



# Health Alert



City of Chicago  
Lori E. Lightfoot, Mayor

[www.chicagohan.org](http://www.chicagohan.org)

Chicago Department of Public Health  
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November 5, 2020

## Mental Health Report: Trends in Suicide-Related Events, Chicago, 2016-2020

### Key Messages and Action Steps

- Suicide was the tenth leading cause of death for all ages in the United States.
- Resources for individuals experiencing suicidal thoughts: National Alliance for Mental Illness (NAMI) Chicago Helpline at 1-833-626-4244 and National Suicide Prevention Lifeline 1-800-273-TALK (8255)
- Resources for clinicians to recognize those at risk for suicide: [Ask Suicide-Screening Questions \(ASQ\) Toolkit](#) and [Patient Safety Screener](#)

**Background:** The importance of addressing mental health concerns has been receiving increased recognition during the current COVID-19 pandemic. According to the [Centers for Disease Control and Prevention \(CDC\) WISQARS Leading Causes of Death Reports](#)<sup>1</sup> most recent report in 2018, suicide is the tenth leading cause of death for all ages in the United States. Suicide and other forms of suicidal self-directed violence are a persistent public health problem in the U.S.

**Definitions:** Suicide is defined by the National Institute of Mental Health (NIMH) as death caused by self-directed injurious behavior with intent to die as a result of the behavior. Suicide attempt is defined by the NIMH a non-fatal, self-directed, potentially injurious behavior with intent to die as a result of the behavior.

**Risk Factors:** Mental health conditions are a known risk factor for suicide, but they are not a stand alone risk factor for suicide. There is always an interplay between multiple converging factors. The main risk factors<sup>1</sup> for suicide are:

- A prior suicide attempt
- Depression and other mental health disorders
- Substance abuse disorder
- Family history of a mental health or substance abuse disorder
- Family history of suicide
- Family violence, including physical or sexual abuse
- Having guns or other firearms in the home
- Being in prison or jail
- Being exposed to others' suicidal behavior, such as a family member, peer, or media figure
- Medical illness
- Being between the ages of 15 and 24 years or over age 60

Most people with risk factors do not attempt suicide and it is difficult to predict who will act on their suicidal thoughts.

**Prevention:** Interventions targeting key risk factors for suicide been shown to prevent the incidence of suicidal ideation. Universal screening for suicide risk is a powerful intervention to detect those at increased risk. The [Ask Suicide-Screening Questions \(ASQ\) Toolkit](#), is a resource for use in medical settings that can help providers successfully identify individuals at risk for suicide. Another resource is the [Patient Safety Screener](#) and can be administered to all patients who present to an acute care setting, regardless of their chief complaint. [Zero Suicide](#) is a quality improvement model that transforms system-wide suicide prevention and care to save lives; where a discussion on [Suicide-Specific Brief Interventions](#) can be found. [Safety Planning](#) is one brief intervention that can provide people who are experiencing suicidal ideation with a specific set of concrete strategies to use in order to decrease the risk of suicidal behavior.

This year, [International Survivors of Suicide Loss Day](#) is Saturday, November 21, 2020. International Survivors of Suicide Loss Day is an event in which survivors of suicide loss come together to find connection, understanding, and hope through their shared experience.

The National Council for Suicide Prevention (NCSP) launched the [Take 5 to Save Lives](#) campaign, which encourages everyone to take 5 minutes out of their day and complete five action items to recognize signs of suicide, to help those exhibiting those signs, and actions to promote mental wellbeing. The five action items are: 1. Learn the warning signs, 2. Do your part, 3. Practice self-care, 4. Reach out, and 5. Spread the word.

1. National Institute of Mental Health: 'Suicide in America: Frequently Asked Questions' <https://www.nimh.nih.gov/health/publications/suicide-faq/index.shtml>



# Trends in Suicide-Related Events, Chicago, 2016-2020

## Introduction:

The importance of addressing mental health concerns has been receiving increased recognition during the current COVID-19 pandemic. In this report, the Bureau of Behavioral Health and the Office of Epidemiology at the Chicago Department of Public Health (CDPH) present data on the prevalence of suicide deaths and suicide attempts. The goal of this report is to compare recent trends in suicide deaths and suicide attempts from January to August 2020 (8 months) to trends from the same timeframe in previous years. Suicide deaths were compared to data from 2016-2019 but due to limitations in the data source for Emergency Department (ED) visits<sup>1</sup>, suicide attempts are compared to 2019 data. Suicide deaths were confirmed by the Cook County Medical Examiner and do not include accidental drug overdoses. Suicide attempts were identified in medical records from EDs throughout Chicago using an algorithm developed by subject matter experts recruited by the Centers for Disease Control and Prevention.

<sup>1</sup> Data Source: Illinois Hospital Emergency Departments through the National Syndromic Surveillance Project (NSSP). <https://www.dph.illinois.gov/topics-services/provider-partner-resources/public-health-reporting>

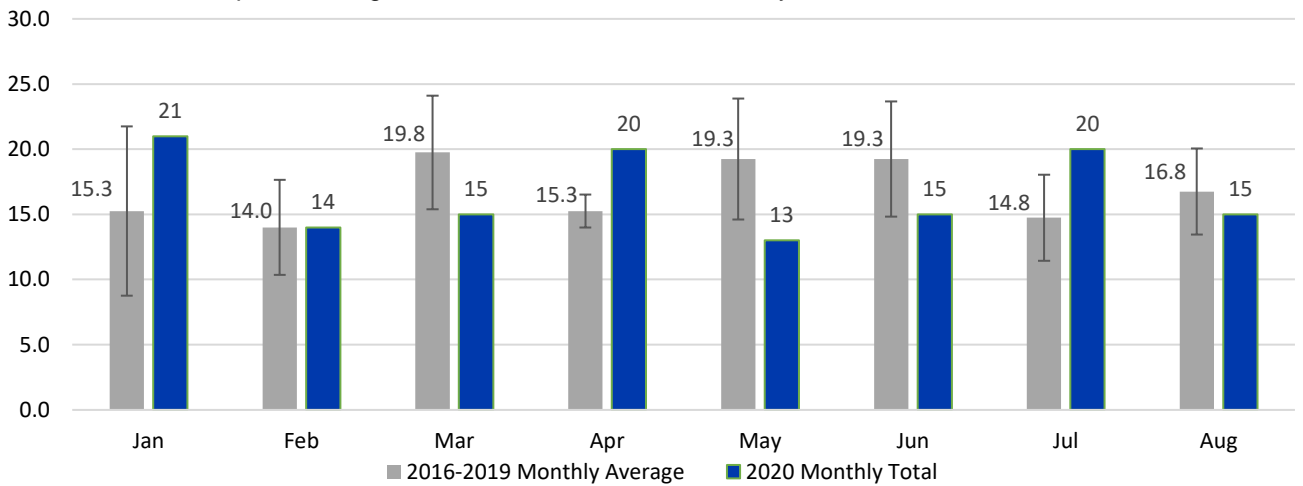
## Resources: Where can you find help?

- National Alliance for Mental Illness (NAMI-Chicago): <https://www.namichicago.org>; call the NAMI-Chicago Helpline at 833-626-4244 M-F: 9am – 8pm; Sat/Sun: 9am-5pm
- National Suicide Prevention Lifeline (<https://suicidepreventionlifeline.org/>): 1-800-273-TALK (8255)
- If you or a loved one are suffering from Depression or Bipolar Disorder, the DBSAlliance is here to provide support during this time: [www.dbsalliance.org](http://www.dbsalliance.org)
- Chicago Department of Public Health Mental Health Centers: 312-747-1020, M-F 8:30am-4:30pm, CT (Teletherapy available).

## Suicide Deaths:

### Figure 1. Suicide Deaths by Month, January to August 2016-2020

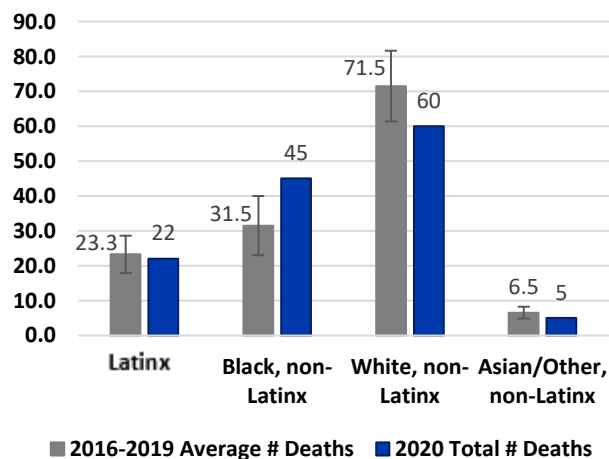
As of August 31, 2020, there have been 132 suicide deaths among Chicago residents this year. In six of the first eight months (except for April & July), the 2020 monthly totals were not higher than monthly totals<sup>1</sup> in 2016-2019. All suicide deaths reported in Figures 1-4 are from the Cook County Medical Examiner.



<sup>1</sup>The standard deviation of 4-year average totals (2016-2019) for each month is indicated by error bars.

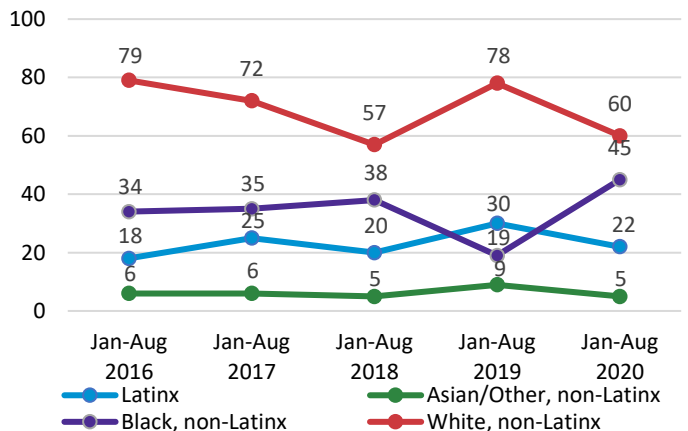
### Figure 2a. Suicide Deaths by Race/Ethnicity, January to August 2016-2020

When compared to average totals during the same timeframe from 2016-2019, the number of suicide deaths in 2020 is higher among non-Latinx (NL) Blacks but decreased among other race/ethnicity groups.



### Figure 2b. Suicide Deaths by Race/Ethnicity, January to August 2016-2020

From 2016-2020, suicides are highest among non-Latinx (NL) Whites. However due to the decrease in 2019 and subsequent increase in 2020 in suicides among NL Blacks, the difference in the number of suicides between NL Whites and NL Blacks decreased by 75% from 2019 to 2020.



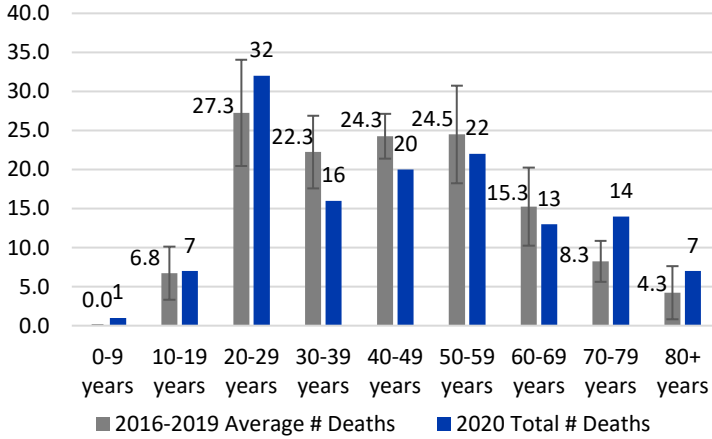


# Trends in Suicide-Related Events, Chicago, 2016-2020

## Suicide Deaths, continued:

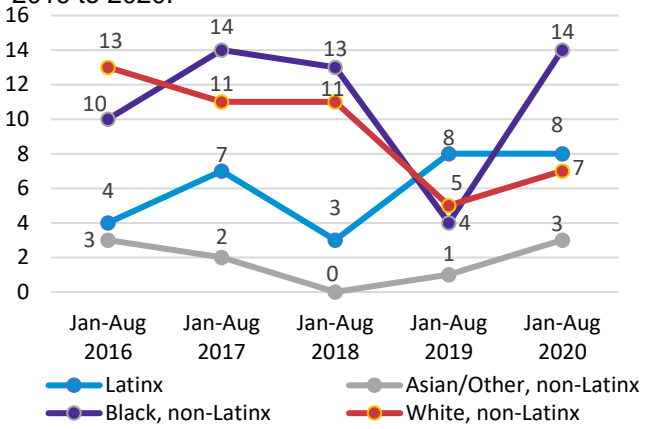
**Figure 3. Suicide Deaths by Age, January to August 2016-2020**

When compared to the average number of deaths from 2016-2019, suicides in 2020 were marginally higher among those 20-29 years old (y.o.) and higher among those over 69 y.o.



**Figure 4. Suicide Deaths Among 20-29 y.o. Adults, January to August 2016-2020**

In 2017, 2018 and 2020, suicide deaths among those 20-29 y.o. were highest among Black, non-Latinx adults. However the difference in the number of suicides between NL Blacks and any other race-ethnicity group was the greatest from 2019 to 2020.



**Table 1. Suicide Death Characteristics, January to August 2016-2020**

When compared to 4-year average rates from 2016-2019, the highest increases in 2020 suicide death rates were seen among non-Latinx Blacks (+42.9%) and adults 70 years old and over (+68.0%). Suicides by “gunshot wounds of or to the head” accounted for 27.3% of all suicides and was the leading primary cause of suicide deaths in 2020. When compared to 4-year average totals from 2016-2019, suicides by gunshot head wounds also increased by 28.5% in 2020.

	January-August 2016-2019			January-August 2020 <sup>i</sup>			2020 Rate Higher: Y/N
	Average Number (n)	Average Percent (%)	Average Rate <sup>ii</sup>	n	%	Rate <sup>ii</sup>	
Chicago	132.8	100.0%	4.9	132	100.0%	4.9	N
<b>Gender</b>							
Male	101.5	76.5%	7.7	103	78.0%	7.8	Y (+ 1.5%)
Female	31.3	23.5%	2.3	29	22.0%	2.1	N
<b>Race-Ethnicity</b>							
White, non-Latinx	71.5	53.7%	7.9	60	45.5%	6.7	N
Black, non-Latinx	31.5	24.0%	4.0	45	34.1%	5.7	Y (+ 42.9%)
Latinx	23.3	17.5%	3.0	22	16.7%	2.8	N
Asian/Other, non-Latinx	6.5	4.9%	<sup>iii, iv</sup> 3.8	5	3.8%	<sup>iii, iv</sup> 3.3	N
<b>Age</b>							
0-17 years	4.5	3.5%	0.8	6	4.5%	<sup>iii, iv</sup> 1.1	N
18-29 years	29.5	22.3%	5.3	34	25.8%	6.1	Y (+ 15.3%)
30-39 years	22.3	16.7%	4.9	16	12.1%	3.5	N
40-49 years	24.3	18.4%	7.2	20	15.2%	5.9	N
50-59 years	24.5	18.4%	7.8	22	16.7%	7.0	N
60-69 years	15.3	11.4%	5.8	13	9.8%	4.9	N
70+ years	12.5	9.4%	<sup>iv</sup> 1.4	21	15.9%	2.3	Y (+ 68.0%)
<b>Primary Cause Categories<sup>v</sup></b>							<b>2020 Higher: Y/N</b>
GUNSHOT WOUND OF/TO HEAD	28.0	21.2%	-----	36	27.3%	-----	Y (+ 28.5%)
OTHER	38.3	28.9%	-----	35	26.5%	-----	N
HANGING	29.8	22.4%	-----	31	23.5%	-----	Y (+ 5.0%)
ASPHYXIA/ASPHYXIATION	20.5	15.3%	-----	15	11.4%	-----	N
MULTIPLE INJURIES FROM FALL/JUMP FROM HEIGHT	10.3	7.7%	-----	14	10.6%	-----	Y (+ 38.5%)
TOXICITY	6.0	4.5%	-----	1	0.8%	-----	N

<sup>i</sup> This count comes from the Cook County Medical Examiner’s office as of 8/31/20. Numbers are provisional and subject to change.

<sup>ii</sup> Data source: ACS 1-year estimates, 2018

<sup>iii</sup> This rate is normally suppressed due to low cell count (<10).

<sup>iv</sup> This rate is statistically unstable due to low cell count (<20); caution should be used when comparing to other rates.

<sup>v</sup> Primary cause was categorized based on frequency to determine top 5 leading causes of suicide deaths. Deaths due to toxicity include a variety of substances including but not limited to opioid and non-opioid drugs. Route of administration could be oral, inhalation or injection.



# Trends in Suicide-Related Events, Chicago, 2016-2020

## Suicide Attempts:

**Table 2. Emergency Department (ED) Visits for Suicide Attempts,<sup>i</sup> Demographics, January to August 2019-2020**

In 2020, males, non-Latinx Blacks, and 18-29 y.o. adults had the highest ED visit rates for suicide attempts. When compared to 2019, the highest increases for suicide attempt rates in 2020 were among those 70 years old and over (+36.7%). The ED visit rate for all types of emergencies decreased by 17.4% for this timeframe from 2020 to 2019 but by only 3.9% for suicide attempts. Given the decrease in the overall visit rate, any increase in visit rates becomes more remarkable.

	January-August 2019			January-August 2020			2020 Rate Higher: (Y/N)
	n	%	Rate <sup>ii</sup>	n	%	Rate <sup>ii</sup>	
<b>ED Visits</b>							
Chicago	3,592,312	100.0%	1.3	2,965,902	100.0%	1.1	N (- 17.4%)
<b>Suicide Attempt ED Visits</b>							
Chicago	1893	100.0%	70.0	1820	100.0%	67.3	N (- 3.9%)
<b>Gender</b>							
Female	973	51.4%	70.2	892	49.0%	64.4	N
Male	920	48.6%	69.7	927	50.9%	70.2	Y (+ 0.7%)
<b>Age</b>							
<18 years	264	14.0%	48.1	247	13.6%	45.0	N
18-29 years	631	33.3%	114.1	635	34.9%	114.8	Y (+ 0.6%)
30-39 years	349	18.4%	76.5	329	18.1%	72.1	N
40-49 years	236	12.5%	70.1	229	12.6%	68.1	N
50-59 years	276	14.6%	88.2	228	12.5%	72.9	N
60-69 years	107	5.7%	40.7	111	6.1%	42.2	Y (+ 3.7%)
70+ years	30	1.6%	3.3	41	2.3%	4.5	Y (+ 36.7%)
<b>Race-Ethnicity</b>							
White, non-Latinx	504	26.6%	56.0	446	24.5%	49.6	N
Black, non-Latinx	904	47.8%	115.3	821	45.1%	104.7	N
Latinx	326	17.2%	42.0	320	17.6%	41.2	N
Asian, non-Latinx	27	1.4%	15.0	25	1.4%	13.9	N
Other, non-Latinx	132	7.0%	110.5	<sup>iv</sup> 208	11.4%	<sup>iv</sup> 174.1	<sup>iv</sup> NR

<sup>i</sup>Data Source: National Syndromic Surveillance Program (NSSP)

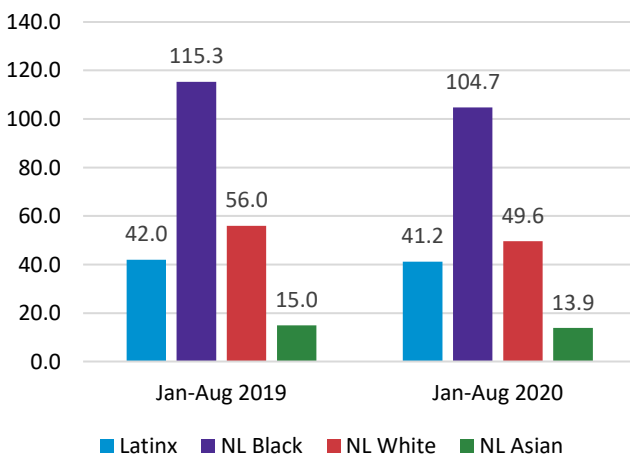
<sup>ii</sup>Crude Rate = #ED visits per 100,000 residents; Data source: ACS 1-year estimates, 2018

<sup>iii</sup>This rate is statistically unstable due to low cell count (<20); caution should be used when comparing to other rates.

<sup>iv</sup>The count and consequently the rate for Other, non-Latinx may be inflated due to changes in one hospital's reporting system for race and ethnicity; Therefore, this rate change is not reported (NR).

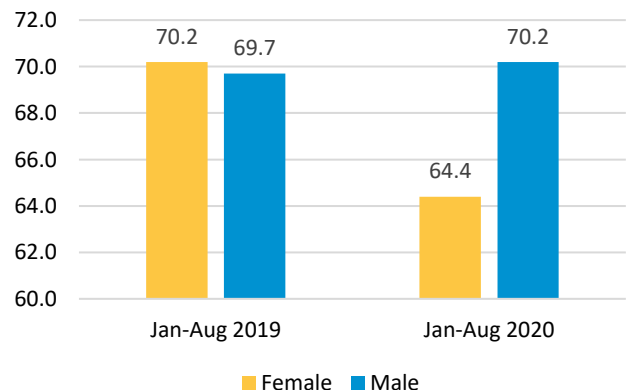
**Figure 5. Rate of Suicide Attempts by Race/Ethnicity, January to August 2019-2020**

ED visit rates for suicide attempts were highest among non-Latinx Black residents in both 2019 and 2020.



**Figure 6. Rate of Suicide Attempts by Gender, January to August 2019-2020**

ED visit rates for suicide attempts were higher among females than males in 2019 but higher among males than females in 2020. Although this rate remained about the same for males, the ED visit rate among females decreased by 8.3%.



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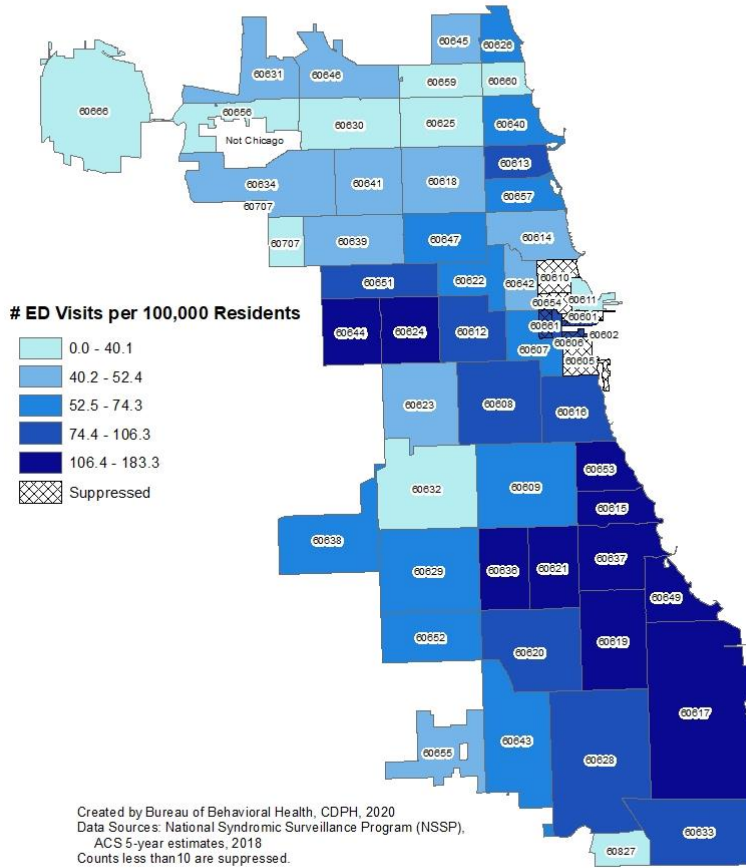
# Trends in Suicide-Related Events, Chicago, 2016-2020

## Suicide Attempts, continued:

**Figure 5. Suicide Attempts by Community Area, January to August 2019-2020**

As of August 31, 2020, there have been 1820 emergency department (ED) visits made by 1708 Chicago residents for suicide attempts in 2020. Residents from the south and west regions of the city visited EDs for suicide attempts at higher rates than those from other regions in the city.

**Emergency Department (ED) Visits for Suicide Attempts, Chicago, January to August 2019 (n=1893)**



**Emergency Department (ED) Visits for Suicide Attempts, Chicago, January to August 2020 (n=1820)**

