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Suicide Prevention in the COVID-19 Era
Transforming Threat Into Opportunity

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IMPORTANCE Suicide, a leading cause of death with devastating emotional and societal costs, is a generally preventable cause of death and a critical global public health issue. The coronavirus disease 2019 (COVID-19) pandemic may increase the risk of population suicide through its effects on a number of well-established suicide risk factors.

OBSERVATIONS Prior to the pandemic, many countries were engaging in suicide prevention strategies, and although the overall global burden of suicide deaths has increased, some national efforts were beginning to see positive results. Additionally, the gap between mental health needs and services has been increasing in many nations. With the added physical and mental health, social, and economic burdens imposed by the pandemic, many populations worldwide may experience increased suicide risk. Data and recent events during the first 6 months of the pandemic reveal specific effects on suicide risk. However, increases in suicide rates are not a foregone conclusion even with the negative effects of the pandemic. In fact, emerging suicide data from several countries show no evidence of an increase in suicide during the pandemic thus far. There are actionable steps that policy makers, health care leaders, and organizational leaders can take to mitigate suicide risk during and after the pandemic.

CONCLUSIONS AND RELEVANCE COVID-19 presents a new and urgent opportunity to focus political will, federal investments, and global community on the vital imperative of suicide prevention. Suicide prevention in the COVID-19 era requires addressing not only pandemic-specific suicide risk factors, but also prepandemic risk factors. This Special Communication provides prioritized, evidence-based strategies for clinicians and health care delivery systems, along with national and local policy and educational initiatives tailored to the COVID-19 environment. If implemented to scale, these interventions could significantly mitigate the pandemic's negative effects on suicide risk.

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International and US experts on suicide have expressed concerns about the potential the coronavirus disease 2019 (COVID-19) pandemic has to increase the risk of suicide through its effects on a number of well-established suicide risk factors.[1,2] Suicide surveillance systems in most countries are not able to provide real-time data.[3] Increases in suicide rates should not be a foregone conclusion even with the negative effects of the pandemic. If the lessons of suicide prevention research are heeded during and after the pandemic, this potential for increased risk could be substantially mitigated. There are also several positive consequences of the pandemic that could increase protective factors related to suicide.

Before the pandemic, strides have been made in global suicide prevention efforts, but most countries have only partially implemented national suicide prevention plans.[4] Many countries have been experiencing increasing gaps between the mental health needs of the population and the ability to deliver services.[5] With the added economic, social, and personal burdens imposed by the pandemic, many populations worldwide may experience increased suicide risk.[1,2] However, seen from a broad suicide prevention perspective, COVID-19 presents a new and urgent opportunity to focus political will, federal investments, and global community on the vital imperative of suicide prevention.

This article covers what data and recent events during the first 6 months of the pandemic reveal about specific effects on suicide risk and outlines actionable steps that policy makers, health care leaders, and organizational leaders can take to mitigate suicide risk during and after the pandemic.

Evolving Events During the First 6 Months of the Pandemic

As the virus emerged, then spread with remarkable speed to all corners of the world, psychological responses moved through numerous phases. Uncertainty and fear about the nature and implications of

this new virus were followed by community cohesion, alongside increased rates of distress, which have taken varied forms, ie, dysphoria, anxiety, insomnia, and for some, traumatic stress and suicidal thoughts. Early in the pandemic, a nationally representative survey of US adults found that 21% of those sheltering in place reported that stress and worry about COVID-19 was having a major negative effect on their mental health, compared with 13% of those not sheltering in place.[6] As the pandemic continued, the proportion of respondents who reported detrimental effects on their mental health continued to rise, from 39% in May 2020 to 53% in July 2020.

As the pandemic has worn on, most nations have experienced viral spread and mortality, economic contraction, and in some instances, mixed messages from national and local leadership. Major concerns about reopening and education fall plans have additionally contributed to anxiety and concerns about the pandemic's effect on the population's mental health. Basic public health strategies such as testing, quarantining, and mask wearing have become politicized in some countries,[7] leading to additional layers of uncertainty, morbidity, and mortality. Three months into the pandemic, a lightning rod moment for social justice ignited with Black Lives Matters protests leading to an additional layer of agitation and trauma for many.[8]

Suicide Surveillance and National Strategies

Globally, suicide mortality data surveillance varies significantly and is not available in real time for most regions of the world.[3] Therefore, claims about increasing suicide rates during COVID-19 are mostly unfounded. In fact, emerging data from several countries finds no evidence of increased suicide rates during the pandemic thus far.[9] International suicide data are deficient for at least 2 reasons. First, not all countries have systems in place to collect quality vital registration data including suicide data. Second, stigma and complexities of medical and legal systems involved in data collection make the reported numbers variable in their accuracy. We do know that in the decades before this pandemic, many nations had seen declines in suicide rates.[4] In particular, 4 countries with fully implemented national suicide prevention plans (Finland, Norway, Sweden, and Australia) had seen reductions in their national rates of suicide.[10] However, in the US, the national suicide rate has been steadily increasing by a total of 35% since 1999. Particular US subpopulations carry long-standing higher risk (eg, middle-aged and older White male individuals, rural area residents) and some populations are experiencing more recent elevations in suicide rates (eg, Black youth). A US Centers for Disease Control and Prevention (CDC) survey released in August 2020 found 40% of US adults reporting symptoms of depression, anxiety, or increased substance use during COVID-19, and 10.7% of respondents reported suicidal ideation in the past 30 days, all increases from previous surveys.[11] Similar measures of increases in stress and anxiety are reported by the World Health Organization for multiple regions of the world.[12]

Specific COVID-19 Threats to Population Suicide Risk

Suicide prevention in the COVID-19 era requires addressing not only pandemic-specific suicide risk factors (eg, increased social isolation, personal and economic losses), but also prepandemic risk factors (eg, the increasing service gap between mental health needs and effective health care). Importantly, these factors may interact in previously unexplored ways. For example, an established suicide risk factor (eg, access to lethal means) has increased during the pandemic.

Based on the growing body of science informing our understanding of suicide, there are several risk factors linked to the pandemic and ensuing public health measures, which suicide expert consensus views as threats that could increase population suicide risk without significant efforts to mitigate these risks. These threats to population suicide risk include the pandemic's potential to lead to deterioration in mental and/or physical health; social disconnectedness, loneliness, or diminished social support; fears about or realized job or financial losses; remote work or school and the related disruption in social, academic, and basic structure to daily life; loss of loved ones or anticipated milestones; increased alcohol consumption in some regions of the world[13]; and increased availability of lethal means such as firearms, opioids, and other toxic substances, especially with more time spent at home sheltering in place. Of particular concern in the US, firearms purchases increased by 85% during March 2020 at the start of COVID-19, compared with previous years during March.[14]

In regard to the recent CDC survey[11] revealing increases in suicidal ideation, while suicidal thoughts certainly reveal distress and warrant professional intervention, they are not an effective predictor of suicidal behavior or death. While financial strain is a risk factor when combined with other factors, suicide researchers do not currently consider it to be an independent, predictive factor.[15] A potent and hopeful indicator has been found to be population increases in connecting to support and mental health services. While the rise in suicidal thoughts and increasing numbers of calls to crisis services do signal more prevalent distress, it should be noted that overall increases in help seeking are associated with suicide risk reduction and are found to be an important indicator of diminishing risk.[16]

High-risk Populations

Particular groups are more likely to have elevated suicide risk during COVID-19 because of baseline vulnerabilities, inequitable effects of the pandemic, or for reasons that present barriers to disclosing hardships and seeking help. These include people with lower access to mental health care, especially for those with mental health conditions at baseline or other suicide risk factors; people in unsafe homes related to domestic violence or abuse; people with socioeconomic disadvantage, from rural areas, or marginalized racial/ethnic and sexual groups, all for whom economic, educational, and health disparities are being accentuated by the pandemic; frontline health and essential workers; youth and elderly populations; parents with school-age children; and male individuals. People who represent intersectionality across risk areas are of particular concern.

COVID-19–Specific Suicide Prevention Strategies

Generally important strategies that would reduce suicide rates are presented in the CDC's technical package on preventing suicide.[17]

Box. Suicide Risk and Prevention During Coronavirus Disease 2019 (COVID-19)

Threats to suicide risk presented by the current pandemic can be categorized into 8 areas, each with mitigating strategies.

Mental illness

Health care systems and individual clinicians
- Suicide preventive care delivery with improved access
- Training in suicide prevention and culturally appropriate care
- Support for health care staff and frontline workers

Government
- Adequate resourcing for Zero Suicide framework

Isolation, loneliness, and bereavement

Communities
- Support for those living alone
- Mobilize community services

Friends and family
- Regular check-ins

Mental health services and clinicians
- Ensure access and availability

Suicidal crisis

Health care systems and individual clinicians
- Clear risk assessments and care pathways
- Evidence-based interventions

Crisis hotlines
- Maintain, support, and increase workforce

Government
- Adequate resourcing for crisis services
- Increase alternative crisis resources to replace law enforcement response

Access to means

Retailers
- Suicide prevention training and vigilance working with distressed individuals

Government and nongonvernmental organizations
- Messaging regarding making home and workplaces safe

Health care systems, emergency departments, primary care physicians
- Counseling on Access to Lethal Means (CALM) training

Alcohol consumption

Government
- Monitor intake
- Messages regarding safe drinking
- Increase access to services

Alcohol industry and nongonvernmental organizations
- Message campaign regarding safe drinking and crisis resources

Financial stressors

Government
- Financial safety net
- Ensure longer-term measures in place

Domestic violence

Government
- Ensure access and support
- Nontraceable call/texting

Irresponsible media reporting

Media professionals
- Safe reporting in line with existing suicide and mental health messaging guidelines

In addition to these general suicide prevention strategies, COVID-19–specific targets are included below with evidence-informed prevention strategies (**Box**). These COVID-19–honed targets and strategies remain quite broad in scope because suicide has numerous risk factors in both population-level and individual suicide risk. As is always the case with suicide prevention, effective outcomes require a multipronged approach using advocacy, government, health care, and community response that targets the numerous ways in which COVID-19 presses on serious suicide risk factors.

Reduce Risk for People With Mental Illness or Addiction

Although suicide risk is driven by many factors, mental illness is a potent risk factor. More than 30 studies using psychological autopsy methods have found that among suicide decedents, 85% to 95% had likely been experiencing psychiatric illness that may or may not have been recognized or treated and which likely contributed to the death.[18] During COVID-19, the potential for deterioration in mental health or recurrence of serious symptoms is elevated.[2,11] Therefore, focusing on the needs of people with mental illness or whose mental health is vulnerable would save lives. Policy and organizational leadership actions that should be highly prioritized include:

- Make federal investments during and after COVID-19 in mental health and addiction services with a focus on robustly increasing access to mental health care, such as ensuring tele–mental health services are continued and strengthened.
- Pass legislation enforcing mental health parity given pre–COVID-19 concerns about lack of access to care and the effect of COVID-19 on deterioration in mental health.
- Reform and invest in nonpunitive, community-based crisis resources.
- During and after COVID-19, health care systems should engage in Zero Suicide system change, enhancing virtual delivery of suicide assessment and care.

Other COVID-19–specific strategies that should be implemented include:

- Increase the federal research investment in COVID-19–specific risks and prevention strategies for mental health, substance misuse, and suicide.
- Include people with COVID-19–related lived experience and other diverse backgrounds in decision-making related to policy, clinical, and research.

General evidence-informed suicide prevention strategies that would also mitigate risk to those who are disproportionately vulnerable because of the effect of COVID-19 include:

- Make evidence-based treatments such as screening, safety planning, cognitive behavioral therapy, dialectical behavior therapy, attachment-based family therapy, and Collaborative Assessment and Management of Suicidality accessible to people affected disproportionately through targeted regional training and use of technology.[19-21]
- Health care organizations and other workplace organizational leadership should provide essential and frontline health care workers access to mental health care without negative career repercussions.
- Expand the inclusion of peer specialists and educators in clinical and community mental health programs.
- During and after COVID-19, policy makers should incentivize expansion of evidence-based workplace and school mental health and suicide prevention programs.
- Increase antistigma education and pro–help-seeking messaging using creative strategies such as mental health experts partnering with media and entertainment platforms and content creators.

Increase Social Connectedness

A substantial body of evidence demonstrates that loneliness and social isolation present major risks for premature mortality comparable with other risk factors such as hypertension, smoking, and obesity. This risk for premature mortality includes suicide risk.[22] The COVID-19–related public health strategy of social distancing presents potential risk for social disconnection in populations on the margin of being isolated before COVID-19. A more precise and helpful term is *physical distancing*, to clarify the point that social connection can still be maintained. Simple human contact and outreach cannot be underestimated as a powerful way to provide a sense of connectedness, which for some can be lifesaving.[23] Among high-risk patient populations with recent suicide attempts, studies have found a robust effect of reducing subsequent suicide attempts by as much as 50% to 60% by providing a series of caring messages in the form of postcards, letters, emails, or telephone messages.[24]

- Systematically provide caring contacts and virtual check-ins within health care settings. During and after COVID-19, systematic, electronic communication may ease the burden on clinicians and staff and would provide a strong suicide risk–reducing effect.
- Increase community-level services and use of technology and virtual mechanisms for communicating with or providing services for elderly individuals, people living alone, and any marginalized persons.
- Leaders in government and organizations can launch social media and public campaigns that promote social cohesion.
- Encourage use of technology (ie, telephone, video chat, texting) for citizens to regularly check in on friends, family, youth, and elderly individuals.

Address Risk at the Moment of Crisis

It is imperative to build robust, accessible, and culturally inclusive crisis response systems that incorporate input from those with diverse backgrounds and lived experiences. A study of national suicide prevention strategies found 4 countries that fully implemented their national plan significantly reduced suicide rates compared with 4 matched control countries. All of these plans included a robust crisis response system.[10]

- Increase federal investment in crisis services, such as the 3-digit 988 National Suicide Prevention Lifeline in the US.
- Reform the current crisis response system to move away from the current punitive, law enforcement response to mental health crises. While this type of change to the crisis system has been identified as a needed next step in the US for many years, the recent focus on racial health disparities may produce a newfound readiness to make the change.
- Policy and community leaders must expand newer alternative resources for mental health crisis response, such as mobile crisis units and residential crisis centers.[25] While COVID-19 has led to resource concerns, the pandemic has brought to light the need for enhanced crisis services.

Reduce Access to Lethal Means

One of the strategies with the strongest evidence for suicide risk reduction is restricting access to lethal means, using tactics based on the population's leading suicide methods, customized to the culture and community.[16] Given the increases in particular lethal means for suicide during COVID-19, the following actions are more critical than ever:

- Mental and public health experts can engage in suicide prevention education efforts with the gun-owning community (in the US) in suicide prevention education efforts.
- Advocates can engage in policy efforts regulating access to means and increasing the research investment in lethal means such as firearm suicide.
- Train primary care, emergency medicine, and behavioral health professionals and other frontline roles such as school personnel in Counseling on Access to Lethal Means (CALM).[26]
- Federal and local leaders and advocacy organizations can launch advertising campaigns promoting how to make home environments safer for at-risk family members.

Other actions that should be taken as resources are available include:

- Increase expired medication disposal efforts.
- Focus advocacy efforts on other hot spot suicide means, such as building bridge barriers. After reliable COVID-19 suicide data are released, efforts should be tailored to the methods with increased prevalence.
- Continue aggressive opioid crisis response efforts in the US, Canada, and the affected areas of Europe.

Address COVID-19 Increases in Alcohol Consumption and Drug Overdoses

During the COVID-19 period, increases in alcohol sales[13] as well as an 18% increase in drug overdose deaths have been documented in the US.[27] Alcohol and drugs are risk factors for suicide both through their addiction and mental health influence as well as being a form of lethal means, with substances present in one-third of suicide decedents' toxicology reports.[28] Addressing substance use to every extent possible can prevent suicide.

- Launch public messaging regarding safe drinking, mental health and crisis services such as via partnerships between alcohol distilleries/distributors, and suicide prevention organizations.

- Monitor alcohol sales and consumption during and after COVID-19.
- Increase virtual accessibility of substance use disorder services.
- Increase distribution of and training in take-home naloxone.

Other strategies that can reduce suicide include:

- Increase the federal investment in crosscollaborative alcohol, drug, and suicide research.
- Train addiction counselors in suicide prevention techniques.

Mitigate Financial Strain

Studies find a complex interaction between economic downturns and population suicide rates, with most studies finding a deleterious effect on suicide risk. Because this COVID-19 period has elements of both global disaster (disasters and wartime have been associated with lower suicide rates with some studies finding a delayed effect[29]) alongside economic strain, it is likely that suicide risk will be affected differently for different populations and during the various phases of the pandemic.

- Federal governments can target resources to create a fiscal safety net for populations with disproportionate financial and health effects of COVID-19.
- Provide unemployment support and retraining opportunities, considering COVID-19–specific workforce needs in particular industries.

Address Domestic Violence and Unsafe Environments

Trauma and abuse are well-established risk factors for suicide. During COVID-19 when stay-at-home orders have led to major concerns about increases in domestic violence, efforts such as these are imperative:

- Widely promote access for domestic violence support such as the National Domestic Violence Hotline and the Crisis Text Line.
- Ensure contact with hotlines is not traceable (Crisis Text Line text conversations do no show up on monthly telephone bills).

Prevent Unsafe Media and Entertainment Messaging

Suicide contagion is a well-established phenomenon with specific types of messaging known to increase risk of suicide. During COVID-19, it is important for the media to avoid any unintended consequences of reporting on suicide, keeping messages focused on suicide as a preventable cause of death, and promoting resources for help and support.

- Encourage reporters' use of safe reporting guidelines on suicide.[30]
- Promote entertainment content creators' use of safe messaging guidelines on suicide.[31]

Conclusions

The COVID-19 pandemic presents clear threats to the mental well-being of most and suicide risk for some. However, increases in suicide rates are not inevitable. Because suicide risk is multifactorial with well-established risk factors and a growing body of evidence for effective suicide prevention strategies, outcomes related to suicide will be greatly influenced by investments and actions taken now and in the coming months on the part of policy makers, health care and community leaders, and citizens. This is a moment in history when suicide prevention must be prioritized as a serious public health concern. If specific strategies can be maximally implemented with COVID-19–specific threats to population mental health and suicide risk in mind, this pandemic may not only provide a sense of urgency, but a path forward to address suicide risk at national and community levels.

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REFERENCES

1. Gunnell D, Appleby L, Arensman E, et al; COVID-19 Suicide Prevention Research Collaboration. Suicide risk and prevention during the COVID-19 pandemic. *Lancet Psychiatry*. 2020;7(6):468-471. doi:10.1016/S2215-0366(20)30171-1

2. Reger MA, Stanley IH, Joiner TE. Suicide mortality and coronavirus disease 2019: a perfect storm? *JAMA Psychiatry*. Published online April 10, 2020. doi:10.1001/jamapsychiatry.2020.1060

3. World Health Organization. Preventing Suicide: A Global Imperative. Published 2014. Accessed September 1, 2020. https://apps.who.int/iris/bitstream/handle/10665/131056/9789241564779_eng.pdf;jsessionid=BD2F88630987953D20BB6DC50241BE19?sequence=1

4. Naghavi M; Global Burden of Disease Self-Harm Collaborators. Global, regional, and national burden of suicide mortality 1990 to 2016: systematic analysis for the Global Burden of Disease Study 2016. *BMJ*. 2019;364:l94. doi:10.1136/bmj.l94

5. Andrade LH, Alonso J, Mneimneh Z, et al. Barriers to mental health treatment: results from the WHO World Mental Health surveys. *Psychol Med*. 2014;44(6):1303-1317. doi:10.1017/S0033291713001943

6. Panchal N, Kamal R, Orgera K, et al. The implications of COVID-19 for mental health and substance use. Kaiser Family Foundation. Published online April 21, 2020. Accessed August 16, 2020. https://www.kff.org/coronavirus-covid-19/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/

7. WHO chief says 'politicization' of pandemic hurting global efforts. *VOA News*. Published June 22, 2020. Accessed September 7, 2020. https://www.voanews.com/covid-19-pandemic/who-chief-says-politicization-pandemic-hurting-global-efforts

8. Jay L. Why race matters when it comes to mental health. *BBC Future*. Published August 11, 2020. Accessed September 7, 2020. https://www.bbc.com/future/article/20200804-black-lives-matter-protests-race-mental-health-therapy

9. John A, Okolie C, Eyles E, et al. The impact of the COVID-19 pandemic on self-harm and suicidal behaviour: a living systematic review. *F1000Research*. 2020,9:1097. doi:10.12688/f1000research.25522.1

10. Lewitzka U, Sauer C, Bauer M, Felber W. Are national suicide prevention programs effective? a comparison of 4 verum and 4 control countries over 30 years. *BMC Psychiatry*. 2019;19(1):158. doi:10.1186/s12888-019-2147-y

11. Czeisler MÉ, Lane RI, Petrosky E, et al. Mental health, substance use, and suicidal ideation during the COVID-19 pandemic: United States, June 24-30, 2020. *MMWR Morb Mortal Wkly Rep*. 2020;69(32):1049-1057. doi:10.15585/mmwr.mm6932a1

12. World Health Organization. Mental health and COVID-19. Accessed September 9, 2020. https://www.euro.who.int/en/health-topics/noncommunicable-diseases/mental-health/data-and-resources/mental-health-and-covid-19

13. Chaudury S. Diageo's alcohol sales rise in north America but fall elsewhere as Covid-19 weighs on results. *The Wall Street Journal*. Published August 4, 2020. Accessed September 8, 2020. https://www.wsj.com/articles/diageos-alcohol-sales-rise-in-north-america-but-fall-elsewhere-as-covid-19-weighs-11596528177

14. Small Arms Analytics. U.S. firearms sales: March 2020 unit sales show anticipated covid-19-related boom. Published April 1, 2020. Accessed August 20, 2020. http://smallarmsanalytics.com/v1/pr/2020-04-01.pdf

15. Merzagora I, Mugellini G, Amadasi A, Travaini G. Suicide risk and the economic crisis: an exploratory analysis of the case of Milan. *PLoS One*. 2016;11(12):e0166244. doi:10.1371/journal.pone.0166244

16. Mann JJ, Apter A, Bertolote J, et al. Suicide prevention strategies: a systematic review. *JAMA*. 2005;294(16):2064-2074. doi:10.1001/jama.294.16.2064

17. Stone D, Holland K, Bartholow B, Crosby A, Davis S, Wilkins N. *Preventing Suicide: A Technical Package of Policy, Programs, and Practices*. Centers for Disease Control and Prevention. Published 2017. Accessed August 17, 2020. https://www.cdc.gov/violenceprevention/pdf/suicideTechnicalPackage.pdf

18. Cavanagh JT, Carson AJ, Sharpe M, Lawrie SM. Psychological autopsy studies of suicide: a systematic review. *Psychol Med*. 2003;33(3):395-405. doi:10.1017/S0033291702006943

19. Hawton K, Witt KG, Taylor Salisbury TL, et al. Psychosocial interventions for self-harm in adults. *Cochrane Database Syst Rev*. 2016;(5):CD012189. doi:10.1002/14651858.CD012189

20. Diamond GM, Diamond GS, Levy S, Closs C, Ladipo T, Siqueland L. Attachment-based family therapy for suicidal lesbian, gay, and bisexual adolescents: a treatment development study and open trial with preliminary findings. *Psychotherapy (Chic)*. 2012;49(1):62-71. doi:10.1037/a0026247

21. Jobes DA, Comtois KA, Gutierrez PM, et al. A randomized controlled trial of the collaborative assessment and management of suicidality versus enhanced care as usual with suicidal soldiers. *Psychiatry*. 2017;80(4):339-356. doi:10.1080/00332747.2017.1354607

22. National Academies of Sciences, Engineering, and Medicine. *Social Isolation and Loneliness in Older Adults: Opportunities for the Health Care System*. The National Academies Press; 2020. Accessed October 8, 2020. https://www.nap.edu/read/25663/chapter/1

23. Calati R, Ferrari C, Brittner M, et al. Suicidal thoughts and behaviors and social isolation: a narrative review of the literature. *J Affect Disord*. 2019;245:653-667. doi:10.1016/j.jad.2018.11.022

24. Luxton DD, June JD, Comtois KA. Can postdischarge follow-up contacts prevent suicide and suicidal behavior? a review of the evidence. *Crisis*. 2013;34(1):32-41. doi:10.1027/0227-5910/a000158

25. National Action Alliance for Suicide Prevention. The Crisis Now Report: Transforming Services is Within Our Reach. Education Development Center. Accessed August 15, 2020. https://crisisnow.com/

26. Suicide Prevention Resource Center. CALM: counseling on access to lethal means. Published 2018. Accessed August 14, 2020. https://www.sprc.org/resources-programs/calm-counseling-access-lethal-means

27. Alter A, Yeager C. COVID-19 impact on us national overdose crisis. overdose detection mapping application program. Accessed August 17, 2020. http://www.odmap.org/Content/docs/news/2020/ODMAP-Report-June-2020.pdf

28. Ertl A, Sheats KJ, Petrosky E, Betz CJ, Yuan K, Fowler KA. Surveillance for violent deaths: National Violent Death Reporting System, 32 states, 2016. *MMWR Surveill Summ*. 2019;68(9):1-36. doi:10.15585/mmwr.ss.6809a1

29. Wasserman IM. The impact of epidemic, war, prohibition and media on suicide: United States, 1910-1920. *Suicide Life Threat Behav*. 1992;22(2):240-254.

30. Reporting on Suicide. Recommendations for reporting on suicide. Accessed September 10, 2020. https://reportingonsuicide.org/

31. World Health Organization. Preventing suicide: a resource for filmmakers and others working on stage and screen. Published September 9, 2019. Accessed October 8, 2020. https://www.who.int/publications/i/item/preventing-suicide-a-resource-for-filmmakers-and-others-working-on-stage-and-screen