# Opioid-involved Overdose Deaths in Cook County, IL, (2020)

Cook County of Public Health
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June 2022

Beginning in 2016, the Chicago Department of Public Health and the Cook County Department of Public Health have worked with the Cook County Medical Examiner's Office and Cook County Health to issue a joint report on opioid overdose deaths in Cook County. This report includes opioid-involved deaths from 2019 and 2020.

# **OVERALL**

In 2020, Cook County experienced 1,789 opioid-involved overdose deaths: 1,302 in Chicago and 487 in suburban Cook County (SCC). This represents a 48% increase in opioid-involved overdose deaths in Cook County from the previous year. More specifically, there was an increase of 52% in Chicago and 25% in SCC. The 2020 death rate was 47.8 per 100,000 individuals in Chicago and 18.1 per 100,000 individuals in SCC. Compared to the death rate of 23.0 per 100,000 in Illinois and 21.4 per 100,000 nationally, Cook County's total death rate (combining both Chicago and SCC) of 29.9 per 100,000 was approximately 1.3 times higher.

#### **COVID-19 PANDEMIC**

Cook County saw an increase in opioid-involved overdose deaths from 2019 to 2020 consistent with national trends showing a sharp increase in opioid-involved overdose fatalities concurrent with the COVID-19 pandemic. For the duration of the stay at home order issued by the State of Illinois (March 21, 2020 to May 29, 2020) there were 122 opioid-involved overdose deaths within SCC, an 82% increase compared to the same dates in 2019. Chicago's stay at home order began March 21, 2020 and ended June 3, 2020; Chicago saw over twice as many opioid-involved overdose deaths compared to this time period in previous years, with 314 in 2020 and 149 in 2019.

#### **RACE & ETHNICITY\***

In Chicago, the opioid-involved overdose rate for Blacks was 79.3 deaths per 100,000, a 56% increase from 2019. While opioid-involved overdose rates increased among all racial and ethnic groups, the rate for Blacks in Chicago was over twice that of White or Hispanic individuals, and 24 times that of Asians. Additionally, the opioid-involved overdose rate for Hispanic residents of Chicago increased by almost 106% from 2019 to 2020 (see Table 3).

In SCC, the opioid-involved overdose rate for Blacks of 30.2 deaths per 100,00 was over 2 times the rate of Hispanics, 35% higher than the rate for Whites, and 15 times the rate of Asians. Opioid-involved overdose rates increased for Blacks, Whites, and Hispanics from 2019 to 2020.

# **SEX & AGE GROUP**

In both Chicago and SCC, men had overdose rates that were 3.9 and 2.8 times higher than women, respectively. Cook County had approximately a 34% higher gender disparity than the national rates where men had overdose rates that were 2.5 times higher than women. In Chicago among the youngest and oldest age groups, opioid-involved overdose deaths increased by more than 90%. In Chicago, those between 45 and 64 years old had the highest rates of opioid overdoses per 100,000. In SCC, there was an increase in these deaths for every age group. Deaths increased at the highest rate among those between 25 and 44 years old, with the number of deaths also increasing at an average of 43% within the one-year period.

# TYPE OF OPIOID INVOLVED

Fentanyl was involved in most opioid-involved overdose deaths in 2020 for both Chicago and SCC, at 86% and 83% of cases respectively. In Chicago, the rate increased by 63% going from 25.2 to 41.1 per 100,000 from 2019 to 2020. In SCC, the rate of overdose deaths involving fentanyl increased by 51% from 10.0 to 15.1 per 100,000 during the same period. Heroin-involved deaths increased by 27% in Chicago but decreased by 18% in SCC. Methadone-involved deaths increased by 85% and 64% in Chicago and SCC, respectively. Cook County's increases in methadone-involved deaths on average were 2.5 times higher than the national increase which was shown to be 29% from the prior year.

# TABLE 1: PERCENTAGE OF ALL OPIOID-INVOLVED OVERDOSE DEATHS BY OPIOID INVOLVED - COOK COUNTY, IL (2020)

Opioid Type <sup>i</sup>	City of Chicago (n=1,302)	Suburban Cook County (n=487)		
Fentanyl-involved	86.2%	83.2%		
Heroin-involved	49.0%	34.9%		
Opioid pain reliever- involved <sup>ii</sup>	8.4%	15.2%		
Methadone-involved <sup>iii</sup>	10.1%	7.6%		

Data Source: Cook County Medical Examiner's Office.

Note: Geographic designations are based on address of incident, regardless of decedent's address of residence.

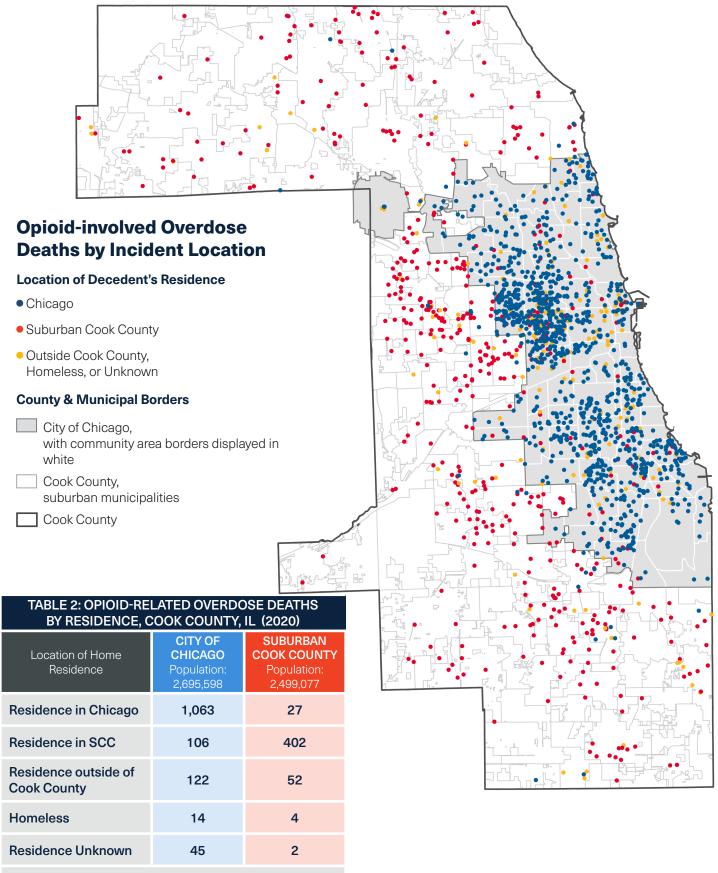
<sup>i</sup> Categories are not mutually exclusive as some deaths involved more than one type of opioid. Percentages will not add to 100%.

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

<sup>\*</sup> Please note that the terms "Black," "White," "Hispanic" and "Asian" used in this section correspond to the racial-ethnic definitions seen in Table 3.







Beginning in 2016, the Cook County Medical Examiner provided decedent's address of residence in addition to address of overdose incident. The address of residence is obtained from a variety of sources including the hospital records, police records, family, and government ID.





TABLE 3: OPIOID-INVOLVED OVERDOSE DEATHS - COOK COUNTY, IL (2020)											
	City of Chicago Population: 2,695,598			Suburban Cook County Population: 2,499,077			All Cook County Population: 5,194,675				
DRUG TYPE <sup>I</sup>	#	Rate <sup>ii</sup>	% change in rate from 2019	#	Rate <sup>ii</sup>	% change in rate from 2019	#	Rate <sup>ii</sup>	% change in rate from 2019		
All Opioids	1,302	47.8	51.3%	487	18.1	28.1%	1,789	29.9	47.1%		
Heroin-involved	637	23.6	26.9%	170	6.2	-18.3%	807	13.5	19.9%		
Fentanyl-involved	1,122	41.1	63.1%	405	15.1	50.8%	1,527	25.5	62.4%		
Opioid pain reliever- involved <sup>iii</sup>	109	3.7	85.0%	74	2.7	1.8%	183	3.1	46.6%		
Methadone-involved	131	4.8	84.6%	37	1.3	64.0%	168	2.8	87.6%		
SEXIV											
Male	1,021	78.1	58.1%	357	26.9	25.9%	1,378	47.7	52.1%		
Female	278	19.7	31.3%	130	9.6	32.0%	408	13.4	34.1%		
RACE-ETHNICITY											
Non-Hispanic Black or African-American	745	79.3	56.1%	127	30.2	63.9%	872	63.6	57.4%		
Non-Hispanic White or Caucasian	342	34.3	27.9%	290	22.4	29.4%	632	23.7	27.6%		
Hispanic or Latino	199	29	105.7%	63	12.7	53.2%	262	23.3	95.1%		
Non-Hispanic Asian or Pacific Islander	6	3.3+	83.3%	<5	++	-28.4%	10	2.5	7.8%		
AGE											
15-24	55	13.5	95.7%	34	9.3	0.6%	89	10.5	53.5%		
25-34	184	35.7	57.3%	120	33.6	36.2%	304	32.0	55.1%		
35-44	229	60.6	40.6%	135	36.8	50.8%	365	45.1	49.2%		
45-54	369	108.9	32.6%	104	26	10.6%	473	60.4	28.5%		
55-64	348	132.4	64.1%	79	24.9	23.3%	427	70.5	55.8%		
65-74	102	67.5	92.3%	14	7.9	5.20%	116	34.15	75.8%		

**Data Source:** Cook County Medical Examiner's Office, US Census Bureau. Annual review of fatality data by CCDPH, CDPH and the Medical Examiner's Office was completed in 2022. **Note:** Geographic designations are based on address of incident, regardless of decedent's address of residence. Due to differing methods used by CCDPH and CDPH to adjudicate if fatality jurisdiction, joint report counts may differ from those reported by the Medical Examiner's Office.

#### Reported by

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# **Cook County Resources for Opioid-involved Overdose Prevention:**

- Chicago Department of Public Health (CDPH): overcomeopioids.org
- Cook County Department of Public Health (CCDPH): bit.ly/SCCopioids
- Illinois Department of Human Services (IDHS) Helpline for Opioids and Other Substances: 1-833-234-6343 (HELP) or helplineil.org/app/home

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

ii Rates express the number of overdoses per 100,000 people in the population. Denominators are based on the 2010 census population. Rates are age-adjusted to the 2000 US standard population.

iii Opioid pain reliever: buprenorphine, codeine, hydrocodone, hydrocodone, meperidine, morphine, oxycodone, oxymorphone, or tramadol. Although buprenorphine is included in this category, it is not possible to determine if it was prescribed for pain, dispensed for opioid disorder treatment, as it is approved for both.

lv Please note that the Office of the Cook County Medical Examiner only collects data information on decedent sex, therefore other gender identities may not be accounted for in this data.

<sup>+</sup> For counts less than 20, rates may be unstable and should be interpreted with caution.

<sup>++</sup> For counts less than 5, rates are not reported.

<sup>&</sup>lt;sup>2</sup> Chicago Department of Public Health

<sup>&</sup>lt;sup>3</sup> Cook County Medical Examiner's Office <sup>4</sup> Cook County Health