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Health Policy Brief

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More Than Half a Million California Adults Seriously Thought About Suicide in the Past Year

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SUMMARY: In 2009, nearly 2.4 million adults in California reported having seriously thought about suicide during their lifetimes. Among these adults, more than half a million had thought seriously about suicide sometime during the past year. Members of sexual minorities were almost three times as likely as all adults in California to have had suicidal thoughts during the past year. This policy brief, based on data from the 2009 California Health Interview Survey (CHIS), presents a comprehensive overview of risk factors associated with suicidal thoughts among adults ages 18 and older and highlights differences in suicidal ideation among demographic groups and geographic regions in California.

"Suicide is the tenth leading cause of death in California."

Suicide is a serious public health issue. In California, suicide is the tenth leading cause of death,[1] with an average of nine preventable deaths by suicide occurring each day.[2] In order to reduce the number of suicidal deaths, the *California Strategic Plan on Suicide Prevention* emphasizes that suicide prevention efforts must go beyond treating individual risk factors by taking a comprehensive, population-based approach to suicide prevention.[3] Recommendations include the expansion of suicide hotlines and improved access to services, particularly for those with physical and psychiatric disabilities and for those in rural locations. These recommendations can be fully implemented only through the collaboration of state and local partners spanning multiple disciplines and settings to create a coordinated system of suicide prevention. The state plan recommends improvements in the collection and reporting of data, as well as the conducting of research and surveillance to better understand suicide trends and risk factors. Similarly, the U.S. Surgeon General recently outlined specific goals and objectives for a national suicide prevention strategy, which includes national surveillance systems to collect, analyze, and disseminate information needed for suicide prevention and informed health policy decisions.[4]

An important source of data on suicide ideation in California is the California Health Interview Survey (CHIS). CHIS is a population-based survey that provides a unique perspective on suicide relative to information obtained from health-care settings, medical records, or death certificates. In 2009, CHIS included questions about suicide, asking all adults (ages 18 years and older): "Have you **ever** seriously thought about committing suicide?" If an individual responded yes, they were asked additional questions about suicide, including whether they had had serious thoughts of suicide during the past 12 months.

Using CHIS 2009 data, this policy brief provides prevalence estimates of suicidal ideation within the past 12 months among

CALIFORNIA DEPARTMENT OF Mental Health

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Exhibit 1

Serious Suicidal Thoughts in the Past Year by Demographic Factors, Adults 18 and Older, California

	Seriously Thought About Suicide in Past 12 Months		
CHIS 2009	**N**	**%**	**95% CI**
	501,400	**1.8**	**1.5 – 2.2**
Gender			
Male	260,200	1.9	1.4 – 2.5
Female	241,200	1.7	1.2 – 2.3
Age			
18-29	134,700	2.1	1.5 – 2.8
30-44	165,900	2.1	1.2 – 3.1
45-64	157,500	1.7	1.3 – 2.1
65+	43,300	1.1	0.2 – 2.0
Poverty Level			
< 300% FPL	320,500	2.5	1.8 – 3.1
≥ 300% FPL	180,900	**1.3**	0.9 – 1.6
Marital Status			
Married	169,200	**1.1**	0.8 – 1.5
Other†	332,300	**2.6**	1.9 – 3.3
Race			
White	196,300	1.5	1.3 – 1.8
Latino	177,600	2.0	1.1 – 2.9
African American	31,000	2.0	0.9 – 3.1
American Indian/Alaska Native	10,900	6.2	0.5 – 12.0
Asian	72,500	2.1	0.7 – 3.4
Native Hawaiian, Pacific Islander/Other 2+	13,100	2.5	1.1 – 3.8
Sexual Orientation			
Heterosexual/ Straight	417,000	1.7	1.4 – 2.1
Sexual Minority	52,200	**6.5**	2.0 – 11.0

Source: 2009 California Health Interview Survey

Notes: Educational attainment, employment, and veteran status were also explored, with no significant findings. Having a college degree or higher is a protective factor but is not statistically significant, at $p < 0.05$ (1.2% at $p = .053$). Income, education, and employment status are highly correlated, which suggests that the significant findings for adults at or greater than 300% FPL are likely related to higher education and employment status.

Proxy interviews excluded for all analysis.

Bold: The difference from the California statewide average (1.8%) is statistically significant at $p < 0.05$.

† "Other" marital status category includes living with partner, divorced, widowed, separated, and never married.

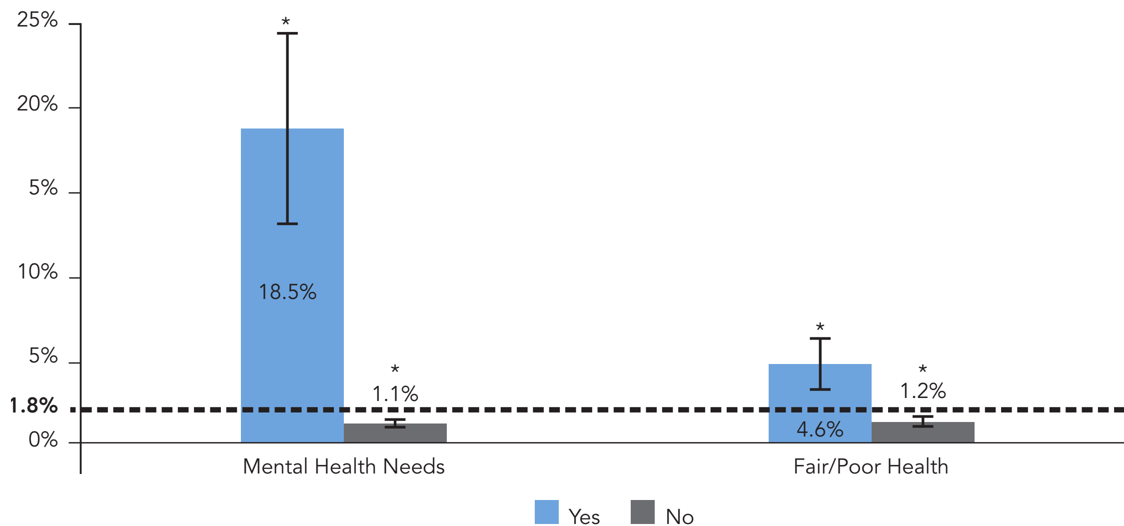
California adults ages 18 years and older. After outlining the demographic characteristics of those who reported having had serious suicidal thoughts in the past year, we examine comorbid mental and physical health indicators and mental health treatment associated with suicidal ideation. Lastly, this brief includes 2009 data from California Vital Statistics that examine regional differences in suicide death rates when compared to suicidal ideation in the past year. The indicators of suicidal ideation presented here can be used to inform policies and programs aimed at suicide prevention for California's diverse population.

American Indians, Alaska Natives, and Sexual Minorities at Risk for Recent Suicidal Thoughts

Serious suicidal ideation affects a range of demographic groups in California (Exhibit 1).

This publication contains data from the California Health Interview Survey (CHIS), the nation's largest state health survey. Conducted by the UCLA Center for Health Policy Research, CHIS data give a detailed picture of the health and health care needs of California's large and diverse population. Learn more at: ***www.chis.ucla.edu***

Serious Suicidal Thoughts in the Past Year by Health Status, Adults 18 and Older, California **Exhibit 2**



Source: 2009 California Health Interview Survey

* Difference from California statewide average (1.8%) is statistically significant at $p < 0.05$.

I represents a 95% Confidence Interval.

Note: Those with mental health needs are those with serious psychological distress and at least a moderate impairment in one or more life domains. Proxy interviews were excluded.

Men and women exhibited similar levels of suicide ideation, with 1.9% of men and 1.7% of women reporting serious suicidal thoughts in the past 12 months. However, there were a few groups who were disproportionately affected, including sexual minorities and American Indians/Alaska Natives.

Sexual minorities were more than three times as likely as all California adults to have had thoughts about suicide in the past year, with 6.5% of sexual minorities having seriously thought about suicide in the past 12 months compared to 1.8% of all California adults. American Indians and Alaska Natives (6.2%) also appear to have much higher levels of suicidal ideation, although this rate is not statistically different from the California adult population. Nonetheless, it is consistent with national data indicating that American Indian/Alaska Native populations have a disproportionately higher risk of suicide relative to other racial groups.[5] These findings suggest that sexual minorities and American Indians/Alaska Natives are important target populations for suicide prevention efforts.

In contrast to risk factors for suicidal ideation, those who reported that they were currently married reported lower rates of suicidal ideation (1.1%) than those who were not married (2.6%). Additionally, adults with household incomes equal to or greater than 300% of the Federal Poverty Level (FPL) were significantly less likely to report suicide ideation in the past months (1.3%) compared to the statewide average (1.8%).

Poor Mental and Physical Health Status Linked to Reported Thoughts of Suicide in the Past Year

Poor mental or physical health is often associated with suicide ideation and attempts.[6, 7] Based on information collected in CHIS about mental health status and suicide ideation, adults with mental health needs were significantly more likely to have had serious thoughts of suicide in the past 12 months than those without mental health needs (Exhibit 2). Individuals with mental health needs were those who reported symptoms consistent with serious psychological distress, indicating the likely

“Sexual minorities were more than three times as likely as all adults to have suicidal thoughts.”

"Suicidal thoughts are more common among adults in poor mental or physical health."

presence of a diagnosable mental disorder,[8] and who reported at least a moderate limitation in one or more life domains due to their mental health needs.[9] Adults with mental health needs were 10 times as likely to report suicidal ideation (18.6%) as all California adults (1.8%, Exhibit 2).

Other health status and health behaviors were associated with recent suicide ideation.[10] Among adults who reported fair or poor health, 4.6% reported suicide ideation in the past 12 months, compared to 1.8% of all California adults (Exhibit 2). Similarly, adults who reported a disability due to a physical, mental, or emotional condition were four times more likely (4.2%) than all adults to report having had serious thoughts of suicide in the past year (data not shown). Some health behaviors were also related to increased risk of recent suicidal thoughts. For instance, being a current smoker was associated with having serious thoughts of suicide in the past 12 months, with 4.9% of current smokers having seriously thought about suicide compared to the California average of 1.8% (data not shown). This association between smoking and suicide ideation may be largely explained by other, nonobserved factors and life circumstances, such as alcohol use, inability to maintain employment, or mental illness, all of which are associated with both smoking and suicidal behavior.[11]

Mental Health Treatment Unlikely for Adults with Recent Suicidal Thoughts

Access to care and appropriate screening for those with suicidal thoughts in both primary care and mental health settings is essential for adults with poor mental or physical health. Previous research found that adults in California with comorbid mental and physical health conditions had greater contact with health care professionals than adults with mental health needs alone.[9] Furthermore, according to other research, one in five suicide victims had contact with a mental health professional within a month before their death, and three of four suicide victims had contact with a primary care provider within a year of their death.[12] While it may seem counterintuitive that adults with physical and mental health needs, including suicide victims, have had recent contact with the medical system, this likely reflects overall poor health that required professional treatment. From a suicide prevention perspective, help-seeking behaviors and higher service use among a vulnerable and suffering population may present a window of opportunity for intervening and potentially disrupting self-destructive behavior. These findings also speak to the need for more suicide training among health professionals.

However, according to CHIS, among those with mental health needs who also report suicidal ideation, 65% (132,000) had unmet mental health needs—that is, either they did not receive minimally adequate treatment or they received no treatment at all. Minimally adequate treatment is defined as having had four or more visits with a primary care physician or mental health professional and prescription medication for mental health problems in the past 12 months.[13] These findings are consistent with previous research showing that among those with mental health needs, more than three-quarters had unmet needs.[9] The treatment gap for those with mental health needs and suicide ideation is wide; comprehensive as well as alternative approaches to suicide prevention are needed to reach those who are unlikely to receive help in traditional health care settings.

Comparison of Recent Suicidal Thoughts and Suicide Deaths by California Region

In California, death by suicide varies by geographic region. Comparisons of publicly available California Vital Statistics data with suicidal ideation rates from CHIS indicate that particular regions and counties in California have higher relative risk.[14] For instance, residents in the Northern and Sierra counties had high rates of both

Suicide Deaths and Suicidal Ideation by Region, Adults 18 and Older, California **Exhibit 3**

Region	Total Deaths by Suicide*	Crude Vital Statistics Suicide Death Rates** (per 100,000) UNADJUSTED	Seriously Thought About Suicide in Past 12 Months	
			%	N
California	**3,675**	**13.9**	**1.8**	**501,400**
Northern and Sierra Counties	364	31.8	2.1	22,300
Central Coast	421	24.4	1.9	31,500
Sacramento Area	261	16.2	2.1	32,800
Other Southern California	1,058	13.3	1.3	97,300
Greater Bay Area	734	13.0	2.0	112,800
San Joaquin Valley	348	12.1	1.9	51,500
Los Angeles	759	9.8	2.1	153,200

Sources: California Vital Statistics 2009; 2009 California Health Interview Survey

* ICD-10 Codes: X60-X84, Y87.0

** 0-17-year-olds excluded based on NCHS estimates of suicide death and Census population estimates (1999-2007).

suicidal ideation and actual deaths by suicide when compared to the California average. According to the 2009 Vital Statistics, the Northern and Sierra counties had a rate of 31.8 suicide deaths per 100,000 persons, and approximately 2.1% of the adult populations in the Northern and Sierra counties had seriously thought about suicide in the past 12 months (Exhibit 3). These findings are consistent with research that suggests that rural areas tend to have higher suicide mortality rates than urban areas, due to factors such as physical isolation and lack of social interaction as well as to unfavorable changes in economic conditions.[15]

Implications

According to data from CHIS 2009, more than 500,000 Californians had seriously thought about suicide in the past 12 months, with 60,000 of these individuals also reporting an actual suicide attempt in the past 12 months. The CDC estimates that for every suicide death, an estimated 11 nonfatal suicide attempts occur.[1] Although most suicide attempts do not result in death, each attempt is associated with psychological suffering (which can also lead to physical disablement) and carries an increased likelihood of future suicide attempts.[16]

The suicidal ideation estimates from the 2009 California Health Interview Survey were comparable to those of the National Survey on Drug Use and Health.[17] Using differently worded questions, NSDUH estimates that 3.7% of all U.S. adults and 2.9% of California adults ages 18 and older had serious thoughts of suicide in the past year. CHIS estimates that 1.8% (95% CI, 1.5 to 2.2) of California adults had serious thoughts of suicide in the past year.

Analyses of CHIS data suggest that mental and physical health were significant risk factors for recent suicidal thoughts. In particular, those with mental health needs and those who reported fair or poor health were at high risk for suicidal ideation. Sexual minorities and American Indians/Alaska Natives were high-risk groups as well, with members of these populations reporting higher levels of suicidal ideation in the past year compared to all California adults. These findings are also consistent with the U.S. Surgeon General's report *2012 National Strategy for Suicide Prevention*.[4]

"More than 500,000 Californians had seriously thought about suicide in the past 12 months."

> *"There is a critical need for more suicide prevention training among all health professionals."*

Building on the recommendations of the *California Strategic Plan on Suicide Prevention*, responsive policies and tailored programs are needed to reduce the risk for suicide among these vulnerable population groups. Increasing access to and utilization of mental health treatment and suicide screening in primary care and mental health treatment settings may help to address the psychosocial and health-related issues associated with suicidal ideation, which may ultimately reduce the number of suicide deaths. Community-wide strategies and culturally tailored programs that span professional disciplines and settings and are responsive to the particular needs of sexual minorities and American Indians/Alaska Natives are needed to address suicidal thoughts and prevent suicide attempts among these especially vulnerable populations. The state of California has an obligation to provide access to care in order to ensure both the longevity and the productivity of its residents. Implementing a broad spectrum of prevention and early-intervention programs that are based on evidence and are data-driven is an important step in this process.

About CHIS/Data Source

This policy brief is based on data from the 2009 California Health Interview Survey (CHIS). The largest statewide health survey conducted in the U.S., CHIS is a research project of the UCLA Center for Health Policy Research. For more information on CHIS and for access to CHIS data and results, visit *www.chis.ucla.edu*.

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