

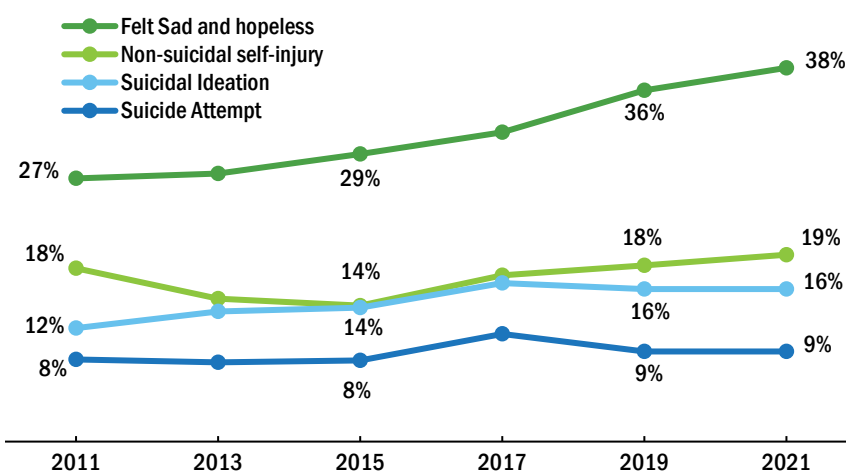
## Suicide-related factors among New York City Public High School Students

Suicide has been associated with factors such as previous suicide attempts, suicidal ideation (thinking about suicide), feelings of sadness and hopelessness, symptoms of depression, and hurting oneself on purpose without wanting to die.<sup>1</sup> Identification of high school students who may be at higher risk for experiencing these related factors is critical for suicide prevention. Equally important is understanding that some youth may be at higher risk due to the specific stressors they face, such as discrimination. For example, sexual and gender minority youth (SGM), many of whom experience discrimination due to their orientation and/or identity, are at higher risk of experiencing suicidal risk factors.<sup>2</sup> This brief presents data from the New York City (NYC) Youth Risk Behavior Survey (YRBS) on NYC public high school students who reported suicide-related factors and identifies those groups who may be at higher risk of suicide. This brief will also present data about students who reported suicide-related factors and COVID-19 stressors experienced during the pandemic.

### Three out of four self-reported suicide-related factors have increased among New York City public high school students from 2011 to 2021

- Between 2011 and 2021, the percentage of students who reported they attempted suicide remained stable. However, during the same time frame, there was an increase in the percentage of students who reported feeling sad and hopeless, non-suicidal self-injury, and suicidal ideation.

**Trends of reported suicide-related factors among New York City public high school students, 2011-2021**



Source: New York City Youth Risk Behavior Survey, 2011-2021

#### Definitions:

**Suicide-related factors** refers to students who responded “yes” to YRBS questions as follows:

- Suicidal ideation** is defined as reporting having seriously considered attempting suicide in the 12 months prior to survey.
- Suicide attempt** is defined as reporting having attempted suicide one or more times in the 12 months prior to survey.
- Feeling sad and hopeless** is defined as reporting having felt sad or hopeless almost every day for two weeks or more in a row during the past 12 months so that they stopped doing some usual activities.
- Non-suicidal self-injury** is defined as reporting having done something to purposely hurt themselves without wanting to die (such as cutting or burning themselves on purpose)

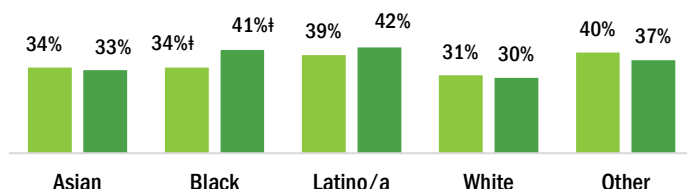
**Sexual and Gender Minority (SGM)** For the purpose of this publication SGM includes students who identified as transgender, unsure if transgender; gay, lesbian, identifies sexual orientation in some other way. Non-SGM students identified as not transgender, heterosexual/straight.

**Data Source: 2011 to 2021 NYC High School NYC Youth Risk Behavior Surveys (YRBS)** were self-administered, anonymous surveys conducted in NYC public high schools by the Health Department and the NYC Department of Education. The 2019 YRBS had 9,534 respondents, 2021 YRBS has 3,944 respondents. For more survey details, visit <https://www1.nyc.gov/site/doh/data/data-sets/nyc-youth-risk-behavior-survey.page> The trends of reported suicide-related factors among New York City public high school students, 2011-2021 are based on linear test for trends. Comparisons within groups were based on t-test analysis. Statistically significant difference inferred at p-value <0.05.

\*Estimate marked with an asterisk should be interpreted with caution. Estimate’s Relative Standard Error (a measure of estimate precision) is greater than 30%, or the 95% Confidence Interval half-width is greater than 10 or the sample size is too small, making the estimate potentially unreliable.

## The proportion of Black teens in New York City who felt sad and hopeless increased from 34% in 2019 to 41% in 2021

### Prevalence of sadness and hopelessness by race/ethnicity among New York City youth, 2019 and 2021



Asian, Black, White, and Other race categories exclude Latino/a ethnicity. Latino/a includes Hispanic or Latino/a of any race. Other race includes students who self-identified as American Indian, Native Hawaiian/other Pacific Islander and multiple races.

† denotes statistically significant difference between 2019 and 2021

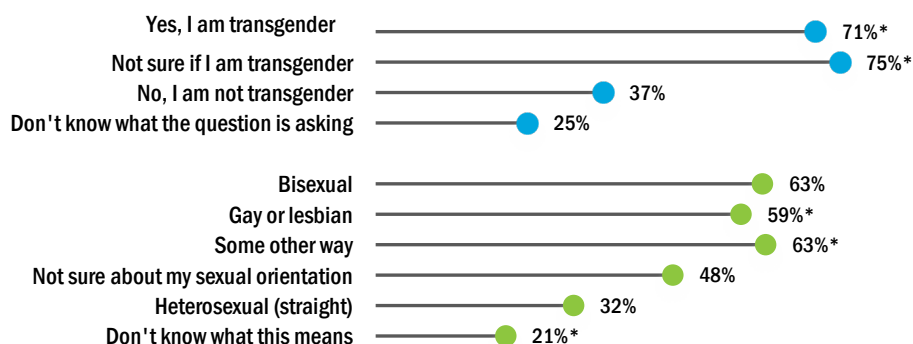
Source: New York City Youth Risk Behavior Survey, 2019-2021

- In 2019, students who identified as Latino/a, and those that identified as American Indian, Native Hawaiian, Pacific Islander and/or multi-racial (collectively defined as Other race) were both more likely than White students to report feeling sad and hopeless (39% and 40% vs. 31%, respectively).
- In 2021, Latino/a (42%), and Black (41%) students were more likely than White students (30%) to report feeling sad and hopeless.

## Sexual and gender minority high school students were more likely than non- sexual and gender minority students to report feeling sad and hopeless in 2021

- In 2021, transgender high school students (71%\*) and those who were not sure if they are transgender (75%\*) were more likely than non-transgender students (37%) to report feeling sad or hopeless.
- Similarly, compared with heterosexual students (32%), those that identified as bisexual (63%), gay or lesbian (59%), or some other way (63%\*) were more likely to report feeling sad or hopeless.

### Prevalence of feeling sad and hopeless by sexual orientation and gender identity among NYC youth, 2021



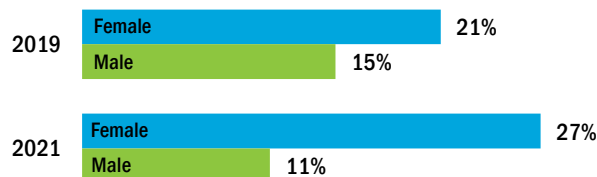
\*Estimate should be interpreted with caution due to small sample size.

Source: New York City Youth Risk Behavior Survey, 2021

## Female high school students were more likely than male students to report non-suicidal self-injury in both 2019 and 2021

- In 2019 and 2021, female students (21% and 27%, respectively), were more likely than male students (15% and 11%, respectively) to report non-suicidal self-injury (NSSI).
- The proportion of female students that reported NSSI between 2019 and 2021 increased.
- The proportion of male students that reported NSSI between 2019 and 2021 decreased.

### Prevalence of non-suicidal self-injury by sex, among New York City youth, 2019 and 2021



Source: New York City Youth Risk Behavior Survey, 2019-2021

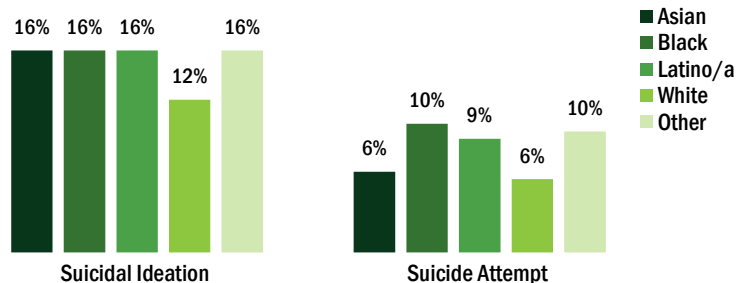
**Definitions: Race/ethnicity:** For the purpose of this publication, Latino/a includes people of Hispanic or Latino/a origin, as identified by the survey question "Are you Hispanic or Latino?" and regardless of reported race. Asian, Black, Other and White race categories exclude those who identified as Latino/a.

**COVID-19 related stressors** refer to students who responded "yes" to experiencing any of the following during the pandemic: being insulted or put down by adult in home, hunger, social isolation, or symptoms of depression during the COVID-19 pandemic.

## Racial inequities exist among students who reported suicidal thoughts and attempted suicide

- In 2019, Black (16%), Latino/a (16%), and Asian (16%) public high school students were more likely than White (12%) high school students to report suicidal ideation. In 2021, the difference between Latino/a (17%) and White (9%) students persisted.
- In 2019, Black (10%) and Latino/a (9%) high school students were more likely than White (6%) students to report attempting suicide.
- In 2021, the prevalence of attempting suicide was similar across racial and ethnic groups.

Prevalence of suicidal behavior by race/ethnicity, among New York City youth, 2019

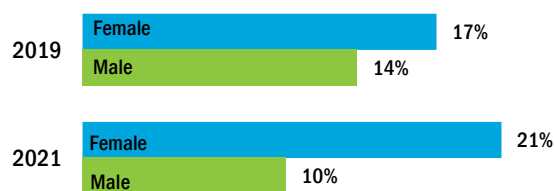


Asian, Black, White, and Other race categories exclude Latino/a ethnicity. Latino/a includes Hispanic or Latino/a of any race. Other race includes students who self-identified as American Indian, Native Hawaiian/other PI and multiple races.

Source: New York City Youth Risk Behavior Survey, 2019

## Female students were more likely than male students to report suicidal ideation

Prevalence of suicidal ideation by sex, New York City, 2019 and 2021

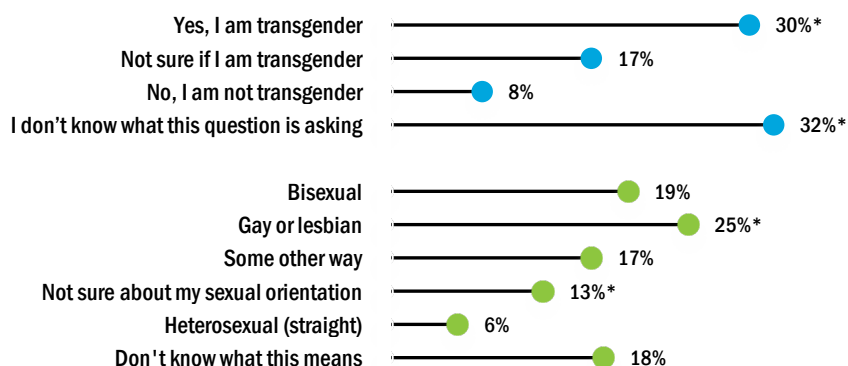


Source: New York City Youth Risk Behavior Survey, 2019-2021

- In 2019 and 2021, female high school students (17% and 21%, respectively) were more likely than male (14% and 10%, respectively) to report suicidal ideation.

## Sexual and gender minority high school students were more likely to report attempting suicide compared with non-sexual and gender minority students

Prevalence of suicide attempt among sexual and gender minority youth, New York City, 2021



\*Estimate should be interpreted with caution due to small sample size.

Source: New York City Youth Risk Behavior Survey, 2021

- In 2021, transgender high school students (30%\*) and those who were not sure if they are transgender (17%) were more likely than non-transgender students (8%) to report attempting suicide at least once in the 12 months prior to the survey.
- Compared with heterosexual students (6%), those that described their sexual orientation as bisexual (19%), gay or lesbian (25%\*), or some other way (17%) were more likely to report attempting suicide in the past 12 months.

**Health equity** is attainment of the highest level of health and well-being for all people. Not all New Yorkers have the same opportunities to live a healthy life. Achieving health equity requires focused and ongoing efforts to address historical and contemporary injustices such as discrimination based on social position (e.g., class, immigration status) or social identities (e.g., race, gender, sexual orientation). For more information, visit the Centers for Disease Control and Prevention's [Health Equity](#) page.

## Mental health of high school students who reported suicide-related factors during COVID-19

In 2021, public high school students reported on their experiences during the COVID-19 pandemic.

- An estimated 77,000 students reported they **felt socially isolated** (37%) during the pandemic. Of these:
  - 21% reported **seriously considering suicide** in the 12 months prior to survey.
  - 13% reported **attempting suicide** in the 12 months prior to survey.
  - 22% reported **non-suicidal self-injury** in the 12 months prior to the survey.
- An estimated 57,000 students (26%) reported **signs of depression** during the pandemic. Of these students:
  - 35% reported **seriously considering suicide** in the 12 months prior to survey.
  - 17% reported **attempting suicide** in the 12 months prior to survey.
  - 41% reported **non-suicidal self-injury** in the 12 months prior to the survey.
- An estimated 24,000 students reported they were **sworn or insulted by an adult in their household** (12%) during the pandemic. Of these students:
  - 43% reported **seriously considering suicide** in the 12 months prior to survey.
  - 25% reported **attempting suicide** in the 12 months prior to survey.
  - 51% reported **non-suicidal self-injury** in the 12 months prior to the survey.
- An estimated 8,000 students reported they **did not have enough food in their home** (4%) during the pandemic. Of these students:
  - 45%\* reported **seriously considering suicide** in the 12 months prior to survey.
  - 32%\* reported **attempting suicide** in the 12 months prior to survey.
  - 45%\* reported **non-suicidal self-injury** in the 12 months prior to the survey.

### Implications

In New York City, between 2011 and 2021, the percentage of public high school students who reported they felt sad or hopeless, had seriously considered killing themselves, and/or engaged in non-suicidal self-injury increased. This alarming trend was present before the COVID-19 pandemic and has continued. Understanding which stressors impact students remains important in addressing the differences in outcomes observed across suicide-related factors - especially among female, Black and Latino/a, and SGM youth - is critical to addressing disparities in suicidal behavior. These findings support the need for preventive interventions for those youth experiencing the greatest risk, as well as the need to mitigate exposure to risk early on. These strategies are further outlined in the child, youth and family mental health section of the recent [Care, Community, Action](#) plan detailing the City's goals for improving mental and behavioral health for New Yorkers.

If you are feeling sad, depressed, or suicidal, or if you or someone you care about is having problems with alcohol or drug use, talk to someone right away.



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**References:** 1. Bridge JA, Goldstein TR, Brent DA. Adolescent suicide and suicidal behavior. *J Child Psychol Psychiatry*. 2006;47(3-4):372-394.

2. Nock MK., Joiner Jr TE, Gordon KH, Lloyd-Richardson E, Prinstein MJ. Non-suicidal self-injury among adolescents: diagnostic correlates and relation to suicide attempts. *Psychiatry Res*. 2006;144(1):65-72.

3. Bhat M. Suicidal Behavior among US High School Students and Associated Risk Factors, Individual Survey Years 2013, 2015 and Trend Analysis from 1991 to 2015. ScholarWorks@Georgia State University. 2017. Accessed October 13, 2023. [https://scholarworks.gsu.edu/iph\\_theses/509/](https://scholarworks.gsu.edu/iph_theses/509/)

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# Epi Data Tables

November 2023, No. 138

## Suicide-related factors among New York City Public High School Students

### Data Tables

- Table 1.** Overall prevalence of suicide-related factors, gender identity, and sexual orientation among New York City public high school students, 2019 and 2021
- Table 2.** Suicide-related factors among New York City public high school students, 2019
- Table 3.** Suicide-related factors among New York City public high school students, 2021
- Table 4.** Suicide-related factors by COVID-19 stressors among New York City public high school students, 2021

### Data Sources

**Youth Risk Behavior Survey (YRBS) 2011 to 2021:** The YRBS were self-administered, anonymous surveys conducted in NYC public high schools by the NYC Health Department and the NYC Department of Education. The 2019 YRBS had 9,534 respondents, 2021 YRBS has 3,944 respondents. For more survey details, visit <https://www1.nyc.gov/site/doh/data/data-sets/nyc-youth-risk-behavior-survey.page>



**Table 1. Overall prevalence of suicide-related factors, gender identity, and sexual orientation among New York City public high school students, 2019 and 2021**

Source: NYC Youth Risk Behavior Survey, 2019 and 2021

Data are weighted to the NYC public high school student population.

All N's are weighted. Weighted N population estimates are rounded to the nearest 1,000.

|                                                                                                                                                                   | 2019       |            |                               |                               | 2021       |            |                               |                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-------------------------------|-------------------------------|------------|------------|-------------------------------|-------------------------------|
|                                                                                                                                                                   | Weighted N | Prevalence | Lower 95% Confidence Interval | Upper 95% Confidence Interval | Weighted N | Prevalence | Lower 95% Confidence Interval | Upper 95% Confidence Interval |
| During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?     |            |            |                               |                               |            |            |                               |                               |
| Yes                                                                                                                                                               | 95,000     | 35.9       | 34.3                          | 37.6                          | 102,000    | 38.2       | 35.1                          | 41.5                          |
| No                                                                                                                                                                | 169,000    | 64.1       | 62.4                          | 65.7                          | 165,000    | 61.8       | 58.5                          | 64.9                          |
| During the past 12 months, did you ever seriously consider attempting suicide?                                                                                    |            |            |                               |                               |            |            |                               |                               |
| Yes                                                                                                                                                               | 41,000     | 15.6       | 14.5                          | 16.8                          | 41,000     | 15.6       | 13.5                          | 18                            |
| No                                                                                                                                                                | 222,000    | 84.4       | 83.2                          | 85.5                          | 224,000    | 84.4       | 82                            | 86.5                          |
| During the past 12 months, how many times did you actually attempt suicide?                                                                                       |            |            |                               |                               |            |            |                               |                               |
| Yes                                                                                                                                                               | 20,000     | 9.2        | 8.0                           | 10.5                          | 21,000     | 9.2        | 7.7                           | 11.1                          |
| No                                                                                                                                                                | 196,000    | 90.8       | 89.5                          | 92.0                          | 205,000    | 90.8       | 88.9                          | 92.3                          |
| During the past 12 months, how many times did you do something to purposely hurt yourself without wanting to die, such as cutting or burning yourself on purpose? |            |            |                               |                               |            |            |                               |                               |
| 0 times                                                                                                                                                           | 217,000    | 82.0       | 80.6                          | 83.3                          | 219,000    | 80.9       | 78.2                          | 83.3                          |
| 1 time                                                                                                                                                            | 21,000     | 8.1        | 7.3                           | 8.9                           | 18,000     | 6.5 D      | 5.7                           | 7.5                           |
| 2 or 3 times                                                                                                                                                      | 14,000     | 5.4        | 4.6                           | 6.3                           | 18,000     | 6.5        | 5.4                           | 7.7                           |
| 4 or 5 times                                                                                                                                                      | 5,000      | 1.9        | 1.6                           | 2.3                           | 6,000      | 2.2        | 1.7                           | 3                             |
| 6 or more times                                                                                                                                                   | 7,000      | 2.7        | 2.2                           | 3.1                           | 11,000     | 3.9        | 3                             | 5                             |
| Which of the following best describes you?                                                                                                                        |            |            |                               |                               |            |            |                               |                               |
| Heterosexual (straight)                                                                                                                                           | 212,000    | 80.6       | 79.1                          | 82.1                          |            |            |                               |                               |
| Gay or lesbian                                                                                                                                                    | 9,000      | 3.3        | 2.7                           | 4.0                           |            |            |                               |                               |
| Bisexual                                                                                                                                                          | 26,000     | 9.8        | 8.9                           | 10.7                          |            |            |                               |                               |
| Not sure                                                                                                                                                          | 17,000     | 6.4        | 5.7                           | 7.1                           |            |            |                               |                               |
| Which of the following best describes you?                                                                                                                        |            |            |                               |                               |            |            |                               |                               |
| Heterosexual (straight)                                                                                                                                           |            |            |                               |                               | 195,000    | 72.5 D     | 68.6                          | 76.1                          |
| Gay or lesbian                                                                                                                                                    |            |            |                               |                               | 11,000     | 3.9        | 2.8                           | 5.4                           |
| Bisexual                                                                                                                                                          |            |            |                               |                               | 30,000     | 11.3       | 9.8                           | 13                            |
| Some other way                                                                                                                                                    |            |            |                               |                               | 12,000     | 4.4        | 3                             | 6.3                           |
| Not sure                                                                                                                                                          |            |            |                               |                               | 14,000     | 5.3        | 4                             | 6.9                           |
| Don't know what this means                                                                                                                                        |            |            |                               |                               | 7,000      | 2.6        | 1.9                           | 3.5                           |
| Some people describe themselves as transgender when their sex at birth does not match the way they think or feel about their gender. Are you transgender?         |            |            |                               |                               |            |            |                               |                               |
| No                                                                                                                                                                | 249,000    | 93.9       | 93.1                          | 94.6                          | 253,000    | 92.8       | 89                            | 95.3                          |
| Yes, I am transgender                                                                                                                                             | 4,000      | 1.6        | 1.2                           | 2.0                           | 8,000      | 3          | 1.6                           | 5.4                           |
| Not sure if I am transgender                                                                                                                                      | 5,000      | 1.8        | 1.5                           | 2.3                           | 6,000      | 2.2        | 1.3                           | 3.7                           |
| DK what question is asking                                                                                                                                        | 7,000      | 2.7        | 2.3                           | 3.2                           | 6,000      | 2.1        | 1.3                           | 3.2                           |

Confidence Intervals are a measure of estimate precision: the wider the CI, the more imprecise the estimate.

Bold p-values are significant at the 0.05 level.

D When reporting to nearest whole percent, round down

For the purpose of this publication, Latino/a includes people of Hispanic or Latino/a origin, as identified by the survey question "Are you Hispanic or Latino?" and regardless of reported race. Asian, Black, Other and White race categories exclude those who identified as Latino/a.

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- Suicide attempt is defined as reporting having attempted suicide one or more times in the 12 months prior to survey.
- Feeling sad and hopeless is defined as reporting having felt sad or hopeless almost every day for two weeks or more in a row during the past 12 months so that they stopped doing some usual activities.
- Non-suicidal self-injury is defined as reporting did something to purposely hurt themselves without wanting to die (such as cutting or burning themselves on purpose)

**Table 2. Suicide-related factors among New York City public high school students, 2019**

Source: NYC Youth Risk Behavior Survey, 2019

Data are weighted to the NYC public high school student population.

All N's are weighted. Weighted N population estimates are rounded to the nearest 1,000.

|                                                                                                                                                                  | Suicidal Ideation |            |                               |                               |                  | Suicide Attempt |            |                               |                               |                  | Felt Sad hopeless |            |                               |                               |                  | Non-suicidal self-injury (NSSI) |            |                               |                               |                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------|-------------------------------|-------------------------------|------------------|-----------------|------------|-------------------------------|-------------------------------|------------------|-------------------|------------|-------------------------------|-------------------------------|------------------|---------------------------------|------------|-------------------------------|-------------------------------|------------------|
|                                                                                                                                                                  | Weighted N        | Prevalence | Lower 95% Confidence Interval | Upper 95% Confidence Interval | p-value          | Weighted N      | Prevalence | Lower 95% Confidence Interval | Upper 95% Confidence Interval | p-value          | Weighted N        | Prevalence | Lower 95% Confidence Interval | Upper 95% Confidence Interval | p-value          | Weighted N                      | Prevalence | Lower 95% Confidence Interval | Upper 95% Confidence Interval | p-value          |
| <b>Total</b>                                                                                                                                                     | 41,000            | 15.6       | 14.5                          | 16.8                          |                  | 20,000          | 9.2        | 8.0                           | 10.5                          |                  | 95,000            | 35.9       | 34.3                          | 37.6                          |                  | 48,000                          | 18.0       | 16.7                          | 19.4                          |                  |
| <b>Race/ethnicity</b>                                                                                                                                            |                   |            |                               |                               |                  |                 |            |                               |                               |                  |                   |            |                               |                               |                  |                                 |            |                               |                               |                  |
| White                                                                                                                                                            | 4,000             | 12.1       | 9.7                           | 14.9                          | REF              | 2,000           | 5.8        | 4.0                           | 8.3                           | REF              | 11,000            | 30.6       | 27.3                          | 34.1                          | REF              | 6,000                           | 15.5       | 12.7                          | 18.6                          | REF              |
| Black                                                                                                                                                            | 11,000            | 15.6       | 14.0                          | 17.4                          | <b>0.027</b>     | 6,000           | 10.2       | 8.8                           | 11.9                          | <b>0.00</b>      | 24,000            | 33.6       | 31.6                          | 35.7                          | 0.15             | 11,000                          | 16.1       | 14.5                          | 17.7                          | 0.70             |
| Latino/a                                                                                                                                                         | 15,000            | 15.9       | 14.5                          | 17.6                          | <b>0.017</b>     | 7,000           | 9.4        | 7.7                           | 11.6                          | <b>0.00</b>      | 38,000            | 39.2       | 36.1                          | 42.3                          | <b>0.00</b>      | 19,000                          | 19.9       | 17.9                          | 22.0                          | <b>0.01</b>      |
| Asian                                                                                                                                                            | 6,000             | 16.2       | 13.2                          | 19.7                          | <b>0.035</b>     | 2,000           | 6.4        | 4.7                           | 8.6                           | 0.68             | 11,000            | 33.5       | 30.7                          | 36.4                          | 0.21             | 5,000                           | 14.9       | 12.5                          | 17.6                          | 0.76             |
| Other (Am Ind, Native Hawaiian/other PI and multiple)                                                                                                            | 2,000             | 16.2       | 11.9                          | 21.6                          | 0.114            | 1,000           | 9.6        | 5.4                           | 16.5                          | 0.17             | 6,000             | 39.9       | 32.2                          | 48.1                          | <b>0.05</b>      | 4,000                           | 24.1       | 18.7                          | 30.3                          | <b>0.01</b>      |
| <b>What is your sex?</b>                                                                                                                                         |                   |            |                               |                               |                  |                 |            |                               |                               |                  |                   |            |                               |                               |                  |                                 |            |                               |                               |                  |
| Female                                                                                                                                                           | 23,000            | 17.4       | 15.9                          | 19.1                          | REF              | 10,000          | 9.0        | 7.7                           | 10.3                          | REF              | 57,000            | 43.7       | 41.6                          | 45.7                          | REF              | 27,000                          | 20.8       | 19.1                          | 22.5                          | REF              |
| Male                                                                                                                                                             | 18,000            | 13.5       | 12.3                          | 14.9                          | <b>0.000</b>     | 9,000           | 8.5        | 7.0                           | 10.3                          | 0.61             | 37,000            | 28.2       | 25.9                          | 30.6                          | <b>&lt;0.001</b> | 19,000                          | 14.7       | 12.7                          | 16.8                          | <b>&lt;0.001</b> |
| <b>Which of the following best describes you?</b>                                                                                                                |                   |            |                               |                               |                  |                 |            |                               |                               |                  |                   |            |                               |                               |                  |                                 |            |                               |                               |                  |
| Heterosexual (straight)                                                                                                                                          | 25,000            | 12.1       | 11.1                          | 13.3                          | REF              | 10,000          | 6.1        | 5.2                           | 7.2                           | REF              | 65,000            | 31.2       | 29.4                          | 33.0                          | REF              | 28,000                          | 13.3       | 11.9                          | 14.7                          | REF              |
| Gay or lesbian                                                                                                                                                   | 2,000             | 25.3       | 19.6                          | 32.0                          | <b>&lt;0.001</b> | 1,000           | 16.6       | 12.0                          | 22.6                          | <b>0.00</b>      | 4,000             | 55.2       | 46.1                          | 63.9                          | <b>&lt;0.001</b> | 3,000                           | 41.6       | 34.0                          | 49.7                          | <b>&lt;0.001</b> |
| Bisexual                                                                                                                                                         | 9,000             | 35.9       | 32.1                          | 39.8                          | <b>&lt;0.001</b> | 5,000           | 22.0       | 18.4                          | 26.1                          | <b>&lt;0.001</b> | 16,000            | 64.0       | 59.0                          | 68.7                          | <b>&lt;0.001</b> | 10,000                          | 40.9       | 36.7                          | 45.2                          | <b>&lt;0.001</b> |
| Not sure                                                                                                                                                         | 3,000             | 20.9       | 16.6                          | 26.0                          | <b>0.000</b>     | 2,000           | 16.6       | 10.4                          | 25.4                          | <b>0.00</b>      | 7,000             | 44.8       | 39.0                          | 50.8                          | <b>0.00</b>      | 4,000                           | 26.6       | 22.7                          | 30.9                          | <b>&lt;0.001</b> |
| <b>Some people describe themselves as transgender when their sex at birth does not match the way they think or feel about their gender. Are you transgender?</b> |                   |            |                               |                               |                  |                 |            |                               |                               |                  |                   |            |                               |                               |                  |                                 |            |                               |                               |                  |
| No                                                                                                                                                               | 36,000            | 14.7       | 13.6                          | 15.8                          | REF              | 15,000          | 7.5        | 6.6                           | 8.5                           | REF              | 85,000            | 35.0       | 33.3                          | 36.6                          | REF              | 40,000                          | 16.2       | 14.9                          | 17.6                          | REF              |
| Yes, I am transgender                                                                                                                                            | 1,000             | 37.6       | *                             | 27.6                          | <b>0.000</b>     | 1,000           | 40.9       | *                             | 26.3                          | <b>0.00</b>      | 2,000             | 54.3       | *                             | 38.9                          | <b>0.02</b>      | 2,000                           | 46.8       | 38.9                          | 54.7                          | <b>&lt;0.001</b> |
| Not sure if I am transgender                                                                                                                                     | 1,000             | 31.4       | *                             | 20.5                          | <b>0.010</b>     | 1,000           | 33.8       | *                             | 22.2                          | <b>0.00</b>      | 2,000             | 61.5       | *U                            | 49.4                          | <b>&lt;0.001</b> | 2,000                           | 54.6       | 46.6                          | 62.2                          | <b>&lt;0.001</b> |
| DK what question is asking                                                                                                                                       | 1,000             | 16.3       | 11.6                          | 22.3                          | 0.535            | 1,000           | 25.7       | *                             | 16.8                          | <b>0.00</b>      | 3,000             | 38.5       | U                             | 29.4                          | 0.48             | 2,000                           | 26.1       | 18.2                          | 36.0                          | <b>0.04</b>      |

\*Estimate should be interpreted with caution. Estimate's Relative Standard Error (a measure of estimate precision) is greater than 30%, or the 95% Confidence Interval half-width is greater than 10 or the sample size is too small, making the estimate potentially unreliable.

Confidence Intervals are a measure of estimate precision: the wider the CI, the more imprecise the estimate.

Bold p-values are significant at the 0.05 level.

U When reporting to nearest whole percent, round up

D When reporting to nearest whole percent, round down

^ P-values were obtained from t-test comparisons. Values below the significance level (0.05) appear in bold and indicate a statistically significant change.

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- Feeling sad and hopeless is defined as reporting having felt sad or hopeless almost every day for two weeks or more in a row during the past 12 months so that they stopped doing some usual activities.
- Non-suicidal self-injury is defined as reporting did something to purposely hurt themselves without wanting to die (such as cutting or burning themselves on purpose)

**Table 3. Suicide-related factors among New York City public high school students, 2021**

Source: NYC Youth Risk Behavior Survey, 2021

Data are weighted to the NYC public high school student population.

All N's are weighted. Weighted N population estimates are rounded to the nearest 1,000.

|                                                                                                                                                           | Suicidal Ideation |            |                               |                               |         | Suicide Attempt |            |                               |                               |         | Felt Sad hopeless |            |                               |                               |         | Non-suicidal self-injury (NSSI) |            |                               |                               |         |        |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------|-------------------------------|-------------------------------|---------|-----------------|------------|-------------------------------|-------------------------------|---------|-------------------|------------|-------------------------------|-------------------------------|---------|---------------------------------|------------|-------------------------------|-------------------------------|---------|--------|--------|
|                                                                                                                                                           | Weighted N        | Prevalence | Lower 95% Confidence Interval | Upper 95% Confidence Interval | p-value | Weighted N      | Prevalence | Lower 95% Confidence Interval | Upper 95% Confidence Interval | p-value | Weighted N        | Prevalence | Lower 95% Confidence Interval | Upper 95% Confidence Interval | p-value | Weighted N                      | Prevalence | Lower 95% Confidence Interval | Upper 95% Confidence Interval | p-value |        |        |
| Race/ethnicity                                                                                                                                            |                   |            |                               |                               |         |                 |            |                               |                               |         |                   |            |                               |                               |         |                                 |            |                               |                               |         |        |        |
| White                                                                                                                                                     | 4,000             | 11.2       | 7.0                           | 17.4                          | REF     | 2,000           | 7.4 *      | 3.7                           | 14.1                          | REF     | 11,000            | 29.9       | 23.5                          | 37.2                          | REF     | 6,000                           | 16.9       | 12.2                          | 23                            | REF     |        |        |
| Black                                                                                                                                                     | 12,000            | 16.7       | 13.8                          | 20.2                          | 0.08    | 6,000           | 9.4        | 6.7                           | 13.2                          | 0.49    | 30,000            | 41.2       | 36.8                          | 45.8                          | <0.001  | 14,000                          | 18.8       | 15.4                          | 22.8                          | 0.53    |        |        |
| Latino/a                                                                                                                                                  | 17,000            | 16.5       | D                             | 13.3                          | 20.3    | 0.04            | 8,000      | 9.5                           | U                             | 7.6     | 11.8              | 0.38       | 43,000                        | 41.9                          | 35.8    | 48.2                            | 0.01       | 21,000                        | 20.3                          | 16.9    | 24.2   | 0.22   |
| Asian                                                                                                                                                     | 5,000             | 12.6       | 10.1                          | 15.6                          | 0.65    | 2,000           | 4.9        | 2.8                           | 8.5                           | 0.39    | 13,000            | 33.4       | 27.1                          | 40.4                          | 0.52    | 6,000                           | 17.0       | 14.0                          | 20.4                          | 0.97    |        |        |
| Other (Am Ind, Native Hawaiian/other PI and multiple)                                                                                                     | 2,000             | 19.1       | 11.4                          | 30.2                          | 0.09    | 1,000           | 11.0       | 6.3                           | 18.6                          | 0.38    | 4,000             | 37.4       | 29.2                          | 46.4                          | 0.22    | 2,000                           | 21.3 *     | 12.4                          | 34.1                          | 0.41    |        |        |
| What is your sex?                                                                                                                                         |                   |            |                               |                               |         |                 |            |                               |                               |         |                   |            |                               |                               |         |                                 |            |                               |                               |         |        |        |
| Female                                                                                                                                                    | 26,000            | 20.6       | 17.5                          | 24.1                          | REF     | 12,000          | 10.3       | 8.2                           | 12.7                          | REF     | 63,000            | 48.4       | 44.7                          | 52.1                          | REF     | 35,000                          | 26.6       | 22.5                          | 31.2                          | REF     |        |        |
| Male                                                                                                                                                      | 13,000            | 10.0       | 8.0                           | 12.3                          | <0.001  | 8,000           | 7.0        | 5.1                           | 9.7                           | <0.001  | 38,000            | 28.2       | 24.8                          | 32                            | <0.001  | 15,000                          | 10.9       | 8.8                           | 13.3                          | <0.001  |        |        |
| Which of the following best describes you?                                                                                                                |                   |            |                               |                               |         |                 |            |                               |                               |         |                   |            |                               |                               |         |                                 |            |                               |                               |         |        |        |
| Heterosexual (straight)                                                                                                                                   | 18,000            | 9.7        | 8.2                           | 11.4                          | REF     | 9,000           | 5.7        | 4.7                           | 6.9                           | REF     | 61,000            | 32.0       | 28.9                          | 35.2                          | REF     | 23,000                          | 11.9       | 10.3                          | 13.7                          | REF     |        |        |
| Gay or lesbian                                                                                                                                            | 4,000             | 41.5       | D                             | 33.1                          | 50.5    | <0.001          | 2,000      | 25.3 *                        | 15.7                          | 38.0    | <0.001            | 6,000      | 58.9 *                        | 47.6                          | 69.4    | <0.001                          | 5,000      | 43.5 *U                       | 31.8                          | 56      | <0.001 |        |
| Bisexual                                                                                                                                                  | 10,000            | 33.8       | 28.5                          | 39.5                          | <0.001  | 5,000           | 19.5       | D                             | 14.8                          | 25.2    | <0.001            | 18,000     | 62.5                          | D                             | 56.1    | 68.4                            | <0.001     | 13,000                        | 41.9                          | 35.3    | 48.7   | <0.001 |
| Some other way                                                                                                                                            | 4,000             | 39.1       | 31.4                          | 47.4                          | <0.001  | 2,000           | 16.7       | 11.5                          | 23.7                          | <0.001  | 7,000             | 63.2       | 55.1                          | 70.7                          | <0.001  | 6,000                           | 51.6       | 44.1                          | 59                            | <0.001  |        |        |
| Not sure                                                                                                                                                  | 3,000             | 25.7 *     | 14.9                          | 40.5                          | 0.02    | 2,000           | 13.1 *     | 6.9                           | 23.5                          | 0.08    | 7,000             | 48.4 *     | 36.4                          | 60.7                          | 0.01    | 4,000                           | 31.8 *     | 21.9                          | 43.6                          | <0.001  |        |        |
| Don't know what this means                                                                                                                                | 1,000             | 11.9       | 6.6                           | 20.4                          | 0.54    | 1,000           | 18.4       | 10.6                          | 30.0                          | 0.01    | 1,000             | 20.6 *     | 11.2                          | 34.7                          | 0.04    | 1,000                           | 15.7 *     | 8.3                           | 27.8                          | 0.43    |        |        |
| Some people describe themselves as transgender when their sex at birth does not match the way they think or feel about their gender. Are you transgender? |                   |            |                               |                               |         |                 |            |                               |                               |         |                   |            |                               |                               |         |                                 |            |                               |                               |         |        |        |
| No                                                                                                                                                        | 33,000            | 13.5       | U                             | 12.0                          | 15.2    | REF             | 16,000     | 7.9                           | 6.5                           | 9.5     | REF               | 91,000     | 36.7                          | 34.1                          | 39.5    | REF                             | 43,000     | 17.0                          | 15.0                          | 19.3    | REF    |        |
| Yes, I am transgender                                                                                                                                     | 4,000             | 53.6 *     | 36.9                          | 69.5                          | <0.001  | 2,000           | 29.7 *     | 19.8                          | 42.0                          | <0.001  | 5,000             | 71.1 *     | 54.0                          | 83.7                          | <0.001  | 5,000                           | 62.9 *     | 50.6                          | 73.7                          | <0.001  |        |        |
| Not sure if I am transgender                                                                                                                              | 3,000             | 54.0 *     | 41.9                          | 65.7                          | <0.001  | 1,000           | 17.4       | 9.7                           | 29.2                          | 0.07    | 4,000             | 75.4 *     | 62.5                          | 84.9                          | <0.001  | 3,000                           | 49.4 *     | 35.5                          | 63.4                          | <0.001  |        |        |
| DK what question is asking                                                                                                                                | 1,000             | 23.2 *     | 14.0                          | 35.8                          | 0.08    | 1,000           | 31.8 *     | 20.2                          | 46.2                          | 0.00    | 1,000             | 24.5       | U*                            | 14.5                          | 38.4    | 0.03                            | 1,000      | 19.6 *                        | 10.9                          | 32.6    | 0.64   |        |

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Bold p-values are significant at the 0.05 level.

U When reporting to nearest whole percent, round up

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^ P-values were obtained from t-test comparisons. Values below the significance level (0.05) appear in bold and indicate a statistically significant change.

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- Feeling sad and hopeless is defined as reporting having felt sad or hopeless almost every day for two weeks or more in a row during the past 12 months so that they stopped doing some usual activities.
- Non-suicidal self-injury is defined as reporting did something to purposely hurt themselves without wanting to die (such as cutting or burning themselves on purpose)

**Table 4. Suicide-related factors by COVID-19 stressors among New York City public high school students, 2021**

Source: NYC Youth Risk Behavior Survey, 2021

Data are weighted to the NYC public high school student population.

All N's are weighted. Weighted N population estimates are rounded to the nearest 1,000.

|                                                                                                                                                                                                                                                                       | Total      |            |                               |                               | Suicidal Ideation |            |                               |                               |         | Suicide Attempt |            |                               |                               |         | Non-suicidal self-injury (NSSI) |            |                               |                               |         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-------------------------------|-------------------------------|-------------------|------------|-------------------------------|-------------------------------|---------|-----------------|------------|-------------------------------|-------------------------------|---------|---------------------------------|------------|-------------------------------|-------------------------------|---------|
|                                                                                                                                                                                                                                                                       | Weighted N | Prevalence | Lower 95% Confidence Interval | Upper 95% Confidence Interval | Weighted N        | Prevalence | Lower 95% Confidence Interval | Upper 95% Confidence Interval | p value | Weighted N      | Prevalence | Lower 95% Confidence Interval | Upper 95% Confidence Interval | p value | Weighted N                      | Prevalence | Lower 95% Confidence Interval | Upper 95% Confidence Interval | p value |
| <b>Percentage of students who most of the time or always felt so sad, depressed, or hopeless that they had little interest or took little interest in doing things during the COVID-19 pandemic</b>                                                                   |            |            |                               |                               |                   |            |                               |                               |         |                 |            |                               |                               |         |                                 |            |                               |                               |         |
| Yes                                                                                                                                                                                                                                                                   | 57,000     | 26.5 D     | 22.2                          | 31.3                          | 19,000            | 35         | 30.5                          | 39.9                          | REF     | 9,000           | 17.3       | 13.5                          | 21.9                          | REF     | 23,000                          | 40.9       | 34.9                          | 47.2                          | REF     |
| No                                                                                                                                                                                                                                                                    | 157,000    | 73.5 U     | 68.7                          | 77.8                          | 13,000            | 8.8        | 6.7                           | 11.6                          | <0.001  | 7,000           | 5.5 U      | 4                             | 7.6                           | <0.001  | 19,000                          | 12.1       | 10                            | 14.6                          | <0.001  |
| <b>Percentage of students who reported that a parent or other adult in their home most of the time or always swore at them, insulted them, or put them down during the COVID-19 pandemic</b>                                                                          |            |            |                               |                               |                   |            |                               |                               |         |                 |            |                               |                               |         |                                 |            |                               |                               |         |
| Yes                                                                                                                                                                                                                                                                   | 24,000     | 11.6       | 9.5                           | 13.9                          | 10,000            | 43.3       | 35.1                          | 51.9                          | REF     | 5,000           | 24.9       | 18.4                          | 32.7                          | REF     | 12,000                          | 50.7       | 44.9                          | 56.5                          | REF     |
| No                                                                                                                                                                                                                                                                    | 187,000    | 88.4       | 86.1                          | 90.5                          | 22,000            | 12.1       | 9.9                           | 14.6                          | <0.001  | 11,000          | 6.7        | 5.4                           | 8.3                           | <0.001  | 29,000                          | 15.7       | 13.2                          | 18.6                          | <0.001  |
| <b>Percentage of students who most of the time or always went hungry because there was not enough food in their home during the COVID-19 pandemic</b>                                                                                                                 |            |            |                               |                               |                   |            |                               |                               |         |                 |            |                               |                               |         |                                 |            |                               |                               |         |
| Yes                                                                                                                                                                                                                                                                   | 8,000      | 3.7        | 2.7                           | 5                             | 3,000             | 45 *       | 29.9                          | 61.1                          | REF     | 2,000           | 31.5 *U    | 19.7                          | 46.4                          | REF     | 3,000                           | 45.1 *     | 29.9                          | 61.2                          | REF     |
| No                                                                                                                                                                                                                                                                    | 201,000    | 96.3       | 95                            | 97.3                          | 28,000            | 14.6       | 12.3                          | 17.3                          | <0.001  | 13,000          | 8          | 6.3                           | 10                            | <0.001  | 37,000                          | 18.7       | 16.2                          | 21.6                          | <0.001  |
| <b>Percentage of students who never or rarely were able to spend time with family, friends, or other groups by using a computer, phone, or other device during the COVID-19 pandemic (such as clubs or religious groups and not counting attending school online)</b> |            |            |                               |                               |                   |            |                               |                               |         |                 |            |                               |                               |         |                                 |            |                               |                               |         |
| Yes                                                                                                                                                                                                                                                                   | 77,000     | 36.6       | 34.4                          | 38.9                          | 15,000            | 21         | 16.6                          | 26.1                          | REF     | 8,000           | 13.3       | 10.9                          | 16.1                          | REF     | 17,000                          | 22         | 19.1                          | 25.4                          | REF     |
| No                                                                                                                                                                                                                                                                    | 133,000    | 63.4       | 61.1                          | 65.6                          | 16,000            | 12.6       | 10.3                          | 15.5                          | <0.001  | 8,000           | 6.6        | 4.5                           | 9.5                           | <0.001  | 24,000                          | 18.2       | 14.7                          | 22.4                          | 0.11    |

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