

Mental Health Among California Secondary Students Before and During the COVID-19 Pandemic – Key Findings from the Eighteenth Biennial State CHKS, 2019/21¹

Adolescent mental health has suffered greatly through the course of the pandemic, and the results of the Eighteenth Biennial State California Healthy Kids Survey (Biennial State CHKS) adds to the evidence of a growing mental health crisis for adolescents. Chronic sadness increased substantially, with wide disparities across gender and racial/ethnic groups. Suicide ideation among high school students changed little but remained elevated and showed evidence of drastic differences across student groups.

This factsheet describes trends in students' self-reported incapacitating sadness/hopelessness and suicidal thoughts in California between 2013/15 and 2019/21—the eight-year period that culminated in the onset of the COVID-19 pandemic. It also describes the substantial disparities in chronic sadness and suicide ideation across gender, gender identity, and sexual orientation groups. The analysis draws on data provided by representative state samples of students in grades 7, 9, and 11 that participated in the Biennial State CHKS.

Key Takeaways

- **Chronic Sadness.** Feelings of incapacitating, chronic sadness or hopelessness were at the highest levels ever reported, rising at every grade level after already having risen markedly in 2017-19 (Exhibit 1).
- **Suicide Ideation.** Contemplating suicide in the past 12 months changed little but remains at troublesome levels, as was the case in 2015-17 and 2017-19 (Exhibit 2).
- **Impacts of COVID-19.** Chronic sadness increased substantially in 2020-21 at the height of the pandemic, with one-year increases of six points among 7th graders and 10 points among 9th and 11th graders. Moreover, students participating in school remotely in 2020-21 reported the highest rates of chronic sadness, followed by students in hybrid and in-person instruction (Exhibit 3). Contemplating suicide remained stable between 2019-20 and 2020-21 and rates did not differ across students participating in in-person, remote, or hybrid instruction.

Trends

The survey contained two indicators of mental health risk in the 2013-15 to 2019-21 period—chronic sadness and suicide ideation (see Appendix Table A1).

- **Chronic Sadness.** Feelings of incapacitating, chronic sadness or hopelessness were at the highest levels ever reported on the Biennial State CHKS. Chronic sadness rose by two points in 7th grade

¹ The factsheet is based on Austin, G., Hanson, T., Bala, N., & Zheng, H. (2023). *Student engagement and well-being in California, 2019-21: Results of the Eighteenth Biennial State California Healthy Kids Survey, Grades 7, 9, and 11*. San Francisco, CA: WestEd. <https://calschls.org/docs/Biennial State 1921.pdf>

to 32%, by four points to 37% in 9th, and by five points to 42% in 11th, after already having risen substantially in 2017-19. (Exhibit 1)

- **Suicide Ideation.** Contemplating suicide in the past 12 months changed little but remains at troublesome levels of 14%, 16%, and 16% among 7th, 9th, and 11th graders, respectively. Of all the major health-risk indicators, suicide ideation shows the smallest variation across grades. (Exhibit 2)

Did Mental Health Deteriorate after the onset of COVID-19?

The Biennial State CHKS was not designed to provide single-year prevalence estimates. However, the onset of the pandemic in March 2020 complicates interpretation of the results. To aid in interpretation and to ascertain potential effects of the pandemic, single-year estimates of chronic sadness and suicide ideation were estimated. Chronic sadness appeared to have increased substantially in 2020-21 at the height of the pandemic, with one-year increases of six points among 7th graders and 10 points among 9th and 11th graders. Moreover, students participating in school remotely in 2020-21 reported the highest rates of chronic sadness (37%, 47%, and 49%, by ascending grade), followed by students in hybrid (33%, 40%, and 45%) and in-person (27%, 30%, and 37%) instruction (Exhibit 3). Contemplating suicide remained stable between 2019-20 and 2020-21 and rates did not differ across students participating in in-person, remote, or hybrid instruction (Exhibit 2).

Group Differences

As was reported for the Seventeenth Biennial State CHKS, the results indicate substantial differences in chronic sadness and suicide ideation across demographic groups.

- **Gender.** Females had a far greater risk of chronic sadness: 40% compared to 21% for males in 7th grade, 47% compared to 25% in 9th, and 52% compared 31% in 11th. Moreover, since 2017-19, chronic sadness increased more for females than males (five points compared to two points in 9th and seven compared to three points in 11th). Suicide ideation rates have remained relatively steady for both males and females since 2015-17, but females had substantially higher rates of contemplating suicide, with rates twice that of males in 7th and 9th grade. (Exhibits 4 and 5)
- **Race/Ethnicity.** Almost all racial-ethnic groups in all grades showed increases in chronic sadness but African Americans showed the largest increases (seven to 10 points, depending on grade). Students reporting two or more racial-ethnic groups exhibited this highest chronic sadness in grades 9 and 11 (40% and 46%), while the rankings across other groups varied considerably across grades. Native Hawaiian/Pacific Islander students tended to report the highest suicide ideation rates, 20% of them in 9th grade and 24% in 11th grade. Hispanic/Latino students reported the lowest rates in 9th and 11th grade (15%). African Americans exhibited the largest increases in suicide ideation since 2017-19 (four points among 9th graders and three points among 11th graders).
- **Transgender Status.** The Biennial State CHKS had previously shown that transgender students are twice as likely to have experienced chronic sadness as students who indicate they are not transgender.² This pattern is broadly unchanged. Seventy-two percent of 11th grade transgender students report chronic sadness, an increase of nine points from the previous biennial period (compared to 42% of students who are not transgender, a six-point increase). The Biennial State

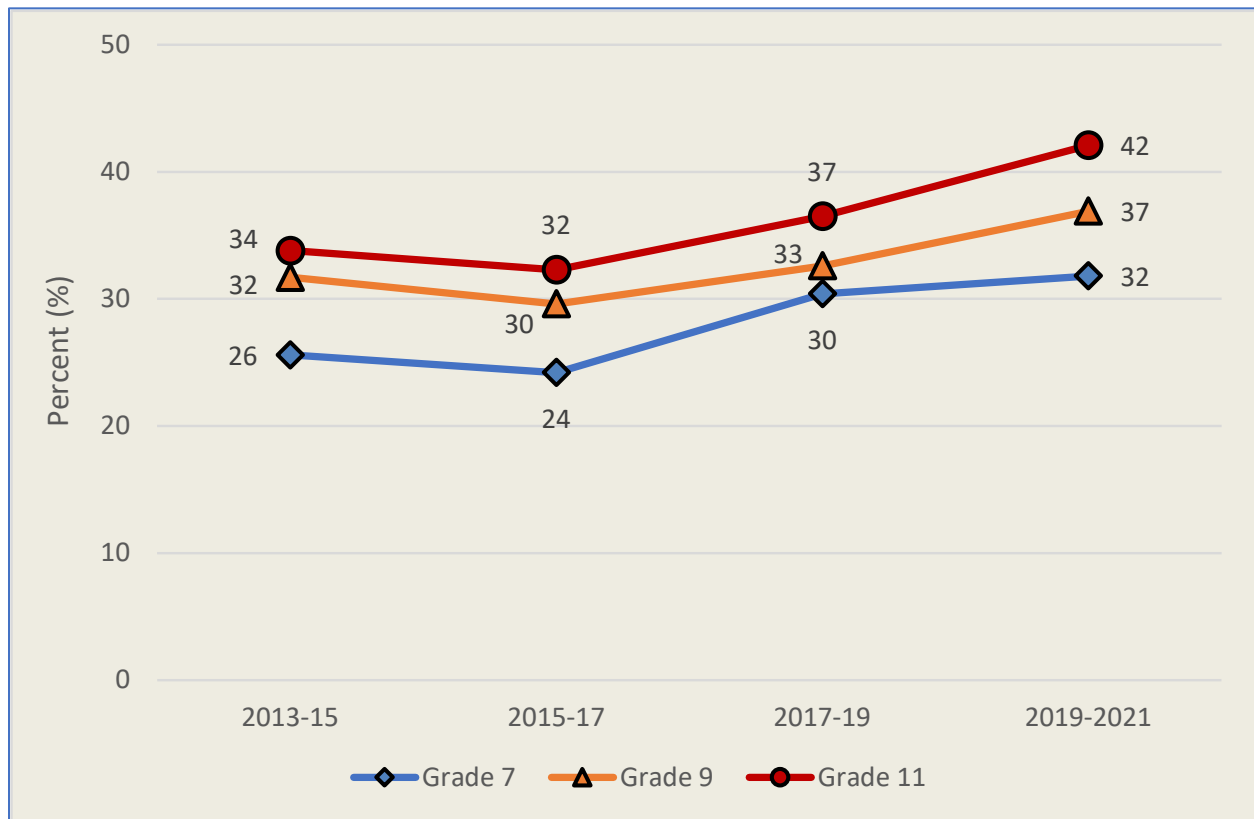
² Hanson, T., Austin, G., Zhang, G., and Zheng, C. (2021) *Trends and demographic differences in mental health among California secondary students – Key findings from the Biennial State CHKS, 2017/19*. CHKS Factsheet #20. San Francisco, CA. WestEd.

CHKS has also previously found that transgender students are three times more likely than students who are not transgender to report contemplating suicide. This gap widened for the most recent administration, with 54% of 9th and 11th grade transgender students reporting that they contemplated suicide compared to 15% of students who are not transgender.

- Sexual Orientation.** The Biennial State CHKS found previously that gay/lesbian and bisexual students reported rates of chronic sadness that were twice as high as those of straight students, and that bisexual students reported the highest rates of any subgroup identified on the survey. These patterns continue to hold in the Eighteenth Biennial State CHKS, with about 70% of bisexual students, 60-66% of gay and lesbian students, 26-27% of straight students, and 48-59% of students who say they are “not sure” about their sexuality reporting chronic sadness. Disparities in suicidal ideation continue to be high. Bisexual students reported the highest rates of contemplating suicide, with 42-44% reporting this compared to 34-38% of lesbian or gay students, 10-12% of straight students, and 21-31% of students who reported being “not sure” about their sexuality.

EXHIBIT 1.

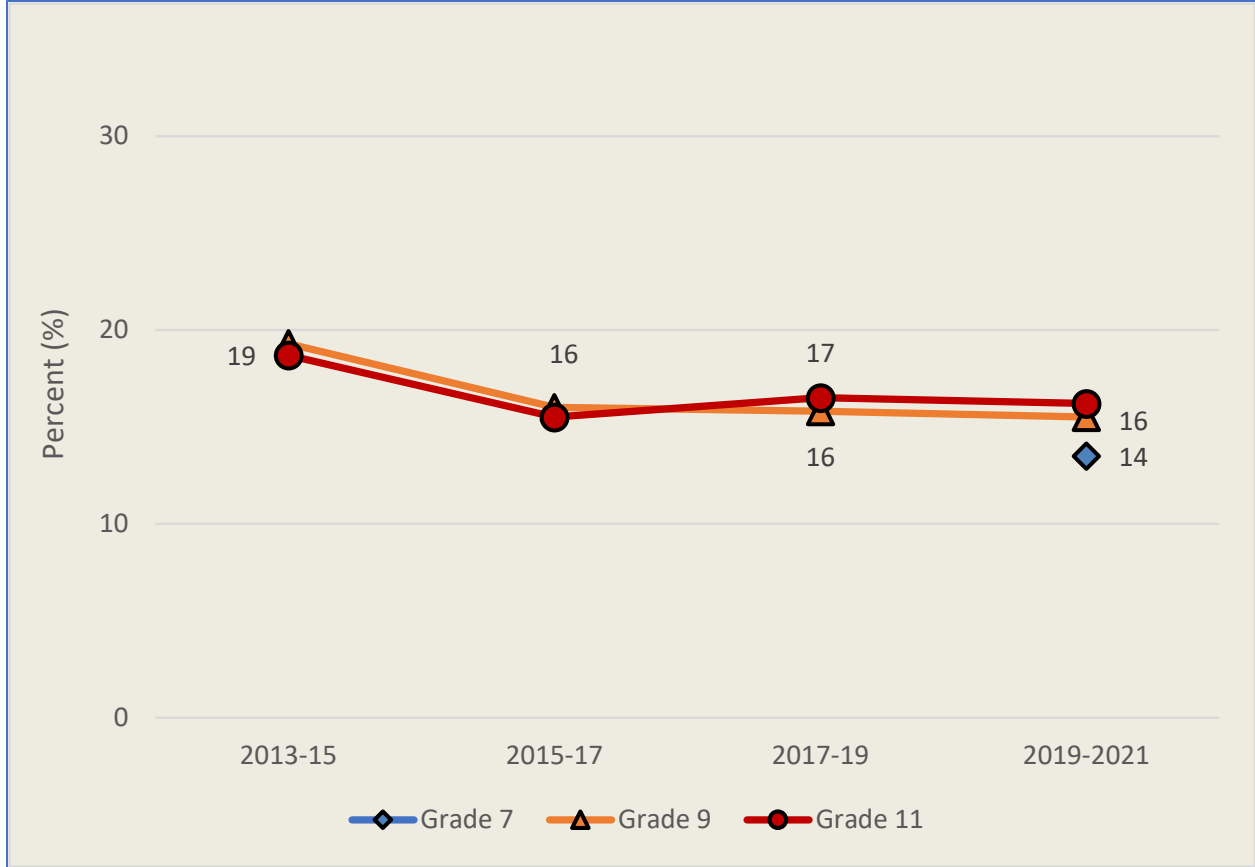
Chronic Sadness/Hopelessness by Administration Period



Source: Eighteenth Biennial State California Healthy Kids Survey Data, 2013-15, 2015-17, 2017-19, and 2019-21

EXHIBIT 2.

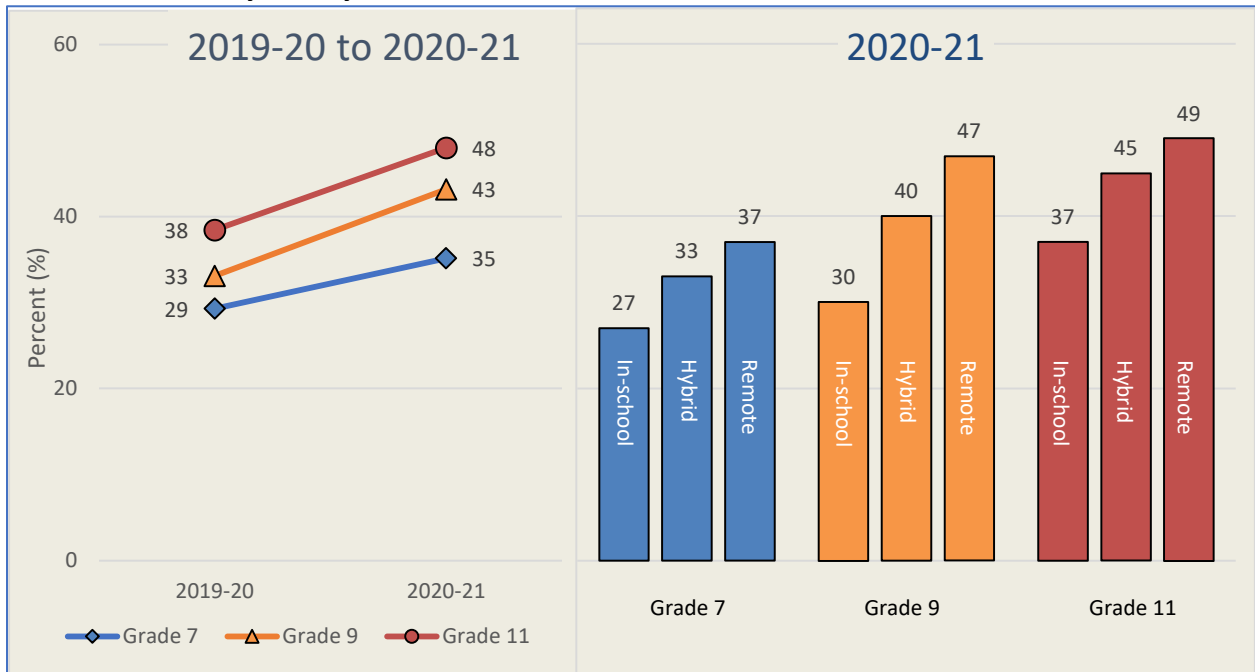
Suicide Ideation by Administration Period



Source: Eighteenth Biennial State California Healthy Kids Survey Data, 2013-15, 2015-17, 2017-19, and 2019-21

EXHIBIT 3.

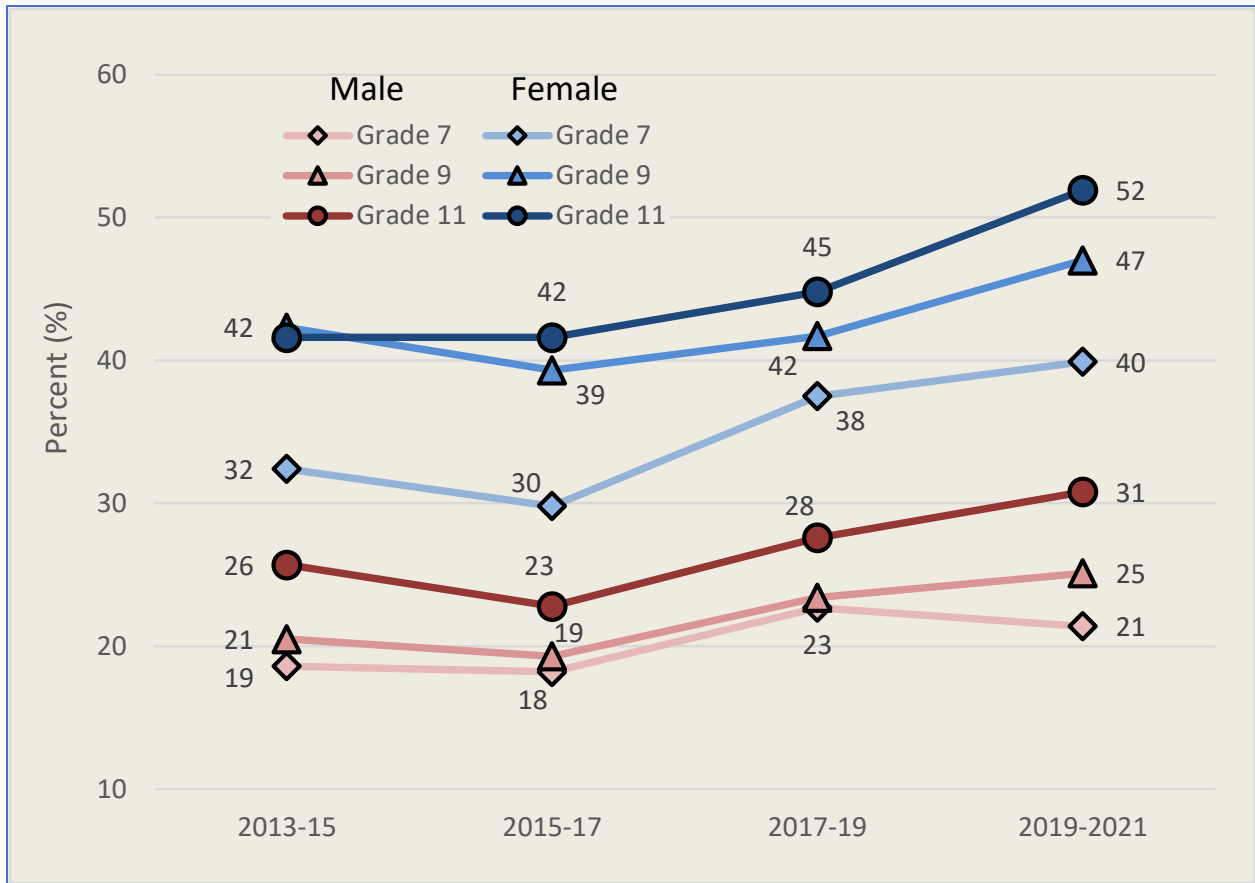
Chronic Sadness by Survey Year and Instructional Model, 2019-21



Source: Eighteenth Biennial State California Healthy Kids Survey Data, 2019-21

EXHIBIT 4.

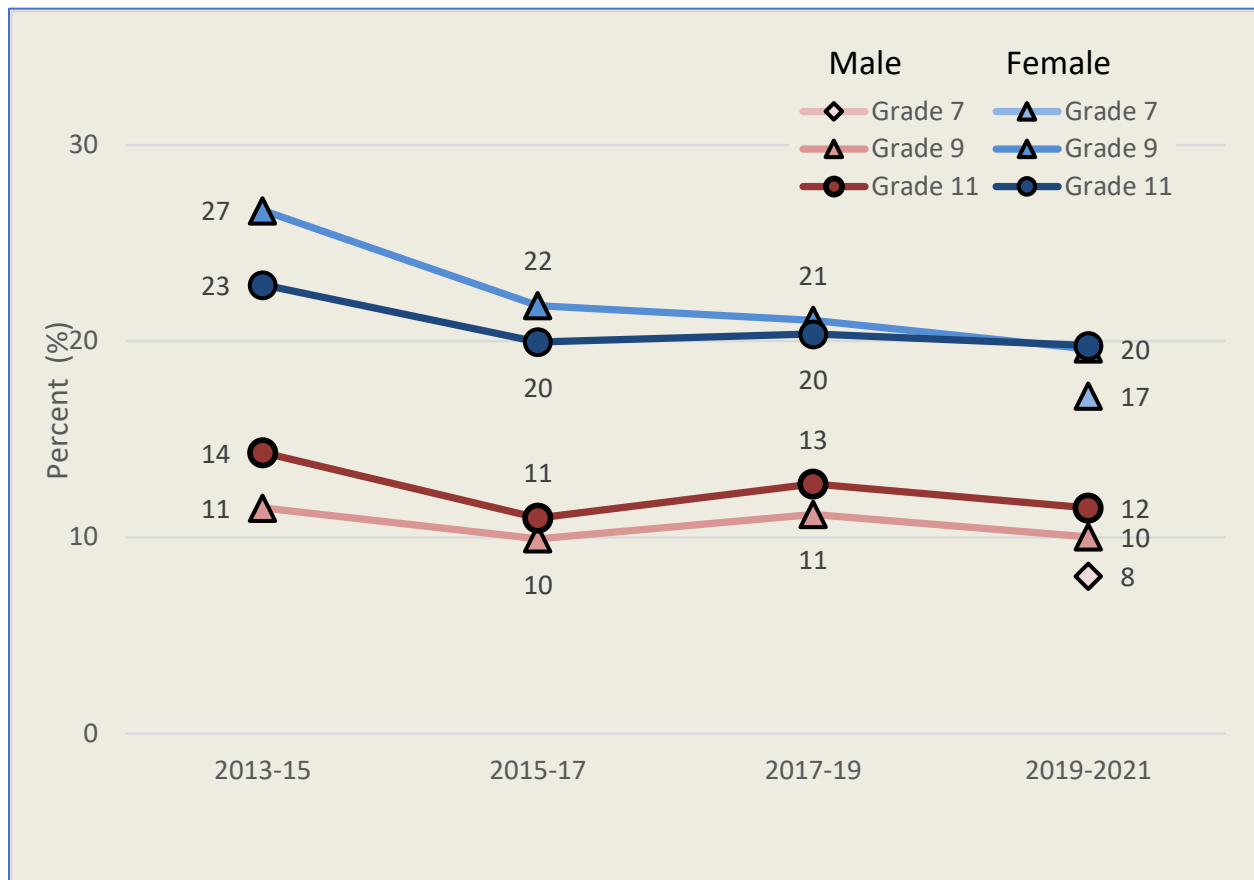
Chronic Sadness by Gender and Administration Period



Source: Eighteenth Biennial State California Healthy Kids Survey Data, 2013-15, 2015-17, 2017-19, and 2019-21

EXHIBIT 5.

Suicide Ideation by Gender and Administration Period



Source: Eighteenth Biennial State California Healthy Kids Survey Data, 2013-15, 2015-17, 2017-19, and 2019-21

Summary

Arguably the most disturbing of all the findings from the Eighteenth Biennial State CHKS is the continuation of an increase in chronic sadness and the particularly high rates among females, with approximately half of them in high school reporting chronic sadness in 2020-21. Although suicide ideation did not increase, the lack of progress in reducing it is troublesome.

CHKS mental-health indicators were already declining before the pandemic and these new survey findings add to the growing body of evidence that the pandemic has exacerbated the problem. Both Eighteenth Biennial State CHKS data and other studies indicate that students attending school remotely reported higher levels of chronic sadness than students attending in-person.

The pronounced gender, racial/ethnic, gender identity, and sexual orientation differences in chronic sadness underscores the importance of identifying groups of students most in need and providing targeted prevention and intervention supports.

Educators and school personnel are in an ideal position to address the risk factors associated with mental health problems—including fostering positive, developmentally-supportive school climates—and to connect students to evidence-based interventions when appropriate. Supporting these efforts is the focus of [CDE's Cal-Well Project](#) and California's allocation of \$4.4 billion to create a statewide Children and Youth Behavioral Health Initiative. Future biennial surveys will help monitor how well the state's efforts succeed in improving mental health supports and outcomes among secondary students.

Suggested citation: Bala, N., Austin, G., Hanson, T., and Zheng, C. (2023). *Mental health among California secondary students before and during the COVID-19 pandemic - Key findings from the Biennial State CHKS, 2019-21*. CHKS Factsheet #22. San Francisco, CA. WestEd.

Appendix

Biennial State California Healthy Kids Surveys

The surveys were administered over two-year periods to randomly-selected, representative state samples of secondary students (grades 7, 9, and 11). Sample selection and data collection was embedded within the process of local CHKS administration by school districts under the sponsorship of the California Department of Education.

The surveys were conducted under conditions of strict anonymity and confidentiality. Results are weighted to reflect the sampling design, state student enrollment, and state enrollment composition by race/ethnicity, gender, and grade. The California Department of Health Care Services provides financial support for the statewide survey. The state's Committee for the Protection of Human Subjects, Office of Statewide Health Planning and Development, approved the survey protocols.

Participating schools included four schools serving students in grades 7, 9, and 11; 47 schools with students in grade 7 only; 46 schools serving students in grades 9 and 11; and 20 continuation schools. No surveys were obtained from 11th graders in one of the 46 schools serving students in grade 9 and 11.

Pandemic Considerations

Data collection for the Eighteenth Biennial State CHKS differed dramatically from previous administrations due to the COVID-19 pandemic. Designed to be administered over a two-year period in the 2019-20 and 2020-21 academic year, survey administration in the 2019-20 academic year ceased in mid-March 2020 when the vast majority of California schools ended in-person instruction and nearly all students continued their schooling remotely. Just a handful of students took the survey in spring 2020. In addition, school buildings remained closed for most of the 2020-21 academic year and between two-thirds and three-quarters of students were participating in school remotely and took the survey in their homes rather than in classroom settings.

Although the Biennial State CHKS is designed to provide statewide prevalence estimates during a two-year time window, the onset of the pandemic in March 2020 complicates interpretation of the results. To aid in interpretation and to ascertain potential effects of the pandemic, the results in the report were sometimes disaggregated by survey year to depict how the results differ in 2019-20 and 2020-21.

Additionally, the Core Module was modified for students participating in school remotely in 2020-21, and some measures available in past reports are not available this year.

Table A1. List of Selected Measures

Construct	Item(s)	Operationalization
Chronic Sadness	In the past 12 months, did you ever feel so sad and hopeless almost every day for two weeks or more that you stopped doing some usual activities?	The average percent of students responding yes.
Suicide Ideation	In the past 12 months, did you ever seriously consider attempting suicide?	The average percent of students responding yes.
Gender	What is your sex? Male, Female, Nonbinary*, Something else* *Categories only asked on 2020-21 category, and thus omitted from Eighteenth Biennial State Survey analysis.	Male Female
Gender Identity	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?	Not transgender Transgender Not sure if transgender
Sexual Orientation	Which of the following best describes you? Straight (not gay), gay or lesbian, bisexual, not sure yet, something else, decline to respond	Straight Gay/Lesbian Bisexual Don't Know Yet