

## Cal-VEX 2021: Past-year Suicidality in California

### BACKGROUND

Suicide is a leading cause of death in California.<sup>1</sup> In 2019, 4,436 Californians died of suicide, a mortality rate of 10.7 per 100,000 people.<sup>1,2</sup> Suicidality, or contemplating suicide, is even more common, with 4.4% of adults in California in 2019 – more than 1,000,000 individuals – reporting serious consideration of suicide in the past year.<sup>3</sup> National data suggest an increase in suicidality and other mental health concerns under the pandemic,<sup>4</sup> due to increases in economic hardships and social isolation.<sup>5</sup> This has not been examined in California.

**Objective.** To assess past year suicidality among California adults age 18+, under the pandemic, and to assess whether demographic characteristics and economic hardship are associated with increased likelihood of suicidality. We also assess the association between firearm ownership and suicidality, as firearms are the most common means of suicide reported<sup>1</sup> and firearm ownership has been linked with suicidality in prior research.<sup>6</sup>

### METHODS

The California Study on Violence Experiences Across the Lifespan (Cal-VEX) 2021 is a state-representative survey on experiences of violence and impacts of the COVID-19 pandemic conducted with 2,203 California residents aged 18 and older. The online survey was conducted from March 12-24, 2021, one year after the prior wave of the Cal-VEX study, conducted March 19-27, 2020 (at the initiation of the statewide COVID-19 stay at home order). The Cal-VEX survey included several items assessing overall mental health as well as specific mental health symptoms; as part of this, participants were asked whether they had seriously considered suicide in the past year.

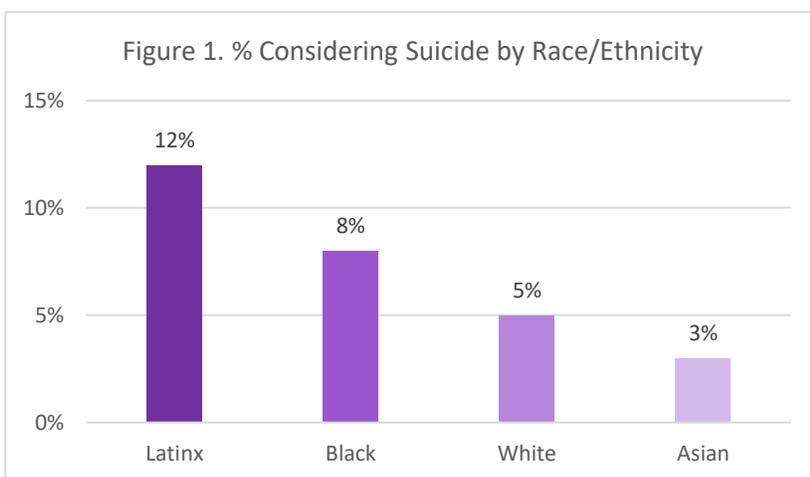
**Analysis.** We present prevalence of past-year suicidality in both 2020 and 2021. We also present demographic characteristics and indicators of economic deprivation, gun ownership and purchases, as well as associations between suicidality and these factors, using Pearson’s chi-squared or adjusted Wald tests of association.

### FINDINGS

In the 2021 Cal-VEX study, 7% of California adults – roughly 1.75 million people - seriously considered suicide in the past year. There was no difference by gender, and rates were comparable to 2020 (6.4% 2020 vs 7.1% 2021,  $p=0.6$ ). We also found a marginal association between COVID infection in the household (excluding the respondent) and suicidality (11% vs. 6%,  $p=0.08$ ), though no association was seen between having had COVID-19 oneself and past year suicidality.

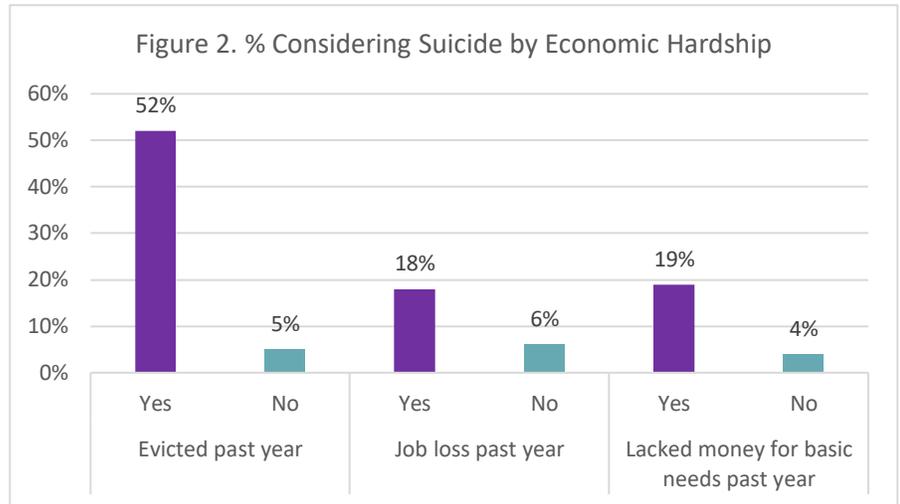
**Demographics** Suicidality differed by age, race/ethnicity, and sexual orientation.

- Adults aged 25-34 years (17%) and 18-24 years (13%) were most likely to report suicidality, and this decreased with age (7% among 35-44 years, 7% 45-54 years, 2% 55-64 years, 2% 65+ years).
- Latinx respondents were significantly more likely to report past-year suicidality compared to white respondents (12% vs 5%,  $p=0.01$ ). (Fig. 1)
- Sexual minority individuals (lesbian, gay, bisexual, or other sexual identity) were 5 times more likely to report suicidality than were heterosexual respondents (24% vs 5%,  $p<0.001$ ).



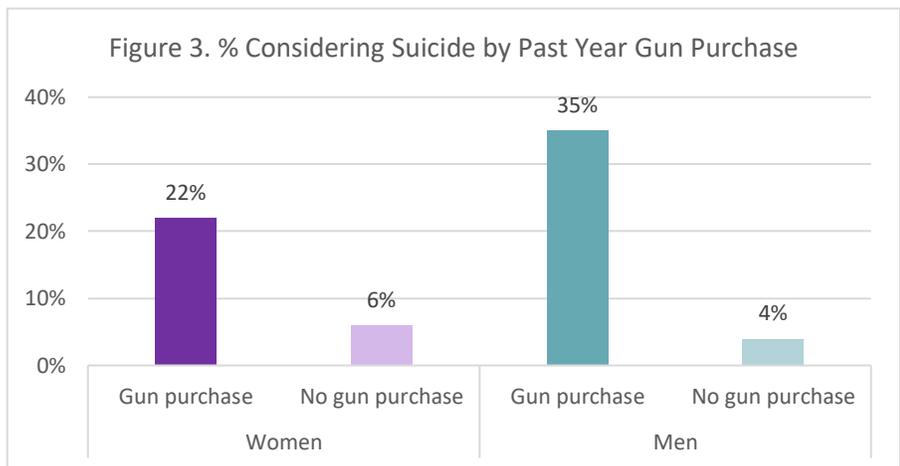
**Economic hardship** Economic hardship under the pandemic was linked with suicidality. (Fig. 2)

- Over half (52%) of individuals who were evicted in the past year considered suicide, compared to 5% who were not evicted ( $p < 0.001$ ).
- Nearly one in five (18%) individuals who lost a job in the past year considered suicide, compared to 6% who did not experience job loss ( $p < 0.001$ ).
- Similarly, 19% of individuals who lacked money for food or other basic needs considered suicide, compared to 4% who did not ( $p < 0.001$ ).



**Suicidality and gun purchases** Gun ownership was not associated with past-year suicidality. However, past-year gun purchase was, with stronger findings for men. (Fig. 3.)

- A third (31%) of individuals who bought a gun in the past year considered suicide, compared to 5% who did not ( $p < 0.001$ ). For women: 22% vs. 6%; for men: 35% vs. 4%.
- Put another way, 32% of individuals who considered suicide also bought a gun in that same timeframe.



## CONCLUSION AND IMPLICATIONS

While suicidality did not significantly increase from March 2020 to March 2021, there appears to be an increase in suicidality in the state from 2019 to 2021 (4% to 7%), indicating an increase in suicidality from before the COVID-19 pandemic to present. These findings also suggest that more than 1.75 million Californians seriously considered suicide in the past year, and that there are disproportionate rates of suicidality among young people, Latinx individuals, and LGBTQ individuals. Findings also indicate that pandemic-related economic hardships and past year gun purchase were significant correlates of suicidality. These findings highlight the need for increased focus on suicide prevention and mental health intervention efforts in our state, and the potential value of economic interventions to help alleviate mental health risks.

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