High-Achieving Asian American Adolescents and Suicide: The Need for Culturally Sensitive Suicide Intervention Approaches in Schools, A Case Study

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Abstract: Within the field of suicidology, high-achieving Asian American adolescents are an under-researched at-risk population. The present paper reviews the existing literature on this topic, addressing the increase in suicidal ideation and suicide attempts within this at-risk group, and explores ecologically valid social work interventions. School social workers are first responders to these at-risk youth and must be well-versed in the riskfactors, including parental resistance to treatment, within the specific populations they serve. To illustrate the relevant issues, a case example is presented of an adolescent Bangladeshi male who attempted suicide while attending school. Finally, this paper recommends suicide prevention measures, including a culturally appropriate suicide assessment and family therapy.

Keywords: Asian American, adolescent, suicide, high-achieving, high school, social work, intervention, prevention

Adolescent suicide is a national public health crisis (Horowitz, et al., 2020). In 2017, 17.7% of high school students seriously considered attempting suicide, 14.6% planned their attempt, 8.6% attempted suicide, and 2.8% reported that their attempt required the medical attention of a nurse or doctor (Kann et al., 2018). Importantly, these statistics appear to vary by race. Although the overall age-adjusted rates indicate a decrease in suicide rates between 2018 and 2019 for White and American Indian or Alaska Native individuals, reflecting the decrease in total deaths, the rate increased for Black and Asian or Pacific Islander individuals (Ramchand et al., 2021).

Asian American high school students are the majority population in high-performing high schools, which require a very competitive entrance exam. In fact, recent work has found that this phenomenon is increasing. A study by the Brookings Institute found that Asian American students made up 60% of the high-performing high school population, up from 50% in 2015 (Reeves & Schobert, 2019). Because of the high risk of suicide within the Asian American adolescent population, clinicians, including social workers, school counselors and psychologists, working in high-achieving high schools need an understanding of the cultural context of suicidal thoughts and behavior, especially when assessing for suicidal behavior in this type of school setting. For example, ethnic minorities are less likely to express suicidal ideation than Whites, a concept called "hidden ideations" (Chu et al., 2010, p. 29). As it stands, the suicidology field has yet to provide systematized recommendations to advance culturally-relevant suicide science and practice due to a lack of theoretical grounding and familiarity with empirical research (Chu et al., 2010).

This article reviews the literature on how acculturative stress and Asian culture relate to the increased rates of suicidal ideation in high-achieving Asian American adolescents in

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a high school setting. When broken down by race, suicide is the first leading cause of death among Asian American young adults age 15-24, which is not the case for any other racial group in this age range in America (Noor-Oshiro, 2021). We then present a specific case example of a Bangladeshi adolescent, representing one subgroup of the Asian-American population. Finally, this article provides clinical recommendations for social workers engaging with Asian American adolescents in a high school setting.

As the population in high performing high schools are majority Asian-American (Reeves & Schobert, 2019), it is vital that social workers are attuned to the suicidal risks of this specific population. Further, social workers must be attuned to the way each individual client expresses suicidality, which is differentiated based on their culture (Tummala-Narra et al., 2016). The hope is that clinicians can use these suggested methods of intervention and tailor them to the specific Asian-American subgroup they are working with, as Asian-Americans make up 5.9% of the population in the United States (U.S. Census, 2020). Asian-American communities consist of approximately 50 ethnic groups speaking over 100 languages, with connections to Chinese, Indian, Japanese, Filipino, Vietnamese, Korean, Hawaiian, and other Asian and Pacific Islander ancestries. As the National Alliance of Mental Illness (2021) points out, it is important to note the diversity within this population and the multiple sub-groups.

Asian American Adolescents, Acculturation, Stress, and Suicidality

Individuals of Asian ancestry are among the most rapidly expanding immigrant subgroups in the United States (Tummala-Narra et al., 2016). Immigrants and their U.S.born children number approximately 85.7 million people, or 26% of the U.S. population, according to the 2020 Current Population Survey (Batalova et al., 2021). Within the family context, there is often a cultural differentiation that emerges, commonly labeled as "acculturation," which describes the psychological processes and subsequent adaptation associated with continuous exposure to one's culture of origin and a new culture (Miller et al., 2011). This experience can sometimes lead to maladaptive experiences, including high levels of stress. For example, "acculturative stress" has been defined by the American Psychological Association (2013) as the challenges or stress accompanying acculturation. Others describe acculturative stress as stress specifically related to the process of adapting to the beliefs, practices, and values of a dominant culture (Berry, 1998; Gomez et al., 2011). This is particularly salient for Asian individuals, as they report higher levels of acculturative stress than other racial or ethnic groups (Gomez et al., 2011). Acculturative stress impacts environmental factors experienced by the acculturating individual (e.g., racial discrimination), change in family relationships (e.g., conflicts between family values and those of the dominant culture), diminished quality of social relationships (e.g., difficulty with language, in forming friendships), and attitudes toward the country/culture of origin (Gomez et al., 2011). Importantly, these stressors may be important risk factors for suicidality among adolescents and emerging adults, as acculturative stressors have been associated with other known predictors of suicidal behavior, such as depression and suicidal ideation (Cho & Haslam, 2010; Gomez et al., 2011). Suicidality may present differently among Asian Americans than individuals of other ethnicities (Whaley & Noel, 2013). For most adolescents, depression is linked to suicidality, but for Asian American

adolescents, it is often depression along with the additional factors including achievementbased anxiety and acculturative stressors, which increase risk for suicidal ideation (Kim et al., 2018). These findings suggest that the acculturative stress that Asian American adolescents experience may exacerbate their likelihood of suicidal ideation and potential suicide attempts.

In addition to acculturative stress, Asian Americans are often faced with stereotyping that may also negatively contribute to their mental health and risk for suicidality, including the term "High-achieving Asian American." Asian Americans are often labeled the model minority, as their significant presence at elite schools has contributed to the narrative of Asian American exceptionalism (Lee & Zhou, 2015). In fact, there may be an assumption that Asian Americans are uniformly successful academically and professionally, minimizing the impact of the structural (i.e., social, cultural, economic) challenges and social injustices that may adversely affect their psychological well-being (Tummala-Narra et al., 2016). Lee and Zhou (2015) state that as opposed to a "stereotype threat," which may dismantle the achievement ability of certain ethnic groups, a "stereotype promise" (p. 7) does the exact opposite. "Stereotype promise can enhance the performance of even the most mediocre Asian American students, leading them to work harder to excel in order to confirm the stereotype of Asian American exceptionalism" (Lee & Zhou, 2015, p. 7).

As the model minority myth and the pressure of stereotype promise is readily expressed both within the culture and externally through stereotypes, Asian American adolescents are familiar with perceived expectations. Unfortunately, when Asian American students are perceived as outperforming their peers, their mental health needs are less likely to be addressed, as their high academic functioning may mask their depression or anxiety (Kim et al., 2018). It is plausible that these same biased perceptions systematically reduce the likelihood that a suicidal symptomatic Asian American student would be identified for a risk assessment (Kim et al., 2018). This may also affect student's own questions/perception of personal emotional distress. Despite the stereotype of Asian Americans being consistent in their high achievements, research has found that Asian Americans are at a significantly higher risk for mental health issues and suicidal ideation compared to individuals of any other ethnicity (Kim et al., 2018).

Recent research has indicated that Asian American youth are at greater risk for mental health problems, such as depression, self-injury, and suicide as compared to White and African American youth (Tummala-Narra et al., 2016). However, compared to other ethnicities, Asian Americans' mental health needs are also less likely to be addressed due to the underutilization of mental health services among these communities (Tummala-Narra et al., 2016).

Asian American Families and Suicidality

While cultural context plays an important role in identifying and intervening with Asian American adolescents at risk for suicide, understanding the familial context is also critical. Among high-achieving students, familial pressures become particularly acute, instilling a sense of urgency to achieve due to a pervasive belief that unrealistic goals (such as achieving admission to all Ivy League universities) are well within reach (Luthar et al., 2013). In an early study, Luthar and Becker (2002) found that Asian American students who felt their parents disproportionately prioritized achievement dimensions were at a significantly greater risk for self-harm. Chronic exposure to pressure has many negative psychological consequences. Flett and colleagues (2016) have suggested that the tendency to be internally controlled provides the fuel for the urgent and relentless striving of adolescents who develop self-oriented perfectionism. This pressure can become overwhelming alongside frequent daily stressors, setting the stage for elevated anxiety, depression, and externalized behaviors. Such requirements of perfectionism and familial pressures have become commonplace, particularly in high-achieving high school settings. These findings suggest that, in general, adolescents do not always have the skills to manage perceptions of familial obligation, and therefore may be more prone to suicidal ideation (Luthar et al., 2013).

Research has also found that Asian individuals who reported higher rates of familial acculturative stress had higher odds of making a previous suicide attempt (Gomez et al., 2011). Familial acculturative stress may interact with the parent-child relationship, considering that parent-child conflict is more strongly associated with suicide-related outcomes among less acculturated Asian Americans than among highly acculturated Asian Americans (Wong & Maffini, 2011). In fact, within acculturated Asian Americans, levels of distress, symptoms, and suicidal ideation have been associated with life stress, lack of parental support, and not living with both parents (Cho & Haslam, 2010). Studies have also found that children of immigrants may have both cultural and language differences with their parents that impede their ability to communicate emotions (Thapa et al., 2015). These findings have important implications for suicide prevention among immigrant adolescents and suggest that social and parental support may be protective. This work also indicates that the combination of a volatile household environment with the heightened stress and perceived academic requirements contribute to an increased cumulative stress model that Asian American adolescents must learn to process. Research has also found that Asian American youth can be less emotionally expressive than other ethnicities, have difficulties discussing problems with their family members and do not disclose suicidal ideation, as emotional expressiveness is perceived to be an undesirable personality trait (Komiya et al., 2000). This paper addresses the need for culturally-sensitive suicide intervention strategies that should be implemented by school clinicians working with high-achieving Asian American youth.

Case Example

The author is a social worker in a large high school and has used one case example (using a pseudonym) to demonstrate how social workers can provide interventions with a suicidal high-achieving Asian American adolescent of Bengladeshi descent. Ahmed, an only child, is a 16-year-old junior at a specialized high school with over 3000 students in a large East Coast City within the United States. He is Bangladeshi American, speaking Bengla in the home, and English with his peers and in school. He stated that his parents consistently told him that they moved to the United States for him to go to an Ivy League college. Ahmed was feeling insecure because his grades were in the B range and he felt

that he was not achieving the goals his parents had set forth for him. Ahmed was introduced to the school social worker by his English teacher in the previous school year after he wrote an essay in his English class concerning his feelings of depression and anxiety about school, work, and his family, which were leading to acts of self-harm. When the social worker invited him into the office to conduct an assessment, he stated that he often had suicidal ideation (SI) and was currently thinking about advancing his acts of self-harm from superficial wrist cutting (horizontal cuts) to vertical and deeper cuts. Because of the highrisk indicators of his suicidal ideation, the social worker had him taken by ambulance to the school's partnering hospital's C-CPEP (Children's Comprehensive Psychiatric Emergency Program) to be evaluated by a psychiatric team. He was held overnight and the hospital recommended outpatient treatment. Despite this experience, Ahmed and his family did not follow-up with his post-crisis appointments at the hospital.

One year later, the Assistant Principal (AP) of the Counseling Department at the school received a call from a school counselor at a sister high school. A student in that school showed her school counselor a text exchange in which Ahmed stated that he wanted to die by suicide because his grades were going down and his parents had been expressing disappointment in him. He stated in the text that his parents were also angry because he had a girlfriend and they did not believe in any relations before marriage. He said in the text that he was going to "kill himself" in school. The in-school response team (school social worker, AP of Counseling, AP of Safety and Security, and school police officer) went to find Ahmed in his class to have him assessed. When the team got to his classroom, his backpack was in the room, but the teacher stated that he was in the bathroom.

The response team proceeded to the boy's bathroom. Ahmed was found inside the bathroom with blood running down his arm from superficial cuts in horizontal strokes. Scissors were taken from him and paper towels were pressed on his arms. He was crying and stated that he wanted to die. However, he was not cutting himself in a way that would have led to death, but instead in a non-lethal method of self-harm. Ahmed stated that he has been feeling very lonely recently with his father in Bangladesh and his mother working constantly and felt overwhelmed by the pressure of his falling grades.

The team decided that Ahmed must be evaluated in the hospital. Mom was not in agreement, expressing that this was not the norm for Bangladeshi children. Shame was affiliated with this prospect as she did not want her family to once again be affiliated with the hospital for mental health reasons, which was not a perceived norm for her culture (Gomez et al., 2011). After speaking with the social worker, Ahmed's mother finally agreed to leave work early and come to the hospital. The social worker and Ahmed were taken by an ambulance to the Child CPEP unit where he was evaluated and a determination was made that he would be kept two nights and then released because he was able to create a safety plan. Staff from the school and the hospital spoke numerous times to determine a suitable intervention that the family would follow-through with, unlike the previous hospital visit where they did not go to treatment. The hospital social worker suggested telling Ahmed's mother that if he did not come to follow-up care in the crisis outpatient clinic and subsequent outpatient counseling sessions, Mobile Crisis would be sent to their home. The school suggested that if Ahmed did not provide a note demonstrating perfect attendance for his clinical sessions, Child Welfare would be called for medical neglect.

These seemingly forceful interventions are sometimes felt necessary to ensure follow-up treatment and prevent another hospitalization. Upon discharge, Ahmed, his family, and the school staff agreed upon these protocols. However, Ahmed's post-hospitalization protocol was not implemented—there was no follow-up with the social worker in the school nor the hospital after the two-week critical care appointment.

Recommendations for Clinical Interventions

The scenario highlighted in the previous case example is not uncommon within the Asian American population. A recent study found that there are indeed disparities in rates of follow-up mental health services for Asian American students assessed for suicide risk in schools (Kim et al., 2018), with few families moving forward with outpatient care post-hospitalization. Mandated follow-up is extremely important to reduce the likelihood of future self-harm. In Ahmed's case, mom felt both shame and a misunderstanding about the necessity of mental health care. Family therapy is also vital, as an adolescent may perceive that they are required to be highly accomplished students and must prove achievements to their primary caretaker. This obligatory stress is one of the key factors that leads to suicidal ideation in this population (Chu et al., 2010). It is also important to note that cultural norms in the family's native country may also contribute to an adolescent's perception of what they are required to accomplish.

It is critical that clinicians understand cultural humility, or the "ability to maintain an interpersonal stance that is other-oriented (or open to the other) in relation to aspects of cultural identity that are most important to the [person]" (Hook et al., 2013, p. 354) when working with Asian American adolescent clients. Evidence also suggests that involving caregivers in each step of treatment, including psychoeducation about mental health disorders and intervention, and ongoing collateral sessions, are all necessary for robust treatment delivery and durability (Kim et al., 2018). Furthermore, successful suicide prevention and intervention strategies should acknowledge the role of culturally relevant factors, such as acculturative stress and perceived discrimination, to improve the identification of emerging adults who are at risk for suicidal behavior and to offer culturally competent treatment (Gomez et al., 2011).

Gaining a greater understanding of cultural context may assist researchers and clinicians in developing more appropriate interventions to prevent suicidal behavior among Asian American youth (Gomez et al., 2011). Past study findings highlight the importance of properly educating social workers concerning the cultural expectations and norms of the population they are serving, particularly when life is at stake. To mitigate potential barriers to service access, social workers should actively review and implement interventions that recognize the ethno-cultural diversity of the population they are serving. Goals should be to reduce racial/ethnic disparities related to adolescent mental health problems, increase access to services, and assuage the component of shame that families may have when accessing outside services (Kim et al., 2018).

Clinical Recommendations

Expanding on the clinical case presented above, the following interventions are the clinical recommendations for social workers and school counselors who work with Asian and Asian American youth and their families. In reviewing these clinical recommendations, please take the following into account: 1. this article focuses on clinical interventions in school settings, while acknowledging the importance of improving mental health awareness in Asian American communities. 2. The recommendations use Ahmed's case as an example. Therefore, social workers working with other Asian American sub-groups are encouraged to carefully consider their clients' specific cultural elements and tailor the recommended applications to their clients' cultural group.

Cultural Model of Suicide

Research has found that the most comprehensive way to address suicidality is to be culturally specific to the populations with which you are working (Chu et al., 2010). It is important to note that no other culturally specific suicide assessment model has been created. A modification of the modality, called *cultural model of suicide* (Chu et al., 2010) addresses the ways that different subgroups may express suicidal ideation. There are three theoretical principles that encompass the framework of Cultural Assessment of Risk for Suicide (CARS): 1. Culture affects how suicidal ideation is expressed. This pertains to whether or not persons from a specific culture may feel comfortable sharing their suicidal thoughts. 2. Culture affects the types of precipitating factors that may lead to wanting to act on suicidal thoughts. 3. Cultural meanings and cultural sanctions include messages of acceptability associated with a stressor and moving forward with a suicidal act (Chu et al., 2010).

The CARS method looks at four major categories when assessing suicide risk: cultural sanctions (acceptability of suicide as an option or shame affiliation with certain life events), idioms of distress (cultural variations in the expression of psychological symptoms), minority stress (particular stressors that cultural minorities may experience due to social identity or position), and social discord (interpersonal troubles, including conflict, alienation and lack of integration; Chu et al., 2013). Chu and colleagues (2013) found that a CARS assessment provides substantial advancement in the field of culture and suicide and provides a viable method of assessing the ways in which cultural variation is manifested in suicide risk. The cultural sanctions that may have prevented Ahmed from cutting in a vertical line might have been related to his religion, which promotes negative associations of suicide. Ahmed's idioms of distress may have been demonstrated by texting a friend about his ideation, rather than feeling safe enough to speak to a social worker or teacher. Difficulty both regulating and expressing emotions was associated with increased severity of suicidal ideation through increases in hopelessness (Polanco-Roman et al., 2019). The shame affiliated with emotional expression in Bangladeshi males may have prevented his feelings of transparency. Acculturation was linked to Ahmed's minority stress, which was demonstrated through the shame and familial fighting affiliated with dating before marriage. This experience of familial acculturative stress caused much tension between Ahmed and his parents. Finally, familial conflict and fighting was the

social discord that influenced Ahmed to move towards suicidal ideation as his only option to escape from the volatility in his family because of his falling grades. Because of this, a clinician may choose to incorporate a friend instead of a family member for social support within a safety plan, as Asian Americans may have familial conflict as a precipitant or trigger for suicide (Chu et al., 2010). The integration of cultural specificity into suicide assessment is the key to successful suicide intervention and eventual prevention in schools with a large high-achieving Asian American population.

Relational Approach to Family Therapy

The Ackerman Relational Approach (ARA) is a systematic approach to therapy that is designed to both strengthen and clarify relationships between family members and empower them to envision and create desired lives with the active support of their partners and/or families (Brewster & Sheinberg, 2014). This theory suggests that the therapists must be aware of their own family of origin and socio-political location and understand how this may influence their interactions with the family in treatment (Brewster & Sheinberg, 2014), who also has their own family of origin and socio-political location. Location is critical to acknowledge in the family relationship, therapeutic relationship, and when navigating the relational practice. From the perspective of the ARA, an acknowledgement of social location supports becoming a critically conscious systemic-relational therapist.

Because social workers' experiences never perfectly match that of the student and family they are serving, cultural humility is crucial for establishing the most effective communication. Cultural humility is needed when working with high-risk Asian American adolescents and their families to break through barriers that might impede therapy in order to find relevant interventions. This is an ongoing internal and external conversation in the therapeutic relationship. By relationally exploring which components play into an adolescent's suicidal ideation as well as differences in openness to therapeutic treatment, clinicians who practice from this perspective allow family members to hear each other when working through a crisis. A clinician's use of "critical consciousness" (Verdon, 2020, p. 4) helps navigate this dynamic with the family. Critical consciousness posits that recognizing the power imbalances in social relationships can foster a reorientation of power (Freire, 1970; Verdon, 2020). A professional must acknowledge their position in social structures and uncover any invisible power structure, privilege, biases, and inequities (Verdon, 2020). Clinicians must be continuously humble in the way that they address differences within the treatment room especially when parents are not immediately open to therapeutic treatment. With regards to Ahmed's mother, using "critical consciousness" would allow the social worker to hear what may have been barriers to treatment the first time around and what could alleviate some of these barriers. This humility allows for the parent-clinician dyad to be both constructive and fluid in helping address the potential resistance and facilitate therapeutic growth.

Intersection of CARS and the ARA for High-Achieving Asian American Adolescents

Chu and colleagues (2010) found that when culturally competent tools are used to screen for suicide, better outcomes result from interventions. Research has also found that

integrating families into care leads to better outcomes for the suicidal child (Kim et al., 2018). Based on the ethno/cultural diversity of high-achieving schools, the CARS model, which incorporates an individual's culture and ethnicity when assessing suicidal ideation, may be beneficial. The ARA may also be an effective approach to implement when intervening with suicidal adolescents and their families, as clinicians must be conscious of all components brought into the room that may be influencing their therapeutic approach. Had the social worker and hospital working with Ahmed been conscious of the ways in which suicide assessment questions should be framed for Asian American youth, Ahmed may have been hospitalized the first time he made a suicide attempt. For example, one study had found that when asking an Asian American adolescent to answer a written survey versus an oral questionnaire, their answers were more honest (Okazaki, 2000). Further, had the school social worker been aware of the parent's shame affiliated with therapeutic interventions and had exercised critical consciousness in the initial referral. Ahmed may never had made a second suicide attempt. Ahmed eventually went to therapy and found a male therapist who he aligned with. Two years after the suicide attempt, when he was graduating from high school, he thanked the social worker for being persistent with both him and his family about getting clinical services. He said that he would not have been alive had she not pushed for outside support. By integrating these two modalities, clinicians can become better practitioners of prevention and intervention for suicidal, high-achieving Asian American adolescents.

Conclusion

Suicide in adolescence is a public health crisis, as suicide attempt and completion rates in adolescents are increasing every year in the United States (Horowitz et al., 2020). Because adolescents spend more time in school than any other place, it is important that prevention and intervention strategies are exercised effectively within this environment (Singer et al., 2018). Further, it is vital that prevention and intervention techniques are tailored to the population the social worker is serving. Clinicians must continue to educate themselves about the cultural norms within the populations they work with. When working with high-achieving Asian American adolescents, culturally specific screening tools may be particularly beneficial to use as this population may not be as open to verbally expressing suicidal ideation. It is crucial that clinicians negotiate the dynamic between adolescents and their families to understand their environmental context and deter suicide attempts. The CARS method allows clinicians to adapt their suicide assessment questioning to the population they are serving, and the use of cultural humility and the ARA strengthens the dynamic between the social worker and clients, enabling stronger more culturally sensitive support in complex situations. By moving away from a uniform approach to suicide prevention and intervention in schools, clinicians can best serve their specific populations and ultimately save lives.

References

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). American Psychiatric Publishing. <u>https://doi.org/10.1176/appi.books.9780890425596</u>

- Batalova, J., Hanna,H., & Levesque, C. (2021). Frequently requested statistics on immigrants and immigration in the United States. <u>https://www.migrationpolicy.org/article/frequently-requested-statistics-immigrantsand-immigration-united-states-2020</u>
- Berry, J. W. (1998). Acculturation and health: Theory and research. In S. S. Kazarian & D. R. Evans (Eds.), *Cultural clinical psychology: Theory, research, and practice* (pp. 39–57). Oxford University Press.
- Brewster, M. K., & Sheinberg, M. (2014). Thinking and working relationally: Interviewing and constructing hypotheses to create compassionate understanding *Family Process*, 53(4), 618-639. <u>https://doi.org/10.1111/famp.12081</u>
- Cho, Y-B., & Haslam, E. N. (2010). Suicidal ideation and distress among immigrant adolescents: The role of acculturation, life stress, and social support. *Journal on Youth Adolescence*, *39*, 370-379. https://doi.org/10.1007/s10964-009-9415-y
- Chu, J. P., Goldblum, P., Floyd, R., & Bongar, B. (2010). The cultural theory and model of suicide. *Applied and Preventive Psychology*, 14(1-4), 25-40. <u>https://doi.org/10.1016/j.appsy.2011.11.001</u>
- Chu, J., Floyd, R., Diep, H., Pardo, S., Goldblum, P., & Bongar, B. (2013). A tool for the culturally competent assessment of suicide: The Cultural Assessment of Risk for Suicide (CARS) measure. *Psychological Assessment*, 25(2), 424-434. <u>https://doi.org/10.1037/a0031264</u>
- Flett, G. L., Nepon, T., Hewitt, P. L., Molnar, D. S., & Zhao, W. (2016). Projecting perfection by hiding effort: Supplementing the perfectionistic self-presentation scale with a brief self-presentation measure. *Self and Identity*, 15, 245-261. <u>https://doi.org/10.1080/15298868.2015.1119188</u>
- Freire, P. (1970). Pedagogy of the oppressed. Seabury Press.
- Gomez, J., Miranda, R., & Polanco, L. (2011). Acculturative stress, perceived discrimination, and vulnerability to suicide attempts among emerging adults. *Journal Youth Adolescence*, 40, 1465-1476. <u>https://doi.org/10.1007/s10964-011-9688-9</u>
- Hook, J. N., Davis, D. E., Owen, J., Worthington Jr., E. L., & Utsey, S. O. (2013). Cultural humility: Measuring openness to culturally diverse clients. *Journal of Counseling Psychology*, 60(3), 353-366. <u>https://doi.org/10.1037/a0032595</u>
- Horowitz, L., Tipton, M. V., & Pao, M. (2020). Primary and secondary prevention of youth suicide. *Pediatrics*, 145(2, Suppl.), S195-S203. <u>https://doi.org/10.1542/peds.2019-2056H</u>
- Kann, L., McManus, T., Harris, W. A., Shanklin, S. L., Flint, K. H., Queen, B., Lowry, R., Chyen, D., Whittle, L., Thornton, J., Lim, C., Bradford, D., Yamakawa, Y., Leon, M., Brener, N., & Ethier, K. A. (2018). Youth risk behavior surveillance - United States, 2017 (Morbidity and Mortality Weekly Report). *Surveillance Summaries*, 67(8), 1-114. <u>https://doi.org/10.15585/mmwr.ss6708a1</u>

- Kim, J. J., Kodish, T., Bear, L., El-Hendi, T., Duong, J., & Lau, A. S. (2018). Disparities in follow-up care for Asian American youth assessed for suicide risk in schools. *Asian American Journal of Psychology*, 9(4), 308-317. <u>https://doi.org/10.1037/aap0000136</u>
- Komiya, N., Good, G., & Sherrod, N. (2000). Emotional openness as a predictor of college students' attitudes toward seeking psychological help. *Journal of Counseling Psychology*, 47(1), 138-143. <u>https://doi.org/10.1037/0022-0167.47.1.138</u>
- Lee, J., & Zhou, M. (2015). *The Asian American achievement paradox*. Russell Sage Foundation.
- Luthar, S. S., Barkin, S. H., & Crossman, E. J. (2013). "I can, therefore I must": Fragility in the upper-middle classes. *Development and Psychopathology*, 25th Anniversary Special Issue, 25, 1529-1549. <u>https://doi.org/10.1017/S0954579413000758</u>
- Luthar, S. S., & Becker, B. E. (2002). Privileged but pressured? A study of affluent youth. *Child Development*, 73, 1593-1610. <u>https://doi.org/10.1111/1467-8624.00492</u>
- Miller, M. J., Yang, M., Hui, K., Choi, N.-Y., & Lim, R. H. (2011). Acculturation, enculturation, and Asian American college students' mental health and attitudes toward seeking professional psychological help. *Journal of Counseling Psychology*, 58(3), 346-357. <u>https://doi.org/10.1037/a0023636</u>
- National Alliance of Mental Illness [NAMI]. (2021). Asian Americans and Pacific Islander. <u>https://www.nami.org/Your-Journey/Identity-and-Cultural-</u> <u>Dimensions/Asian-American-and-Pacific-Islander</u>
- Noor-Oshiro, A. (2021, April 23). Asian American young adults are the only racial group with suicide as their leading cause of death, so why is no one talking about this? *The Conversation*. <u>https://theconversation.com/asian-american-young-adults-are-the-only-racial-group-with-suicide-as-their-leading-cause-of-death-so-why-is-no-one-talking-about-this-158030</u>
- Okazaki, S. (2000). Asian American and White American differences on affective distress symptoms: Do symptom reports differ across reporting methods? *Journal of Cross-Cultural Psychology*, 31(5), 603-625. https://doi.org/10.1177/0022022100031005004
- Polanco-Roman, L., Ahmad, K., Tigershtrom, A., Jacobson, C., & Miranda, R. (2019). Emotion expressivity, suicidal ideation, and explanatory factors: Differences by Asian American subgroups compared with White emerging adults. *Cultural Diversity* and Ethnic Minority Psychology, Online First, 1-11 [Advance online publication]. http://dx.doi.org/10.1037/cdp0000313
- Ramchand R., Gordon J. A., & Pearson J. L. (2021). Trends in suicide rates by race and ethnicity in the United States. *JAMA Network*, 4(5), 1-4. http://doi:10.1001/jamanetworkopen.2021.11563

- Reeves, R., & Schobert, A. (2019, July 31). Elite or elitist? Lessons for colleges from selective high schools. <u>https://www.brookings.edu/research/elite-or-elitist-lessons-for-colleges-from-selective-high-schools/</u>
- Singer, J., Erbacher, T.A., & Rosen, P. (2018). School-based suicide prevention: A framework for evidence-based practice. *School Mental Health*, 11, 54-71. <u>https://doi.org/10.1007/s12310-018-9245-8</u>
- Thapa, P., Sung, Y. Klingbeil, D. A., Lee, C-Y., & Kilmes-Dougan, B. (2015). Attitudes and perceptions of suicide and suicide prevention messages for Asian Americans. *Behavioral Sciences*, 5, 547-564. <u>https://doi.org/10.3390/bs5040547</u>
- Tummala-Narra, P., Deshpande, A., & Kaur, J. (2016). South Asian adolescents' experiences of acculturative stress and coping. *American Journal of Orthopsychiatry*, 86(2), 194-211. <u>https://doi.org/10.1037/ort0000147</u>
- Verdon, S. (2020). Awakening a critical consciousness among multidisciplinary professionals supporting culturally and linguistically diverse families: A pilot study on the impact of professional development, *Child Care in Practice*, 26,1, 4-21. <u>https://doi.org/10.1080/13575279.2018.1516626</u>
- Whaley, A. L., & Noel, L. (2013). Academic achievement and behavioral health among Asian American and African American adolescents: Testing the model minority and inferior minority assumptions. *Social Psychology Education*, 16, 23-43. <u>https://doi.org/10.1007/s11218-012-9206-2</u>
- Wong, W. J., & Maffini, C. S. (2011). Predictors of Asian American adolescents' suicide attempts: A latent class regression analysis. *Journal of Youth and Adolescence*, 40, 1453-1464. <u>https://doi.org/10.1007/s10964-011-9701-3</u>

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Risk and Protective Factors: Asian, Native Hawaiian, and Other Pacific Islander Populations

People who are descended from the original peoples of the Far East, Southeast Asia, or the Indian subcontinent are referred to as *Asian*. People who are descended from any of the original populations of Hawaii, Guam, Samoa, or other Pacific Islands are referred to as *Native Hawaiian or Other Pacific Islander*.¹ However, in some cases the Native Hawaiian population is included in the term *Pacific Islander*.

This information sheet covers the common risk and protective factors for Asian, Native Hawaiian, and other Pacific Islander populations. For data on suicidal thoughts and behaviors and suicide deaths in these populations, go to the web page "Asian, Native Hawaiian, and Other Pacific Islander Populations."

Risk Factors

Across all racial and ethnic populations, some of the most significant risk factors are:^{2, 3}

- Prior suicide attempt(s)
- Alcohol and drug abuse
- Mood and anxiety disorders
- Access to lethal means

For individuals who are already at risk, a "triggering" event causing shame or despair may make them more likely to attempt suicide. These events may include relationship problems and breakups, problems at work, financial hardships, legal difficulties, and worsening health.

In addition, research has shown the following to be among the most significant risk factors in Asian, Native Hawaiian, and other Pacific Islander populations.

Family conflict: High levels of family conflict, such as witnessing family violence or experiencing low levels of family support, have been associated with suicide risk in Asian and Native Hawaiian populations.^{4, 5}

Among Asian youth and college students, family problems and conflict, especially parent-child conflict, play a very significant role in increasing risk for suicidal ideation.^{6, 7}

Family conflict created greater risk for suicidal behavior among less acculturated Asian adolescents compared to those who were very acculturated.⁸

Acculturation: A study of Native Hawaiian youth found a small but statistically significant risk for attempting suicide in adolescents who had greater affiliation with Hawaiian culture. This may be due to increased cultural conflict and stress associated with being culturally Hawaiian in a Western environment.⁹

One 10-year study of high school youth found that the high rate of suicidal behavior among Pacific Islander populations, including Native Hawaiian people, may be related to cultural conflict and stress from acculturating. Non-Hawaiian Pacific Islander populations living in the United States have had to deal with cultural barriers that cause loss of ethnic identity. Like other native peoples, Native Hawaiian people have had to deal with colonialism, which has led to a significant change in values and a negative effect on family structure, health, and well-being.¹⁰

Discrimination: Asian people reporting that they are racially discriminated against have been found to be more likely to have a psychiatric disorder.¹¹

Immigrant Asian populations may be hampered in the U.S. mental health system by discriminatory attitudes and language proficiency issues.¹²

Asian college students who perceive discrimination report higher rates of suicidal ideation¹³ and suicide attempts,¹⁴ and Asian adults who perceive discrimination have also reported higher rates of suicidal ideation and attempts.¹⁵

Mental health services access and use: Due in large part to their cultural beliefs and values, Asian people are less likely to seek professional help for psychological distress, and they are less likely to disclose suicidal thoughts. Two studies found that Asian adults and college students were less likely than other racial groups to seek professional psychological help for suicidal ideation^{16, 17}

Asian people also are less likely to receive a diagnosis of mental health problems because many tend to experience their problems through physical rather than emotional symptoms. Lack of access to treatment that is sensitive to their culture is also a barrier. When they do obtain professional help Asian people generally drop out of treatment sooner than White people.¹⁸ Asian people are more likely to use informal support systems than formal services for help with mental health problems.¹⁹

In a large national survey, people of Asian/Pacific Islander descent who reported suicidal thoughts or attempts were less likely than Hispanic, Black, or White people to seek or receive psychiatric services.²⁰

Percentages of Adults Who Did Not Seek or Receive Any Psychiatric Services in the Year Prior to Having Suicidal Thoughts or Attempts

	Asian/Pacific Islander	Hispanic	Black	White
Suicidal Thoughts	84.1%	61.6%	59.7%	42.8%
Suicide Attempts	70.1%	45.7%	57.8%	24.1%

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The "model minority" myth that Asian people are the most successful (academically, economically, and socially) of all the racial/ethnic minority groups in the United States not only hides the racism and discrimination that many experience, but it also masks psychological issues among Asian people and perpetuates the stigma that keeps them from seeking mental health services.²¹

Poor academic achievement: Two studies of Asian college students in the United States found that poor academic performance and anxiety about performing well enough was a major risk factor for suicidal ideation.^{22, 23}

Protective Factors

Across all racial and ethnic populations, some of the most significant protective factors are:^{24, 25}

- Effective mental health care
- Connectedness to individuals, family, community, and social institutions
- Problem-solving skills
- Contacts with caregivers

In addition, research has shown the following to be among the most significant protective factors in Asian, Native Hawaiian, and other Pacific Islander populations.

Cultural identification: Among Asian people, higher levels of identification with Asian culture, such as a sense of belonging and affiliation with spiritual, material, intellectual, and emotional features of Asian culture, have been associated with a 69% reduction in the risk of suicide attempt.²⁶

Family relationship: Among youth of Native Hawaiian and other Pacific Islander backgrounds, strong and supportive family relationships and higher levels of family cohesion, family organization, and parental bonding have been related to lower risk of lifetime suicide attempt.²⁷

Among Asian people, family cohesion and parental support were associated with lower levels of suicidal ideation.^{28, 29}

Help seeking with native healers: Although Native Hawaiian youth do not seek help for their mental health problems from physicians as often as other groups, they do seek help from Native Hawaiian healers more often than other groups.³⁰ Youth who had stronger Hawaiian cultural identification were more likely to use Native Hawaiian healers for mental health issues.³¹

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References

¹ U.S. Census Bureau. (2018). *About Race*. Retrieved from <u>https://www.census.gov/topics/population/race/about.html</u>

² U.S. Department of Health and Human Services (HHS) Office of the Surgeon General and National Action Alliance for Suicide Prevention. (2012, September). *2012 National strategy for suicide prevention: Goals and objectives for action.* Washington, DC: Author. Retrieved from https://store.samhsa.gov/system/files/full_report-rev.pdf

³ Suicide Prevention Resource Center (SPRC), & Rodgers, P. (2011). *Understanding risk and protective factors for suicide: A primer for preventing suicide.* Newton, MA: Education Development Center, Inc. Retrieved from https://www.sprc.org/sites/default/files/migrate/library/RiskProtectiveFactorsPrimer.pdf

⁴ Cheng, J. K., Fancher, T. L., Ratanasen, M., Conner, K. R., Duberstein, P. R., Sue, S., & Takeuchi, D. (2010). Lifetime suicidal ideation and suicide attempts in Asian Americans. *Asian American Journal of Psychology*, *1*(1), 18–30.

⁵ Else, I. R., Andrade, N. N., & Nahulu, L. B. (2007). Suicide and suicidal-related behaviors among indigenous Pacific Islanders in the United States. *Death Studies*, *31*(5), 479–501.

⁶ Lau, A. S., Jernewall, N. M., Zane, N., & Myers, H. F. (2002). Correlates of suicidal behaviors among Asian American outpatient youths. *Cultural Diversity & Ethnic Minority Psychology, 8*(3), 199–213.

⁷ Wong, Y. J., Brownson, C., & Schwing, A. E. (2011). Risk and protective factors associated with Asian American students' suicidal ideation: A multicampus, national study. *Journal of College Student Development, 52*(4), 396–408.

⁸ Lau, Correlates of Suicidal Behaviors

⁹ Yuen, N. Y., Nahulu, L.B., Hishinuma, E. S., & Miyamoto, R. H. (2000). Cultural identification and attempted suicide in Native Hawaiian adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry, 39*(3), 360–367.

¹⁰ Wong, S. S., Sugimoto-Matsuda, J. J., Chang, J. Y., & Hishinuma, E. S. (2012). Ethnic differences in risk factors for suicide among American high school students, 2009: The vulnerability of multiracial and Pacific Islander adolescents. *Archives of Suicide Research*, *16*(2), 159–173. doi:10.1080/13811118.2012.667334

¹¹ Gee, G. C., Spencer, M., Chen, J., Yip, T., & Takeuchi, D. T. (2007). The association between selfreported racial discrimination and 12-month DSM–IV mental disorders among Asian Americans nationwide. *Social Science & Medicine, 64,* 1984–1996.



¹² Spencer, M. S., Chen, J., Gee, G. G., Fabian C. G., & Takeuchi, D. T. (2010). Discrimination and mental health-related service use in a national study of Asian Americans. *American Journal of Public Health*, *100*(12), 2410–2417.

¹³ Hwang, W-C., & Goto, S. (2008). The impact of perceived racial discrimination on the mental health of Asian American and Latino college students. *Cultural Diversity & Ethnic Minority Psychology, 14*(4), 326–335.

¹⁴ Gomez, J., Miranda, R., & Polanco, L. (2011). Acculturative stress, perceived discrimination, and vulnerability to suicide attempts among emerging adults. *Journal of Youth and Adolescence, 40*(11), 1465–1476. doi:10.1007/s10964-011-9688-9

¹⁵ Cheng et al., Lifetime Suicidal Ideation

¹⁶ Chu, J. P., Hsieh, K., & Tokars, D. A. (2011). Help-seeking tendencies in Asian Americans with suicidal ideation and attempts. *Asian American Journal of Psychology*, *2*(1), 25–38.

¹⁷ Wong, Y. J., Brownson, C., Rutkowski, L., Nguyen, C. P., & Becker, M. (2014). A mediation model of professional psychological help seeking for suicide ideation among Asian American and White American college students. *Archives of Suicide Research*, *18*(3), 259-273.

¹⁸ Leong, F. T., & Lau, A. S. (2001). Barriers to providing effective mental health services to Asian Americans. *Mental Health Services Research*, *3*(4), 201–214.

¹⁹ Spencer, Discrimination and Mental Health-Related Service Use

²⁰ Ahmedani, B. K., Perron, B., Ilgen, M., Abdon, A., Vaughn, M., & Epperson, M. (2012). Suicide thoughts and attempts and psychiatric treatment utilization: Informing prevention strategies. *Psychiatric Services*, *63*(2), 186–189.

²¹ Africa, J., & Carrasco, M. (2011, February). *Asian-American and Pacific Islander mental health: Report from a NAMI listening session.* Arlington, VA: National Alliance on Mental Health (NAMI). Retrieved from

http://www.nami.org/Template.cfm?ContentID=115279&Section=Multicultural Support1&Template=/ContentManagement/ContentDisplay.cfm

²² Noh, E. (2007). Asian American women and suicide: Problems of responsibility and healing. *Women* & *Therapy*, *30*(3–4), 87–107.

²³ Wong, Y. J., Brownson, C., & Schwing, A. E. (2011). Risk and protective factors associated with Asian American students' suicidal ideation: A multicampus, national study. *Journal of College Student Development, 52*(4), 396–408.

- ²⁴ HHS, 2012 National Strategy
- ²⁵ SPRC and Rodgers, Understanding Risk and Protective Factors

²⁶ Cheng et al., Lifetime Suicidal Ideation



²⁷ Else, Andrade, and Nahulu, Suicide and Suicidal-Related Behaviors

²⁸ Cho, Y., & Haslam, N. (2010). Suicidal ideation and distress among immigrant adolescents: The role of acculturation, life stress, and social support. *Journal of Youth and Adolescence, 39*(4), 370–379.

²⁹ Wong, Y. J., Uhm, S. Y., & Li, P. (2012). Asian Americans' family cohesion and suicide ideation: Moderating and mediating effects. *The American Journal of Orthopsychiatry*, *82*(3), 309–318. doi:10.1111/j.1939–0025.2012.01170.x

³⁰ National Center on Indigenous Hawaiian Behavioral Health (NCIHBH). (2012). Requests for access to the database can be made to Dr. Deborah Goebert, director of NCIHBH at <u>GoebertD@dop.hawaii.edu</u>

³¹ Bell, C. K., Goebert, D. A., Andrade, N. N., Johnson, R. C., McDermott, J. F., Hishinuma, E. S., . . . Miyamoto, R. H. (2001). Sociocultural factors influencing adolescent preference and use of native Hawaiian healers. *Complementary Therapies in Medicine*, *9*(4), 224–231.

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About Suicide Effective Prevention Online Library Training News & Highlights Organizations

Scope of the Problem

- Suicide Deaths in the United States
- ➔ Suicide by Age
- Suicidal Thoughts and Suicide Attempts
- Means of Suicide
- ➔ Racial and Ethnic Disparities
- Suicide and Opioids
- Suicide and Serious Mental Illnes

Understanding racial and ethnic differences in rates of suicidal ideation, suicide attempts, and suicide deaths is essential for more effectively directing suicide prevention efforts. Racial and ethnic groups differ in their access to culturally appropriate behavioral health treatment, experiences of discrimination and historical trauma, and other factors that may be related to suicide risk.¹ At the same time, our understanding of racial and ethnic differences in suicide and suicidal behaviors is limited by underreporting and other limitations in data collection systems.^{2,3}

Racial and Ethnic Disparities

To find data on specific populations, click on the following links:

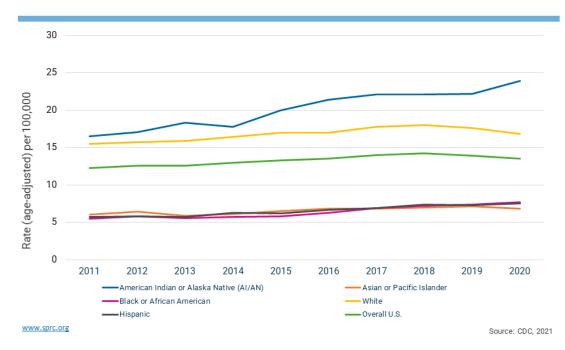
- » American Indian and Alaska Native Populations
- » Asian, Native Hawaiian, and Other Pacific Islander Populations
- » Black Populations
- » Hispanic Populations
- » White Populations



Locating and Understanding Data for Suicide Prevention

This free online course explores data sources that can help you understand suicide at the national, state, and community level.

Rates of Suicide by Race/Ethnicity, United States 2011-2020

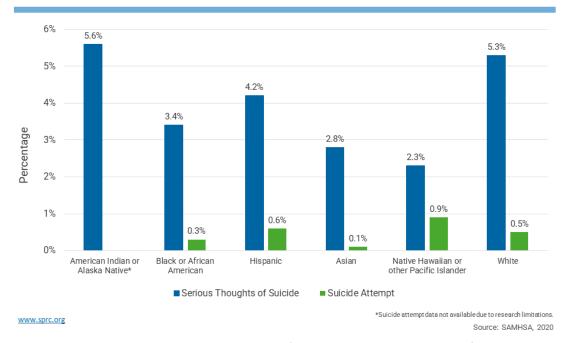


Since 2011, the age-adjusted suicide death rate has increased for all races and ethnicities. For American Indian and Alaska Native populations, the age-adjusted suicide death rate increased from 16.5 per 100,000 in 2011 to 23.9 per 100,000 in 2020.¹



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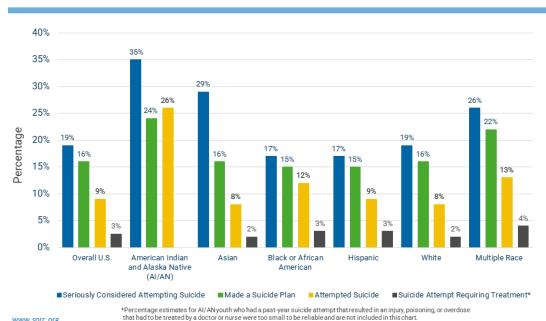
Past-Year Suicidal Thoughts and Suicide Attempts for Adults, United States 2020



American Indian and Alaska Native adults are at highest risk for past-year suicide-related thoughts, followed by White and Hispanic adults. For past-year suicide attempts, Native Hawaiian or Pacific Islander adults are at the highest risk, followed by Hispanic adults and then White adults.²

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Past-Year Suicidal Thoughts and Behaviors for High School Youth, United States 2019



Source: CDC. 2020

Among youth, suicidal thoughts and behaviors vary by race and ethnicity. AI/AN, multiple race, and Asian high school youth have the highest percentages of seriously considering attempting suicide. AI/AN and multiple race youth had the highest percentages of making a suicide plan. By far, AI/AN had the highest percentage of attempting suicide.³

References

www.sprc.org

- Centers for Disease Control and Prevention, National Center for Health Statistics. (2021). 1999-2020 Wide Ranging Online Data for Epidemiological Research (WONDER), Multiple Cause of Death files [Data file]. Retrieved from http://wonder.cdc.gov/ucd-icd10.html
- Center for Behavioral Health Statistics and Quality. (2021). 2020 National Survey on Drug Use and Health: Detailed Tables. Substance Abuse and Mental Health Services Administration, Rockville, MD. Retrieved from https://www.samhsa.gov/data/report/2020-nsduh-detailed-tables
- 3. Centers for Disease Control and Prevention (CDC), Youth Risk Behavior Surveillance System. (2021). 1991-2019 High School Youth Risk Behavior Survey Data [Data file]. Retrieved from http://nccd.cdc.gov/youthonline/



The charts and graphs in this section are also available as a PowerPoint slide set. Feel free to use this slide set to deliver a presentation about the scope of the suicide problem.

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Warning Signs for Suicide



Immediate Risk

Some behaviors may indicate that a person is at immediate risk for suicide.

The following three should prompt you to immediately call or text 988 (988 Suicide & Crisis Lifeline) or call a mental health professional.

- » Talking about wanting to die or to kill oneself
- » Looking for a way to kill oneself, such as searching online or obtaining a gun
- » Talking about feeling hopeless or having no reason to live

Serious Risk

Other behaviors may also indicate a serious risk-especially if the behavior is new; has increased; and/or seems related to a painful event, loss, or change.

- » Talking about feeling trapped or in unbearable pain
- » Talking about being a burden to others
- » Increasing the use of alcohol or drugs
- » Acting anxious or agitated; behaving recklessly
- » Sleeping too little or too much
- » Withdrawing or feeling isolated
- » Showing rage or talking about seeking revenge
- » Displaying extreme mood swings

988 Suicide & Crisis Lifeline

Call or text 988 or visit https://988lifeline.org/

The Lifeline is a 24-hour toll-free phone line for people in suicidal crisis or emotional distress.

An online chat option is also available.

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