34	9.3	41	12.8
25-34	184	35.7	203	36.9	120	33.6	106	34.7
35-44	229	60.6	244	61.5	135	36.8	105	32.0
45-54	369	108.9	365	111.8	104	26.0	94	28.6
55-64	348	132.4	426	140.4	79	24.9	81	23.2
65-74	102	67.5	120	56.9	14	7.9+	11	4.3+
75+	-	-	7	5.0+	-	-	<5	++

Note: Geographic designations are based on address of incident, regardless of decedent's residence address. Due to differing methods used by CCDPH and CDPH to adjudicate fatality in their jurisdiction, the joint report's counts may differ from those reported by the Cook County Medical Examiner's Office. Missing addresses were NOT accounted for in the calculations of frequencies and rates.

I Categories are not mutually exclusive as some deaths involved more than one type of opioid.

II Rates express the number of overdose deaths per 100,000 people of corresponding population. Denominators are based on the 2020 census population. Rates are age-adjusted to the 2000 US standard population.

III Opioid pain reliever: buprenorphine, codeine, hydrocodone, hydromorphone, meperidine, morphine, oxycodone, oxymorphone, or tramadol. Buprenorphine is included in this category, but it is not possible to determine if it was prescribed for pain or opioid use disorder treatment or used illicitly.

IV Methadone: it is not possible to determine if methadone was prescribed for opioid use disorder treatment or used illicitly.

V Gender categories are not accounted for.

† Rates for counts less than 20 (although reported) should be interpreted with caution. Counts less than 5 are suppressed.