Maryland's State Suicide Prevention Plan 2020

Governor's Commission on Suicide Prevention



GOVERNOR'S COMMISSION ON SUICIDE PREVENTION

MARYLAND



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Section I: Background

Executive Summary

Pursuant to Executive Order 01.01.2018.26D, the Governor's Commission on Suicide Prevention is required to submit a state plan on suicide prevention, biennially, to the Governor.

Suicide is a significant public health problem in the United States and Maryland. In 2018, 650 Marylanders died by suicide (10.15 per 100,000), a 2.9% increase from the suicide rate in 2017. Overall, suicide was the 11th leading cause of death in Maryland. This 2020 Suicide Prevention Plan of the Governor's Commission on Suicide Prevention presents an update of current data and information on resources and initiatives taking place in Maryland. Additionally, the following four goals, with corresponding objectives, are offered to guide suicide prevention efforts in the State:

<u>Goal 1</u>: Integrate and coordinate suicide prevention activities across multiple sectors and settings.

<u>Goal 2</u>: Develop, implement, and monitor effective programs that promote wellness and prevent suicide and related behaviors.

<u>Goal 3</u>: Promote suicide prevention as a core component of health care services. Promote the adoption of "zero suicides" as an aspirational goal by health care and community support systems that provide services and support to defined patient populations.

<u>Goal 4</u>: Increase the timeliness and usefulness of surveillance systems relevant to suicide prevention and improve the ability to collect, analyze, and use this information for action.

Background on the Governor's Commission

On October 7, 2009, Governor Martin O'Malley issued Executive Order 01.01.2009.13, establishing the Governor's Commission on Suicide Prevention (Commission). On October 11, 2018, the Executive Order was amended by Governor Larry Hogan via Executive Order 01.01.2018.26. The amendments were established to help align the Commission's membership and objectives with current trends. The Commission's amended objectives are to:

- 1) Assess suicide's economic and social costs, and impact on the health and well-being of Maryland citizens;
- 2) Establish a list of existing support systems for survivors, attempters, and their families;
- 3) Develop a comprehensive, coordinated, and strategic plan for suicide prevention, intervention, and post-suicide services across the State;
- 4) Identify the resources needed to adequately provide those services; and
- 5) Promote the delivery of those services by local and state agencies through collaborative efforts that ensure effective and efficient use of local and state resources.

<u>Objective 3.3</u>: Provide care and support to individuals affected by suicide deaths and attempts to promote healing and implement community strategies to help prevent further suicides.

- a) Develop listing for effective comprehensive support programs for individuals bereaved by suicide.
- b) Provide appropriate clinical care to individuals affected by a suicide attempt or bereaved by suicide, including trauma treatment and care for complicated grief.
- c) Add a seat to the Governor's Commission on Suicide Prevention to represent the American



Indian/Alaskan Native community, LGBTQ community, and a suicide attempt survivor.

As of the 2018 amendment, the Commission is charged to submit a two-year plan to the Governor that establishes—for the organization, delivery, and funding of suicide prevention, intervention and post-suicide services—the (1) emerging needs, (2) priorities and strategies, (3) promising practices and programs, (4) recommendations for coordination and collaboration among State agencies, and (5) training. The plan shall be developed in consideration of the priorities and strategies in plans established by local jurisdictions. Under Executive Order 01.01.2009.13, the Commission submitted its initial plan to the Governor in 2012 and subsequent plans in 2016 and 2018.

Impact of Suicide in Maryland

Though Maryland currently has the fifth lowest suicide rate in the country, the suicide rate has been steadily increasing since 2015. In 2018, 650 Marylanders died by suicide equating to an age-adjusted rate of 10.15 suicide deaths per 100,000. For men, the age-adjusted rate was 15.93 per 100,000 and for women, the age-adjusted rate was 4.92 per 100,000. The age ranges with the highest age adjusted rates was 85 and older (18.58 per 100,000) followed by 80-84 years old (17.24 per 100,000), 20-24 years old (15.93 per 100,000) and 60-64 years old (15.77 per 100,000). Maryland 2018 data shows the age-adjusted suicide rate by for White people was 13.25 and for Black people, 5.08. In 2018, suicides in Maryland accounted for 12,299 years of potential life lost.



Source: CDC WISQARS

However, to fully understand the suicide rate in Maryland it is important to take into account the high number of deaths of undetermined manner. In 2018, the states with the highest age-adjusted drug overdose death rates were West Virginia (51.5 per 100,000 standard population), Delaware (43.8/100,000), and Maryland (37.2/100,000). On March 1, 2017, Governor Larry Hogan signed Executive Order 01.01. 2017.02 declaring a State of Emergency in response to the heroin, opioid, and fentanyl crisis in Maryland. Maryland, in comparison to other states, has a significantly higher rate of



undetermined overdose deaths; in fact Maryland has the highest proportion of opioid deaths that are classified by the medical examiner as undetermined manner.¹ However, epidemiologists have shown that a significant proportion of undetermined overdose deaths are likely intentional suicides.^{2,3,4} Thus, of 1,683 undetermined overdose deaths in Maryland in 2018, approximately 546 of the overdoses are likely to have been suicides. This would change the suicide rate in Maryland from ~10 to ~18 per 100,000. This revised rate would place Maryland at 21st highest rate, after Arkansas and before Kentucky. The disproportionate number of undetermined overdose deaths in Maryland likely accounts for a grossly underestimated state suicide rate. Rural counties in Western Maryland and the Eastern Shore tend to have higher suicide rates as compared to more urban areas in the state (e.g., Kent (14.7/100,000), Cecil (14.4/100,000), Allegany (13.0/100,000), Dorchester (12.5/100,000), Garrett (12.5/100,000), and Queen Anne's (12.3/100,000) Counties).



Source: Vital Statistics Annual Report 2018

¹ Rockett IR, Hobbs GR, Wu D, et al. Variable Classification of Drug-Intoxication Suicides across US States: A Partial Artifact of Forensics? [published correction appears in PLoS One. 2015;10(9):e0137933]. *PLoS One*. 2015;10(8):e0135296. Published 2015 Aug 21. doi:10.1371/journal.pone.0135296.

² Nestadt PS, Bohnert, ASB. (2020). Clinical Perspective on Opioids in the Context of Suicide Risk. *FOCUS*. 18. 100-105. doi:10.1176/appi.focus.20200003.

³ Liu D, Yu M, Duncan J, et al. Discovering the Unclassified Suicide Cases Among Undetermined Drug Overdose Deaths Using Machine Learning Techniques. *Suicide Life-Threat. Behav.* 50(2). 333-344. doi:10.1111/sltb.12591.

⁴ Rockett IRH, Caine ED, Connery HS, et alMortality in the United States from self-injury surpasses diabetes: a prevention imperative. *Injury Prevention*. 2019;25:331-333.





Source: CDC WISQARS



Source: CDC WISQARS

Circumstances of Suicide Death Data

The Maryland Violent Death Reporting System (MVDRS) is a subsidiary of the National Violent Death Reporting System (NVDRS). According to the Maryland Violent Deaths Reporting System (MVDRS), which collects facts from death certificates, coroner/medical examiner reports, law enforcement reports and



toxicology reports into an anonymous database. Maryland has a statewide, protocolized medical examiner system, which ensures high quality suicide death data. As mentioned above, as compared to other states, Maryland has a high rate of cases that are ruled "Undetermined," as the Office of the Chief Medical Examiner (OCME) observes a stringent definition of suicide and intent. Circumstance data is limited to information documented in the law enforcement and/or medical examiner files. Information on mental health and substance abuse history comes solely from these sources and not medical records or other treatment records. From 2017 MVDRS, there were 641 suicide deaths in the state of Maryland. From 2016 to 2017 there was a 9% increase in the total number of suicide deaths in the state, which accounts for an additional 53 lives lost to suicide. In 2017, 110 (17.4%) of the suicide decedents in Maryland had ever served in the military.

In 2017, 42.1% of suicide decedents had a mental health problem and 19.5% had a reported depressed mood at time of death. Despite these significant mental health concerns, only 14.7% of individuals had documentation of currently receiving treatment for mental health or substance use at time of death. Of concern is that while the number of suicide deaths in the state increased, the number of suicide decedents who had received some form of mental health treatment appears to have decreased. In 2016, 251 (42.7%) suicide decedents had documentation of receiving some form of mental health treatment in their lifetime, while in 2017 only 198 (30.9%) of suicide decedents had documentation of receiving some for an 11.8% decrease in the number of suicide decedents who had documentation of receiving mental health care.

2018 Youth Risk Behavior Surveillance Survey (YRBSS) Data

The results of the 2018 Youth Risk Behavior Surveillance Survey (YRBSS) data highlight the recent trends in suicidal thoughts and behaviors among middle and high school students in Maryland public schools. The YRBSS monitors six categories of health-related behaviors that contribute to the leading causes of death and disability among youth and adults. There are limitations of the current YRBSS survey data. Data is not collected from alternative school students, drop-outs or home-schooled students. The survey is only administered in English, which limits the accuracy of data from non-English speaking students.

Middle School YRBSS 2018 Results

In Maryland middle schools, 22.9% of students reported seriously thinking about killing themselves, a significant increase since 2013 (17.6%). In 2018, female middle school students were more likely to report seriously thinking about killing themselves (27.8%) than males (18%). Black (27.8%), Hispanic 26%), and multiracial (27.7%) students had the highest reports of suicidal ideation. 14.3% of middle school students reported ever making a plan about how they would kill themselves (10.8% of males; 17.8% of females). 8.8% of students reported making a suicide attempt (6.8% of males and 10.9% of females). Hispanic/Latino students and multiracial students had the highest proportions of suicide attempts with 12.2% of Hispanic/Latino and multiracial students reported rates than 6th and 7th grade students.

High School YRBSS 2018 Results

18% of Maryland high school students reported they had seriously considered attempting suicide in the past 12 months (13% of males; 22.7% of females). The highest rates of students that seriously



considered attempting suicide was in 10th and 11th grades (18.1%) and lowest in 9th grade (17.4%). 16.2% of high school students reported they had made a plan about how they would attempt suicide in the past 12 months (12.8% of males; 19.2% of females). Multiracial students had the highest rates for reporting they had considered attempting suicide in the past 12 months (25.6%) and for making a plan for attempting suicide in the past 12 months (22.1%). The Maryland High School Youth Risk Behavior Survey does not include a question about prior suicide attempts.

Groups with Increased Suicide Risk

The following is a list of some of the groups that have been identified as being at higher risk for suicide than the general population. The complexity of suicide, the range of interacting risk and protective factors that impact different groups in different ways, and a growing body of research mean that our understanding of vulnerable populations and how to reduce their risk continues to evolve.

Suicide Attempt Survivors

Although nine out of ten people who attempt suicide will not go on to die by suicide at a later date, a history of suicide attempts is a strong risk factor for suicide. A review of 90 studies showed that 23% of people who made attempts serious enough to receive medical care will attempt suicide again and survive, 70% do not attempt suicide again, and 7% die by suicide.⁵ WISQARS 2018 national data reports an estimated age-adjusted rate of 158.16 per 100,000 nonfatal self-harm injuries. The 2017 MVDRS data reports that 14.6% of individuals that died by suicide had a history of suicide attempts.

Suicide Loss Survivors

Research suggests that each death by suicide impacts at least 147 people and of those affected, more than six experience a major life disruption as a result of the suicide loss.⁶ Based on these estimates, there are more than 5.2 million survivors of suicide loss (or 1 in 62 Americans) living in the United States. Having lost someone to suicide is a documented risk factor for future suicide attempts or suicide. In 2018 an estimated 95,550 individuals became suicide loss survivors in Maryland, as a result of 650 individuals dying by suicide.

LGBTQ Youth

The results from the National Survey on LGBTQ Youth Mental Health 2020 by the Trevor Project show 48% of LGBTQ youth engaged in self-harm in the past 12 months, and that rate rises to over 60% for transgender and non-binary youth. The 2017 Youth Risk Behavior Survey Summary and Trends report show that significantly higher percentages of lesbian, gay, or bisexual students (63.0%) and students not sure of their sexual identity (46.4%) experienced persistent feelings of sadness or hopelessness than heterosexual students (27.5%). Also the survey found significantly higher percentages of lesbian, gay, or bisexual students (23.0%) and students not sure of their sexual identity (14.3%) attempted suicide than

⁵ Owens D, Horrocks J, and House A. Fatal and non-fatal repetition of self-harm: systematic review. *British Journal of Psychiatry*. 2002;181:193-199.

⁶ Drapeau and McIntosh. American Association of Suicidology, Suicide Data Page (2016).



heterosexual students (5.4%).⁷ This means that lesbian, gay and bisexual youth are 4x more likely to attempt suicide than straight youth. In Maryland, the Youth Risk Behavior Survey found 61% of lesbian, gay or bisexual students reported to feelings of sadness or hopelessness compared to 27.2% of heterosexual students. It also found that there were significantly higher percentages of lesbian, gay or bisexual students (36.1%) that ever seriously considered attempting suicide versus heterosexual students (12.8%).⁸ The 2015 US Transgender Survey for transgender adults (18 and older) found that 40% of respondents had attempted suicide in their lifetime—nearly nine times the attempted suicide rate in the U.S. population (4.6%).⁹

Individuals with Disabilities and Behavioral Health Conditions

Behavioral health conditions including mental illness and substance use disorders are well-documented risk factors for suicide. Of those who died by suicide with a known mental health condition, 75% had a diagnosis of depression.¹⁰ Individuals with alcohol dependence and persons who use drugs have a 10–14 times greater risk of death by suicide then the general population and approximately 22% of deaths by suicide have involved alcohol intoxication.¹¹ 2017 MVDRS data reports that 42.1% of individuals that died by suicide had a mental health problem, 14.2% had an alcohol dependence or problem and 13.5% had a (other) substance abuse problem.

American Indian/Alaska Native Individuals

American Indian/Alaska Natives (AI/AN) have the highest suicide rates of any racial or ethnic group in the United States. The suicide rate for AI/AN people in 2018-22.1 per 100,000-was higher than the overall U.S. suicide rate of 14.2 per 100,000.¹² Although suicides peak in midlife within the overall U.S. population, they peak during adolescence and young adulthood among AI/AN populations.¹³ According to the CDC in 2017 the age-adjusted death rates for suicide, by sex, for American Indians/Alaska Natives was 33.8 for males, and 11.0 for females.¹⁴ According to the 2010 census there are 59,795 individuals in Maryland identifying as AI/AN. From information provided by Native Lifelines, a Title V Urban Indian Health Program operating in Baltimore, MD, AI/AN populations particularly concentrated in Charles, St. Mary's, Montgomery, Howard, Baltimore, Harford, Frederick and Washington counties. Despite having a substantial population that is increasingly vulnerable to factors contributing to suicide, the population is

https://phpa.health.maryland.gov/ccdpc/Reports/Pages/YRBS2018.aspx Accessed on [5/13/2020].

⁷ National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention- Division of Adolescent and School Health, Youth Risk Behavior Survey Data Summary and Trends Report (2001-2017). Center for Disease Control. online at https://www.cdc.gov/healthyvouth/data/yrbs/pdf/trendsreport.pdf.

⁸ Centers for Disease Control and Prevention. [2018] Youth Risk Behavior Survey Data. Available at:

⁹ James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). Executive Summary of the Report of the 2015 U.S. Transgender Survey. Washington, DC: National Center for Transgender Equality.

¹⁰ Stone, Simon, Fowler, et al., Vital Signs: Trends in State Suicide Rates—United States, 1999–2016 and Circumstances Contributing to Suicide-27 States, MMWR Morb. Mortal Wkly Rep., 67:617-624 (2018), online at http://dx.doi.org/10.15585/mmwr.mm6722a1.

¹¹ Wilcox HC, Conner KR, Caine ED, et al.: Association of alcohol and drug use disorders and completed suicide: an empirical review of cohort studies. Drug Alcohol Depend 2004; 76:S11–S19 Crossref, Google Scholar.

¹² CDC, 2020. National Center for Health Statistics. 1999--2018 Wide Ranging Online Data for Epidemiological Research (WONDER), Multiple Cause of Death files. Retrieved by the Suicide Prevention Resource Center from http://wonder.cdc.gov/ucd-icd10.html.

¹³ Wexler L, Chandler M, Gone JP, et al. Advancing suicide prevention research with rural American Indian and Alaska Native populations. *Am J Public Health*. 2015;105(5):891-899. doi:10.2105/AJPH.2014.302517 ¹⁴ CDC, 2019. National Vital Statistics Report. Vol. 68, No. 09. Table 10.

https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68 09.pdf.



often overlooked. This manifests with increased rates of suicide and self-harm. In 2014, self-intended harm was the fifth leading cause of death amongst American Indians living in Maryland according to a study from the Urban Indian Health Institute. One factor affecting and limiting the analysis of data are errors in racial misclassification, particularly for demographic and mortality data. Racial misclassification is defined as incorrect coding of an individual's race or ethnicity in public records. This can greatly underestimate the true rate of disease, risk factor, or outcome. AI/ANs are especially likely to experience problems of incorrect classification on death certificates; therefore, true mortality rates among AI/ANs are assumed to be higher than reported numbers suggest.

Older Adult Males

Nationally and in Maryland, the suicide rate among men aged 85 and older is higher than for any other single group (47.17 and 18.58, respectively).¹⁵ Reasons for this include: older adults plan more carefully and use more deadly methods, such as firearms; older adults are less likely to be discovered and rescued; physical frailty means older adults are less likely to recover from an attempt.¹⁶ National crude rates (per 100,000) of suicide by sex and age in 2018, show that for individuals 65 to 74 the male rate was 27.8 while the female rate was 6.2.¹⁷ In Maryland older adult males (85 and over) have the highest rates of suicide at 39.42, followed by males 80 to 84 years old at 34.9. There are many factors contributing to suicide risk in older adults, including mental and physical health conditions, overall functioning, and social factors including lack of social connectedness, bereavement, and financial problems.¹⁸ 2017 MVDRS data shows that in individuals 65 and over circumstances involving a physical health problem were reported in 40% of suicide deaths.

¹⁵ Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS) [online]. (2005-2018) [cited 2020 Oct]. Available from URL: www.cdc.gov/injury/wisgars

¹⁶ Conwell Y, Van Orden K, Caine ED. Suicide in older adults. *Psychiatr Clin North Am*. 2011;34(2):451-ix. doi:10.1016/j.psc.2011.02.002

¹⁷ Centers for Disease Control and Prevention, National Center for Health Statistics. NCHS Data Brief Number 362 (2020). Available from URL: https://www.cdc.gov/nchs/data/databriefs/db362-h.pdf

¹⁸ Conwell, Van Orden, & Caine, Suicide in Older Adults, The Psychiatric Clinics of North America, 34(2), 451–468 (2011), online at http://doi.org/10.1016/j.psc.2011.02.002.





Source: CDC WISQARS

Individuals in the Justice and Child Welfare Systems

Incarcerated individuals and those who are affected by the criminal justice system have elevated risks of suicide. According to 2017 MVDRS data, 6% of individuals who died by suicide had a reported recent criminal legal problem. Children in the juvenile justice and child welfare systems and adults in the justice system often have a number of adverse childhood experiences that can contribute to an increased risk of suicide. Mental health disorders, substance abuse, impulsivity, abuse, loss, and legal problems are closely associated with increased suicide risk and are prevalent in these groups. In Maryland in 2017, there were 7,578 children that were victims of abuse or neglect which is an increase of 8.4% from 2016. There were a total of 3,923 children in out-of-home care.¹⁹

Those who engage in non-suicidal self-injury (NSSI)

Non-suicidal self-injury refers to the intentional destruction of one's own body tissue without suicidal intent and for purposes not socially-sanctioned. Examples include: cutting, piercing, burning, scratching, and hitting. Non-suicidal self-injury may be a unique risk factor for suicide because its presence is associated with both increased desire and capability for suicide. Though there are a variety of ways to self-injure, riskier self-injury methods can be associated with accidental death. NSSI is stigmatized, so self-injury typically occurs in private and is kept secret. Research has found that it is most common among adolescents and young adults. A study conducted in a college setting found a lifetime prevalence rate of having 1 or more self-injurious incidents was 17%, with 75% of those students engaging in self-injurious behavior more than once.²⁰ This study also found that individuals with repeat NSSI behavior were more likely to report a history of emotional or sexual abuse, ever having considered or attempted

¹⁹ Child Welfare League of America, Maryland's Children at a Glance (2019). Online at https://www.cwla.org/wp-content/uploads/2019/04/Maryland-2019.pdf.

²⁰ Whitlock, J., Eckenrode, J. and Silverman, D. Self-Injurious Behaviors in a College Population. *Pediatrics*. June, 2006,117 (6) 1939-1948; DOI: 10.1542/peds.2005-2543.



suicide, and increased levels of psychological distress. Research into the connection between NSSI and attempted suicide has found evidence that NSSI is a strong predictor of future suicide attempts, even stronger than a history of past suicide attempts.^{21,22}

Military Members, Veterans, and their Families

Between 2015 and 2017, there were an average of 103 annual deaths by suicide among Maryland residents who had served in the Armed Forces. Deaths by suicide among those who had served in the Armed Forces represented 17.5% of all suicides among Maryland residents during this three year period. In 2017, 96% of suicide deaths among Maryland residents who had served in the Armed Forces were men.²³ From 2017 MVDRS data, the individuals that died by suicide and had ever served in the Armed Forces 36% had a reported mental health problem, 14% had a reported alcohol dependence/problem, 17% a recent problem with current/ or former intimate partner, and 25% a physical health problem.

People Who Work in Certain Industries and Occupations

In January 2020, CDC published its analysis of suicide data by industry and occupation among workingage decedents employed at the time of death from the 32 states participating in the 2016 National Violent Death Reporting System (NVDRS).²⁴ Using U.S. Census codes, they found the following industries and occupations to be at significantly higher risk when compared with the overall study population. Suicide rates were significantly higher in five industry groups: 1) Mining, quarrying, and oil and gas extraction (for males); 2) Construction (males); 3) Other services (e.g., automotive repair) (males); 4) Agriculture, forestry, fishing, and hunting (males); and 5) Transportation and warehousing (males and females). They were also higher in the following six major occupational groups: 1) Construction and extraction (males and females); 2) Installation, maintenance, and repair (males); 3) Arts, design, entertainment, sports, and media (males); 4) Transportation and material moving (males and females); 5) Protective Service (females); and 6) Healthcare support (females). They cite research indicating that suicide risk is associated with "low-skilled work, lower education, lower absolute and relative socioeconomic status, work-related access to lethal means, and job stress, including poor supervisory and colleague support, low job control, and job insecurity."

Section II: Evolving and Emerging Trends

Suicide Among Black Youth

In 2019, the Congressional Black Caucus's Emergency Task Force on Black Youth Suicide and Mental Health studied a disturbing trend reported in the literature: that although the suicide rates among children ages 5–19 remained stable across the country over two decades, the rate for Black youth—

²¹ Wilkinson P, Kelvin R, Roberts C, et al. Clinical and psychosocial predictors of suicide attempts and nonsuicidal self-injury in the Adolescent Depression Antidepressants and Psychotherapy Trial (ADAPT). *Am J Psychiatry*. 2011;168(5):495–501.

²² Guan K, Fox KR, Prinstein MJ. Nonsuicidal self-injury as a time-invariant predictor of adolescent suicide ideation and attempts in a diverse community sample. *J Consult Clin Psychol*. 2012;80(5):842–849

²³ Maryland Department of Health. Veteran and Armed Forces Member Suicides in Maryland Annual Report. (2018), online at https://health.maryland.gov/suicideprevention/Documents/Veteran%20and%20Armed%20Forces%20Member%20Suicides%20 in%20Maryland_Annual_Report_2018.pdf

 ²⁴ Peterson C, Sussell A, Li J, Schumacher PK, Yeoman K, Stone DM. Suicide Rates by Industry and Occupation — National Violent Death Reporting System, 32 States, 2016. *MMWR Morb Mortal Wkly Rep* 2020;69:57–62. DOI: http://dx.doi.org/10.15585/mmwr.mm6903a1



especially Black boys—increased significantly while it decreased significantly for white youth.²⁵ This is in contrast to the fact that historically the suicide rate among Black Americans has been lower than that of white individuals across all age groups, and these were the first national studies to observe higher suicide rates among U.S. black individuals compared to white individuals. It is important to note that although the overall numbers of children who die by suicide is very low (averaging 33 deaths annually), this 20-year trend is alarming. The Congressional Task Force Report examined causes and solutions for Black youth suicide and mental health needs and produced practice and policy recommendations.

"In youth ages 10 to 19 years, suicide is the second leading cause of death, and in 2017, over 3,000 youth died by suicide in this age group. Over the past decade, increases in the suicide death rate for Black youth have seen the rate rising from 2.55 per 100,000 in 2007 to 4.82 per 100,000 in 2017. Black youth under 13 years are twice as likely to die by suicide and when comparing by sex, Black males, 5–11 years, are more likely to die by suicide compared to their White peers. Finally, the suicide death rate among Black youth has been found to be increasing faster than any other racial/ethnic group. Although Black youth have historically not been considered at high risk for suicide or suicidal behaviors, current trends suggest the contrary."

National trends point to the need to ensure suicide prevention initiatives are common programs in Black communities in Maryland. The persistent and alarming rate of suicide increase warrants the attention of practitioners that work in child-serving systems, such as pediatric and family health care, schools, child welfare; mental health providers and researchers. There should also be a call to action for faith-based communities, families, and community leadership.

COVID-19 Pandemic

Experts agree that the mix of economic, psychosocial, and health-associated risk factors has the potential for increasing suicide risk, but they advise that this is not inevitable.^{26, 27} Certainly, the pandemic has affected our behavioral health: According to the CDC, more than 1 in 10 individuals nationally has seriously considered suicide in the previous 30 days, including over 25% of those aged 18-24, and more than 13% have started or increased their substance use to cope with pandemic-related stress. Further, the national rate of overdose deaths jumped more than 9% in the first six months of 2020 following the first yearly decline in a decade.²⁸

Maryland and national mortality data during the pandemic were not available at this writing.

In a note of optimism, Reger and colleagues state:

²⁵ Bridge JA, Horowitz LM, Fontanella CA, et al. Age-Related Racial Disparity in Suicide Rates Among US Youths From 2001 Through 2015. *JAMA Pediatr*. 2018;172(7):697–699. doi:10.1001/jamapediatrics.2018.0399.

 ²⁶ 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.

²⁷ Gunnell D, Appleby L, et al and the COVID-19 Suicide Prevention Research Collaboration. Suicide risk and prevention during the COVID-19 pandemic. *The Lancet Psychiatry*. Published Online April 21, 2020 https://doi.org/10.1016/ S2215-0366(20)30171-1.

²⁸ 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 Morbidity & Mortality Weekly Report* 2020;69:1049-1057. DOI: https://www.cdc.gov/mmwr/volumes/69/wr/mm6932a1.htm?s cid=mm6932a1 w.



There may be a silver lining to the current situation. Suicide rates have declined in the period after past national disasters (e.g., the September 11, 2001, terrorist attacks). One hypothesis is the so-called pulling-together effect, whereby individuals undergoing a shared experience might support one another, thus strengthening social connectedness. Recent advancements in technology (eg, video conferencing) might facilitate pulling together. Epidemics and pandemics may also alter one's views on health and mortality, making life more precious, death more fearsome, and suicide less likely.²⁹

Increased Access to Firearms

An unprecedented surge in U.S. firearm sales has been widely reported: between March and July 2020, an estimated 10.1 million guns were sold, more than double the number of estimated guns sold over the same period last year.³⁰ Firearms are the most common method of suicide in the US.³¹ Access to a firearm triples the risk of death by suicide.³² An *Annals of Internal Medicine* study found that while only 8.5% of overall suicide acts were fatal, 89.6% of the firearm suicide acts were fatal.³³

Since early March 2020, demand for firearms in Maryland has skyrocketed. According to the FBI National Instant Criminal Background Check System (NICS), firearm background checks in Maryland have almost doubled when compared to the previous five years. While background checks are not a one-to-one indicator of gun sales (one background check can be done for the purchase of multiple firearms), NICS data is considered a strong proxy indicator for firearm demand.

 ²⁹ 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.

³⁰ Federal Bureau of Investigation National Instant Criminal Background Check System (NICS) Firearm Checks: Month/Year (November 30, 1998 - September 30, 2020). https://www.fbi.gov/file-repository/nics_firearm_checks_-_month_year.pdf/view.

³¹ Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS) [online]. (2005-2018) [cited 2020 Oct]. Available from URL: www.cdc.gov/injury/wisgars.

³² Anglemyer A, Horvath T, Rutherford G. 2014. https://doi.org/10.7326/M13-1301.

³³ Conner A, Azrael D, Miller M. Suicide case-fatality rates in the United States, 2007 to 2014: a nationwide population-based study *Ann. Intern Med.* 2019; ePub(ePub): ePub.





Source: National Instant Criminal Background Check System (NICS), 2020

In 2018, 266 Maryland suicides (41% of total suicide deaths in the state) were by firearm. Even one unsecured firearm elevates suicide risk, not only for the firearm purchaser or owner, but also for all members of the household. It is estimated that nationally, close to half of firearm purchasers during the COVID-19 period are first-time firearm owners, many of whom have not received training in safely storing their firearms.³⁴ The increased gun ownership in Maryland may lead to an increase in suicides if preventative measures are not taken.

Unemployment and Suicide Risk

The economic impacts of COVID-19 have been felt intensely everywhere in the United States, and Maryland is no exception. Filings for unemployment insurance in the state have risen rapidly, and unemployment rates have remained elevated since the COVID crisis began. Historically, recessions have led to increased suicide risk - after the 2008 economic crisis, the U.S. suffered an estimated 3500 suicide deaths above the expected trend.³⁵

³⁴ Lyons VH, Haviland MJ, Azrael D, et al. Firearm purchasing and storage during the COVID-19 pandemic. *Injury Prevention*. Published Online First: 17 September 2020. doi: 10.1136/injuryprev-2020-043872.

³⁵ Chang S, Stuckler D, Yip P, Gunnell D. Impact of 2008 global economic crisis on suicide: time trend study in 54 countries. *BMJ*. 2013 Sep;347:f5239. doi:10.1136/bmj.f5239.





Source: US Department of Labor, 2020

Unemployment, in particular, is linked to increased rates of depression and suicide. Typically, suicide risk increases as duration of unemployment increases.³⁶ During mass layoffs associated with crisis, those who experience unemployment are less likely to blame themselves for their job loss, which can reduce suicide risk in the short term. However, those who struggle to re-enter the workforce after the crisis are at higher risk of suicide. The risk is elevated even higher if peers in their age group or industry are able to find employment, increasing negative peer comparison.^{37, 38, 39} To prevent an increase in suicide, those who are unemployed will require long-term support as they seek to re-enter the workforce – even after the height of the COVID-19 crisis passes.^{40, 41}

³⁶ Classen TJ, Dunn RA. The effect of job loss and unemployment duration on suicide risk in the United States: a new look using mass-layoffs and unemployment duration. *Health Econ*. 2012;21(3):338-350. doi:10.1002/hec.1719.

³⁷ Milner A, Page A, LaMontagne AD. Duration of unemployment and suicide in Australia over the period 1985-2006: an ecological investigation by sex and age during rising versus declining national unemployment rates. *J Epidemiol Community Health*. 2013;67(3):237-244. doi:10.1136/jech-2012-201594.

³⁸ Milner A, Page A, LaMontagne AD (2013) Long-Term Unemployment and Suicide: A Systematic Review and Meta-Analysis. *PLoS ONE* 8(1): e51333. https://doi.org/10.1371/journal.pone.0051333.

 ³⁹ Milner A, Page A, LaMontagne AD. Cause and effect in studies on unemployment, mental health and suicide: a meta-analytic and conceptual review. *Psychol Med*. 2014;44(5):909-917. doi:10.1017/S0033291713001621.
⁴⁰ Cylus J, Glymour MM, Avendano M. Do generous unemployment benefit programs reduce suicide rates? A state fixed-effect

⁴⁰ Cylus J, Glymour MM, Avendano M. Do generous unemployment benefit programs reduce suicide rates? A state fixed-effect analysis covering 1968-2008. *Am J Epidemiol*. 2014;180(1):45-52. doi:10.1093/aje/kwu106.

⁴¹ Kim C, Cho Y. Does Unstable Employment Have an Association with Suicide Rates among the Young?. *Int J Environ Res Public Health*. 2017;14(5):470. Published 2017 Apr 28. doi:10.3390/ijerph14050470.



Section III: Goals and Objectives

GOAL 1: INTEGRATE AND COORDINATE SUICIDE PREVENTION ACTIVITIES ACROSS MULTIPLE SECTORS AND SETTINGS.

<u>Objective 1.1</u>: Integrate suicide prevention into all relevant health care reform efforts.

- a) Implement universal screening for suicide risk in emergency departments. Additional objectives related to health care reform efforts and suicide prevention can be found under Goal 3.
- b) Develop guidelines for primary care physicians and pediatricians to integrate universal screening into routine questioning during patient visits

<u>Objective 1.2</u>: Reduce the stigma associated with suicidal behaviors and mental and substance use disorders.

a) Develop and implement a statewide suicide prevention campaign.

<u>Objective 1.3</u>: Increase the knowledge of the warning signs for suicide and of how to connect individuals at high risk or in crisis with assistance and care.

- a) Develop and implement a statewide suicide prevention campaign similar to the Know the Signs campaign.
- b) Promote suicide prevention and awareness training including but not limited to safeTALK, Applied Suicide Intervention Skills Training (ASIST), Question Persuade Refer (QPR), and Talk Saves Lives.
- c) Continue to develop online training modules through MD-SPIN and embed the modules on a publically accessible website.

<u>Objective 1.4</u>: Increase knowledge of the factors that offer protection from suicidal behaviors and that promote wellness and recovery.

<u>Objective 1.5</u>: Promote responsible media reporting of suicide, accurate portrayals of suicide and mental illnesses in the entertainment industry, and the safety of online content related to suicide.

- a) Encourage and recognize news organizations that develop and implement policies and practices addressing safe and responsible reporting of suicide and other related behaviors.
- b) Develop, implement, monitor, and update guidelines on the safety of online content for new and emerging communication technologies and applications.
- c) Develop and disseminate guidance for journalism and mass communication schools regarding how to address consistent and safe messaging on suicide and related behaviors in their curricula.

<u>Objective 1.6</u>: Establish partnerships with organizations that serve high-risk and underserved populations.

a) Establish partnerships with faith-based organizations, Medicaid/Medicare, private payers, school system, businesses and employers, Maryland Primary Care program, and organizations that serve special populations.

GOAL 2: DEVELOP, IMPLEMENT, AND MONITOR EVIDENCE-BASED PROGRAMS THAT PROMOTE WELLNESS AND PREVENT SUICIDE AND RELATED BEHAVIORS.



<u>Objective 2.1</u>: Strengthen the coordination, implementation, and evaluation of comprehensive state and local suicide prevention programming.

- a) Hold focus groups and develop a survey to assess current strengths and needs in state and local suicide prevention programming.
- b) Facilitate regional meetings with local jurisdictions to discuss strategies and best practices for suicide prevention programming and implementation.

<u>Objective 2.2</u>: Strengthen the efforts to increase access to and delivery of effective programs and services for mental health and substance use disorders.

- a) Develop and disseminate awareness campaigns for Maryland's Helpline, text, and chat services.
- b) Coordinate with the National Suicide Prevention Lifeline to prepare for transitioning to 9–8–8 as the new nationwide suicide prevention number, scheduled for completion by July 2022.
- Promote access to mental health and substance use services and programs for community members with limited English proficiency.
 Research and support evidence-based school programs for mental health, including: Good

Behavior Game, Youth Aware of Mental Health, Sources of Strength and Signs of Suicide

<u>Objective 2.3</u>: Promote efforts to reduce access to lethal means of suicide among individuals with identified suicide risk.

- a) Promote the free online training "Counseling on Access to Lethal Means" to providers.
- b) Encourage providers who interact with individuals at risk for suicide to routinely assess for access to lethal means.
- c) Work with county suicide prevention coalitions and other organizations to launch a Maryland Gun Shop Project.
- d) Work with county suicide prevention coalitions and other organizations to collaborate with firearms dealers, firearm ranges, and gun owner groups to incorporate suicide awareness as a basic tenet of firearm safety and responsible firearm ownership.
- e) Develop and implement new safety technologies to reduce access to lethal means (i.e., create a communication loop between healthcare providers, prescribers, and pharmacies when an individual is at risk for suicide, or restricting pack sizes for potentially lethal medications)
- f) Disseminate information about the Maryland Safe Storage map created by the Johns Hopkins Bloomberg School of Public Health.
- g) Distribute gun locks and promote safe firearm storage habits.
- h) Work with partners to expand, co-sponsor, and promote medication take-back days and ongoing methods for disposal of unwanted medications.
- i) Develop a statewide means safety campaign with specific emphasis on rural areas.
- j) Work with the Maryland Extreme Risk Protective Order (ERPO) Implementation Group to raise awareness of Maryland's ERPO law.
- k) Pilot the use of ERPO navigators in health care settings to help health care providers file petitions when patients are at high risk of suicide and have firearms in their home.

<u>Objective 2.4</u>: Provide effective community-centered training to community groups and clinical service providers on the prevention of suicide and related behaviors.

- a) Provide training to targeted gatekeeper professions including law enforcement, teachers, and faith-based communities.
- b) Ensure the provision of training in languages other than English.



- c) Provide training about culturally appropriate responses as they relate to suicide and related behaviors.
- d) Provide training on implicit bias to providers.

<u>Objective 2.5</u>: Provide training to mental health and substance use providers on the recognition, assessment, and management of at-risk behavior and the delivery of effective clinical care for people with suicide risk.

- a) Develop and promote the adoption of core education and training guidelines on the prevention of suicide and related behaviors by all health professions, including within graduate and continuing education programs.
- b) Promote the adoption of core education and training guidelines on the prevention of suicide and related behaviors by credentialing and accreditation bodies.
- c) Develop and implement protocols and programs for clinicians, clinical supervisors, first responders, crisis staff, and others on how to implement effective strategies for communicating and collaboratively managing suicide risk.

GOAL 3: PROMOTE SUICIDE PREVENTION AS A CORE COMPONENT OF HEALTH CARE SERVICES. PROMOTE THE ADOPTION OF "ZERO SUICIDES" AS AN ASPIRATIONAL GOAL BY HEALTH CARE AND COMMUNITY SUPPORT SYSTEMS THAT PROVIDE SERVICES AND SUPPORT TO DEFINED POPULATIONS.

<u>Objective 3.1</u>: Promote timely access to assessment, intervention, and effective care for individuals with heightened risk for suicide. Promote continuity of care and the safety and wellbeing of all patients treated for suicide risk in emergency departments or hospital inpatient units.

- a) Establish linkages between providers of mental health and substance use services and community-based programs, including peer-support programs.
- b) Develop collaborations between emergency departments and other health care providers to provide alternatives to emergency department care and hospitalization when appropriate and to promote rapid follow up after discharge.
- c) Develop and implement protocols to ensure immediate and continuous follow-up after discharge from an emergency department or inpatient unit.
- d) Expand the availability of mobile crisis teams, crisis intervention teams, and 24/7 crisis centers in all local jurisdictions.
- e) Identify strategies to implement community-based interventions to provide care for people who are uninsured and uninsurable.
- f) Establish linkages between school health providers (nurses, counselors, social workers, etc.) and community-based supports and healthcare systems.
- g) Support expansion of telemedicine to provide timely services and support to patients.

<u>Objective 3.2</u>: Promote and implement effective clinical and professional practices for assessing and treating those identified as being at risk for suicidal behaviors.

- a) Adopt, disseminate, and implement guidelines for the assessment of suicide risk among persons receiving care in all settings.
- b) Develop, disseminate, and implement guidelines for clinical practice and continuity of care for providers who treat persons with suicide risk.
- c) Develop and implement protocols for delivering services for individuals with suicide risk in the most collaborative, responsive, and least restrictive settings.



- d) Adopt and implement guidelines to effectively engage families and concerned others, when appropriate, throughout entire duration of care for persons with suicide risk.
- e) Promote the safe disclosure of suicidal thoughts and behaviors by all patients.
- f) Adopt and implement policies and procedures to assess suicide risk and intervene to promote safety and reduce suicidal behaviors among patients receiving care for mental and/or substance use disorders.
- g) Develop guidelines on the documentation of assessment and treatment of suicide risk and establish a training and technical assistance capacity to assist providers with implementation.

<u>Objective 3.3</u>: Provide care and support to individuals affected by suicide deaths and attempts to promote healing and implement community strategies to help prevent further suicides.

- a) Develop listing for effective comprehensive support programs for individuals bereaved by suicide.
- b) Provide appropriate clinical care to individuals affected by a suicide attempt or bereaved by suicide, including trauma treatment and care for complicated grief.
- c) Adopt, disseminate, implement, and evaluate guidelines for communities to respond effectively to suicide clusters and contagion within their cultural context, and support implementation with education, training, and consultation.
- d) Provide health care providers, first responders, and others with care and support when a patient under their care dies by suicide.

GOAL 4: INCREASE THE TIMELINESS AND USEFULNESS OF SURVEILLANCE SYSTEMS RELEVANT TO SUICIDE PREVENTION AND IMPROVE THE ABILITY TO COLLECT, ANALYZE, AND USE THIS INFORMATION FOR ACTION.

<u>Objective 4.1</u>: Improve the timeliness of reporting vital records data.

Objective 4.2: Improve the usefulness and quality of suicide-related data.

- a) Collaborate with school districts to use Youth Risk Behavior Surveys to better understand suicidal ideation and attempts among school-aged youth.
- b) Work with the Maryland State Department of Education (MSDE) and the Maryland Department of Health (MDH) to administer the Youth Risk Behavior Surveys (YRBS) in languages other than English.
- c) Adopt recommended self-directed violence uniform definitions and data elements developed by the CDC.
- Improve data linkage across agencies and organizations, including hospitals, psychiatrics and other medical institutions, and police departments to better capture information on suicide attempts.
- e) Establish a Suicide Fatality Review team with a legislative mandate to collect and aggregate more detailed and prevention informative data on suicide deaths.
- f) Collaborate with the state child fatality review team for information collected about youth suicides.

<u>Objective 4.3</u>: Improve and expand state and local public health capacity to routinely collect, analyze, report, and use suicide-related data to improve prevention efforts and inform policy decisions.

a) Utilize the Maryland Suicide Data Warehouse to address gaps in suicide data and establish priorities.



<u>Objective 4.4</u>: Evaluate the impact and effectiveness of suicide prevention interventions and systems and synthesize and disseminate findings.

<u>Objective 4.5</u>: Develop and support a repository of research and resources to help increase the amount and quality of research on suicide prevention and care in the aftermath of suicidal behaviors.