

# Preparing Michigan for the Behavioral Health Impact of COVID-19

June 13, 2020<sup>A</sup>



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<sup>A</sup>Presented COVID-19 data is current as of June 13, 2020

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# Preparing Michigan for the Behavioral Health Impact of COVID-19

## Executive Summary

The COVID-19 crisis will have a profound impact on the mental health of Michiganders. Due to the emergence of the disease and its impact on our lives and economy, many of the conditions that are known to increase risk for suicide are now in place in Michigan. Research of previous epidemics, including an outbreak of Severe Acute Respiratory Syndrome (SARS) in Asia in 2003, gives us evidence-based warning signs about what could happen in Michigan and also strategies on how we could effectively prepare.

The research literature indicates that the impact of economic downturn, isolation/quarantine, increased substance use, insomnia, and lack of community gatekeepers, among other factors, could all lead to increased deaths by suicide—unless we act. Certain groups of Michiganders are especially at risk for a behavioral health crisis due to COVID-19's impact, including healthcare providers, children and adolescents, older adults, the LGBTQ community, and those with autism spectrum disorder.

This paper seeks to promote awareness of this coming crisis and offer solutions. It concludes with a sampling of immediate action steps we in Michigan can take to minimize the fallout of COVID-19 on mental health in our communities, including: improving access to care through awareness, affordability, and technology; workforce development; and fixing gaps in critical behavioral health infrastructure.

We in Michigan need to continue to scale up teletherapy and telepsychiatry, let Michiganders and gatekeepers know the availability of these care options and how to find them, and keep in place financial incentives such as waivers for co-pays for these services. There is infrastructure at the State that could be quickly retooled to serve as a statewide behavioral health clearing house for people seeking these services.

We must urgently address shortages in the mental health workforce by quickly retraining those whose jobs have been eliminated to work in entry level positions in the mental health field. We must also prepare our existing behavioral health workforce for caring for a surge of trauma related needs, and in evidence-based suicide prevention interventions. The adoption of an inpatient intensive care behavioral health reimbursement rate would immediately encourage psychiatric facilities to accept COVID-19 positive and acutely ill psychiatric patients who are frequently boarded in Emergency Rooms which now must prioritize a response to the pandemic.



## Introduction

It is no secret that the COVID-19 crisis has created profound disruption in the lives of Michiganders.

The disease has brought premature death to over 5,745 Michigan residents to date (June 13, 2020) and has sickened over 59,621 individuals<sup>1</sup>. Many patients have died without family members at their side, and family and friends grieve alone. Healthcare workers have worked long hours, often without adequate personal protection equipment, risking their own health and the health of their families to save patients struggling with this disease.

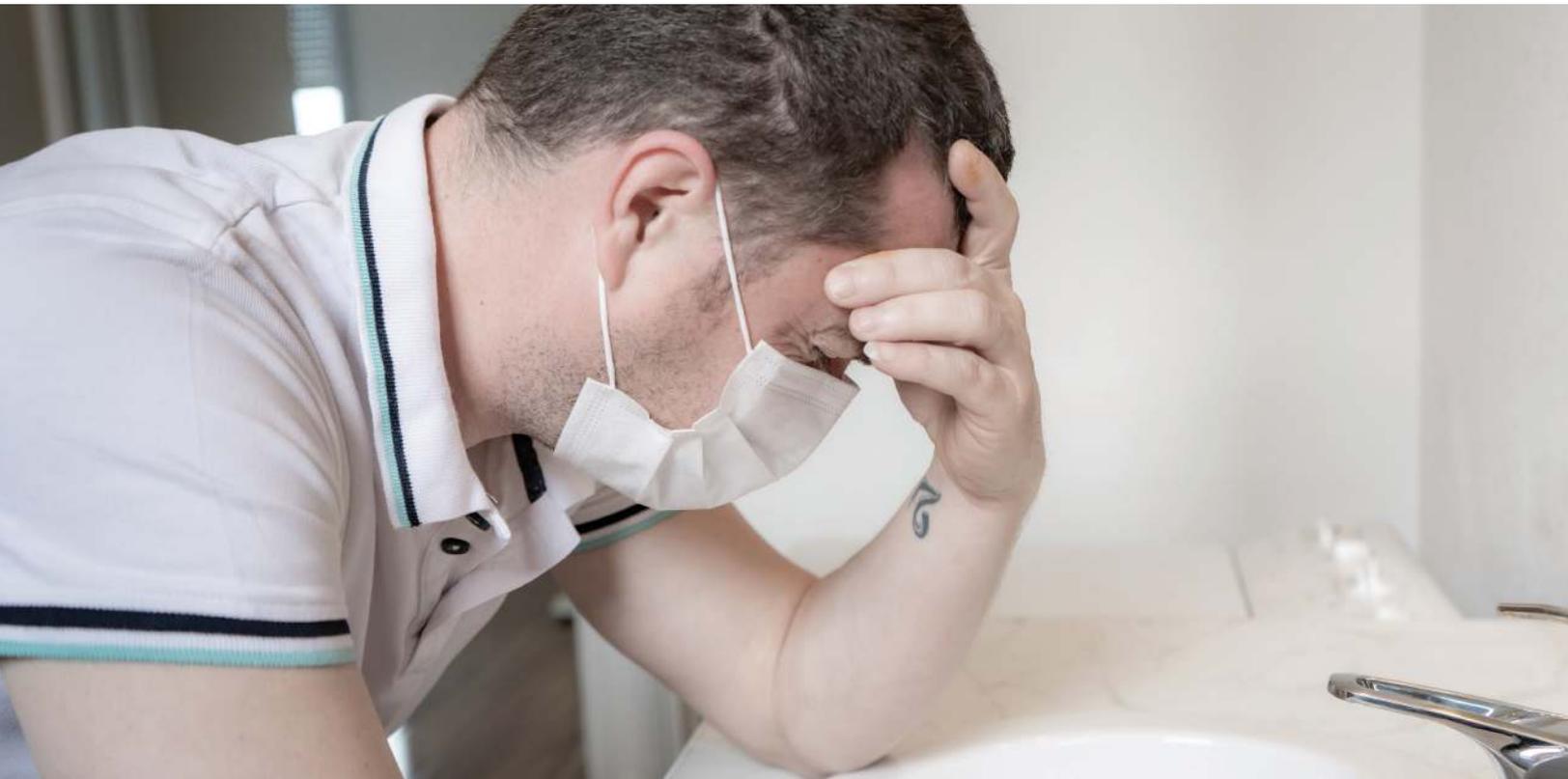
Healthcare systems are either overwhelmed with caring for those with COVID-19 or are experiencing unprecedented financial distress as they cease elective procedures in preparation for a possible surge of patients.

The “Stay Home, Stay Safe” order has been effective in saving lives, but Michiganders find themselves separated from their core social supports of friends, extended family, coworkers, teachers, and healthcare providers. The Michigan economy has slowed dramatically, driving up unemployment, threatening healthcare benefits, and shuttering businesses throughout the state.

While the national political debate about whether the severity of the COVID-19 pandemic within the U.S. and Michigan could have been prevented continues, we do have clarity about what will likely come in the near future:

***Michigan will experience a mental health crisis as a result of the aftershocks of COVID-19 unless we act now.***

The warning signs are clear, as this paper will describe. We can do nothing and experience further death and disability, or we can take definitive steps to keep Michigan safe. The choice is ours. The time to act is now.



## A “Second Wave” of COVID-19 Impact in Michigan

The factors that research has shown to predict mental health impairment and death have all recently spiked in Michigan.

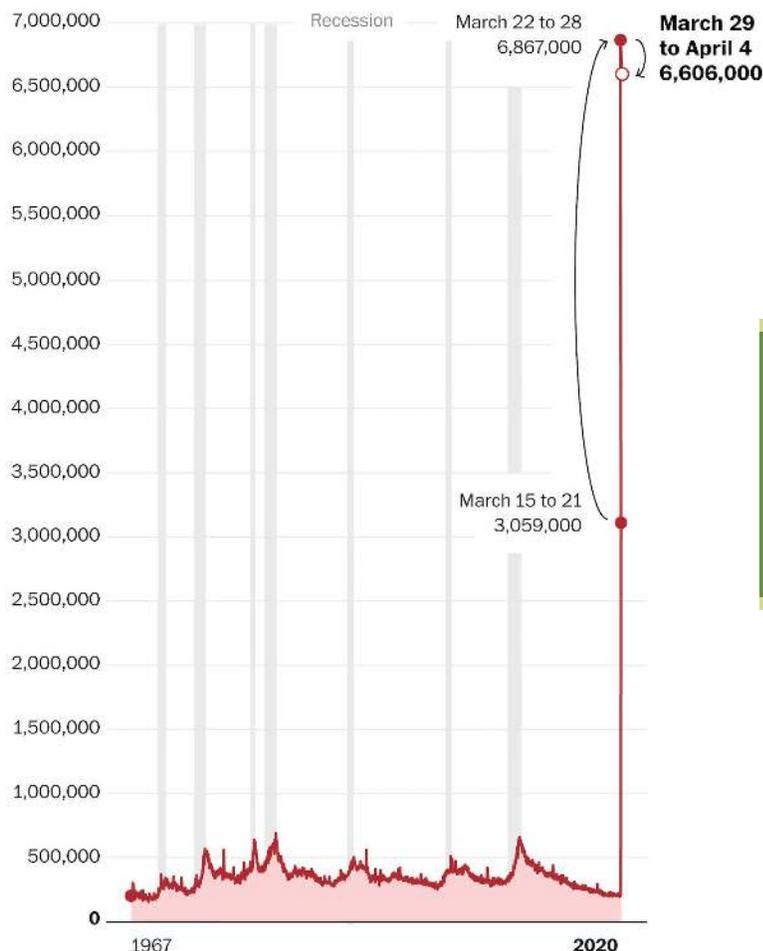
### Risk Factors in Michigan for Increased Suicide

#### Economic Distress

Economic downturns are shown to increase suicide rates 1.3% for every percentage point increase in unemployment.<sup>2</sup> In one month, Michigan unemployment rates rose more than 17% with over 1 million Michigan residents filing for benefits.<sup>3</sup> The unemployment rate in April was 23%, the 2nd highest in the nation.<sup>4</sup>

Taking this spike into account, we can estimate an increase in suicide deaths of at least 25% in the coming year. Two years prior to the COVID-19 pandemic, 16% of those who died by suicide had experienced a job loss or financial problem.<sup>5</sup> Already, calls to national suicide hotlines have increased an average of 47%, with some crisis lines experiencing a 300% increase in calls.<sup>6-7</sup> Crisis calls to a hotline in southeast Michigan have already increased 35%.<sup>8</sup>

**Weekly initial claims for unemployment insurance**



Note: Seasonally adjusted  
Sources: Labor Department via FRED

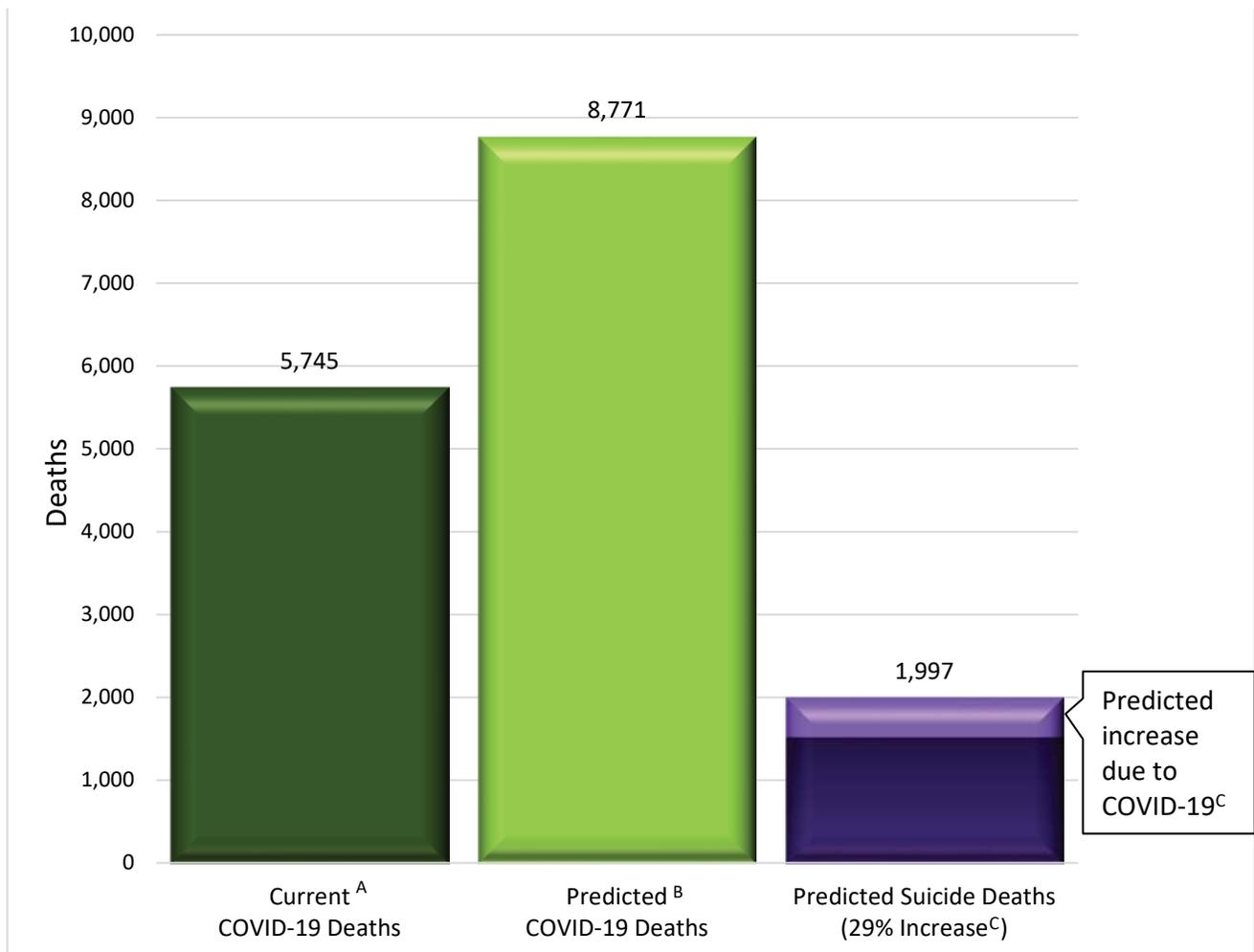
THE WASHINGTON POST

*“We don’t want a double tragedy. There are tragedies of people dying by this virus, every day. Our suicidal patients don’t have to die as well.”*

David Jobes, Ph.D., ABPP,  
International Expert in Suicidology<sup>9</sup>



## State of Michigan COVID-19<sup>A,B</sup> and Suicide<sup>C</sup> Deaths

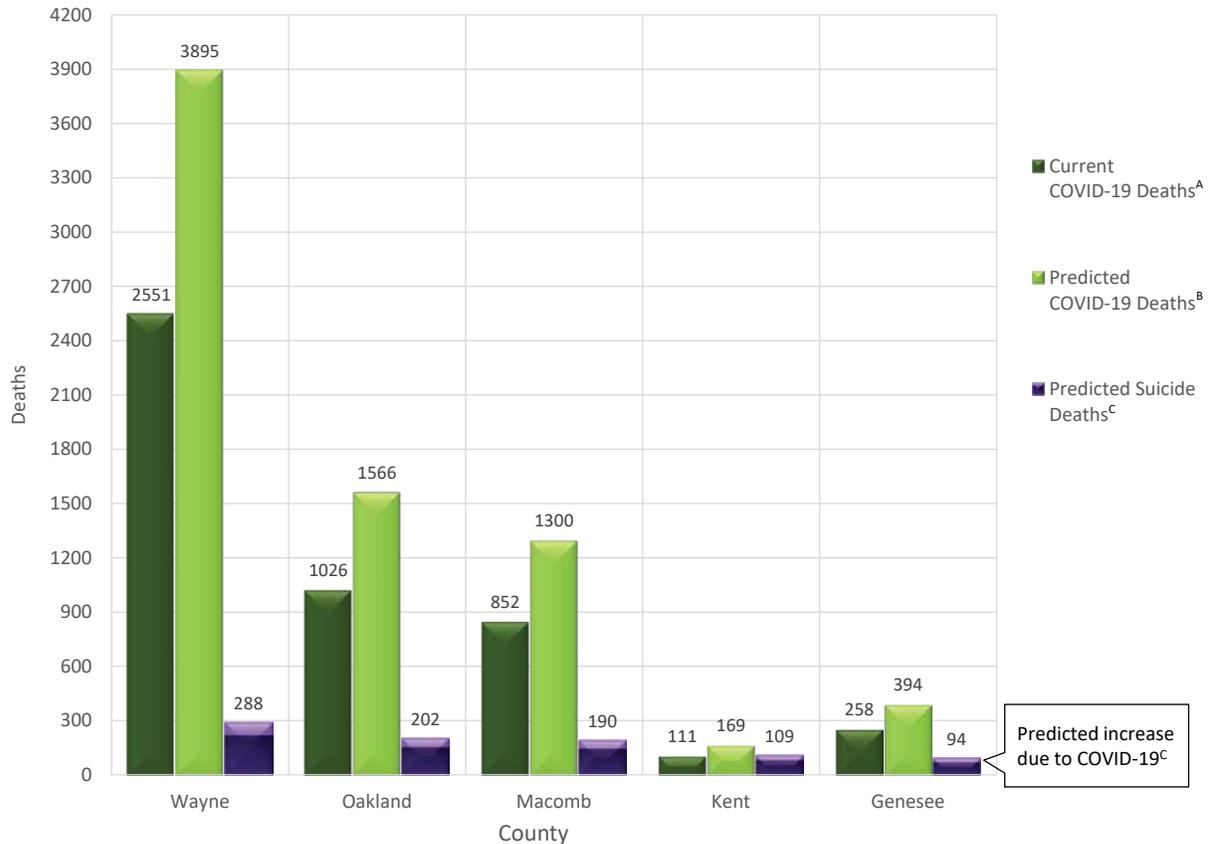


<sup>A</sup>COVID-19 deaths as reported on June 13, 2020

<sup>B</sup>Based on state-level predictions reported on June 13, 2020, by The Institute for Health Metrics and Evaluation at the University of Washington (<https://covid19.healthdata.org/united-states-of-america>)

<sup>C</sup>Prediction based on prior studies of unemployment and suicide rates (25% increase predicted<sup>2</sup>) and rise in Hong Kong suicide rates post-SARS epidemic that exceeded unemployment-based predictions by 4-32% (total increase of 14-42%<sup>32-34</sup>)

## COVID-19<sup>A,B</sup> and Suicide Deaths<sup>C</sup> for 5 Most-Populated Michigan Counties



<sup>A</sup>COVID-19 deaths as reported on June 13, 2020

<sup>B</sup>Based on state-level predictions reported on June 13, 2020, by The Institute for Health Metrics and Evaluation at the University of Washington (<https://covid19.healthdata.org/united-states-of-america>)

<sup>C</sup>Prediction based on April 2020 unemployment rates, prior studies of unemployment and suicide rates (1.3% increase per 1% rise in unemployment<sup>2</sup>), and studies of Hong Kong suicide rates post-SARS epidemic that found a >4% increase in suicide rates beyond unemployment-based predictions<sup>32-34</sup>

### Isolation/Quarantine

Michigan has done well in our social distancing efforts. In the long-run, this will save many lives that would otherwise be lost due to COVID-19. But along with social distancing comes isolation, which can lead to increased suicide risk. Living alone and felt loneliness are strong predictors of suicidal thoughts and suicide attempts.<sup>10-11</sup> “Stay Home, Stay Safe” also decreases individuals’ abilities to stay involved with their religious communities—yet weekly attendance of religious services has been associated with a five times lower risk of suicide.<sup>11</sup>

Beyond the increase in suicide risk, there are additional factors that should be considered in building a response to this crisis and its impact on mental health. Over 59,000 Michiganders have been diagnosed with COVID-19, resulting in strict quarantine and, at times, even putting themselves in complete isolation from family members. Quarantines increase depression, acute stress disorder, post-traumatic stress disorder (PTSD), anxiety, insomnia, and cognitive symptoms.<sup>12</sup> Those residents who have a pre-existing psychiatric illness are at an even higher risk of increased anxiety, depression, anger, and other mental health symptoms.<sup>12</sup>





## Increased Substance Use

Since the onset of the pandemic, Michigan alcohol sales have increased by 41% and marijuana sales have nearly doubled.<sup>13-14</sup> Due to isolation and restrictions on gatherings, many of the support groups that are critical for substance use disorder (SUD) recovery are limited, increasing the risk of relapse.<sup>15</sup>

In addition, those who witness others' increased use of substances are at a greater risk of also using substances to cope and, for those in recovery, this results in a greater risk of relapse.<sup>15</sup> Suicide data indicates that 17-24% of those who die are acutely intoxicated at the time of death,<sup>16</sup> and those who have alcohol dependence have a 7% lifetime risk of suicide death, higher than that for individuals diagnosed with bipolar disorder, depression, or psychotic disorders.<sup>17</sup>

Prior to the pandemic, the nation was already facing a growing SUD crisis. Research from previous economic downturns shows increases in the use of alcohol and other substances following unemployment.<sup>18</sup> In patients with existing substance use disorders, one study showed 58% of patients increasing their use when unemployed.<sup>18</sup> It will be essential to have programs and staff available to meet this growing need.

## Insomnia

Additionally, we know already that COVID-19 both directly and indirectly causes sleep impairment and insomnia. This could be due to the physiological effects of the disease or the increased anxiety and stress that comes from navigating the pandemic. Concerningly, insomnia has been shown to increase suicide risk two to four times for the general public, and 18 times for those with mental illness.<sup>19</sup>

## Lack of Community Gatekeepers

Studies show that primary care providers (PCPs) already prescribe 79% of antidepressant medications and see 60% of people being treated for depression in the United States.<sup>20</sup> We anticipate PCP teams will soon be inundated with a wave of new patients seeking relief for their symptoms of distress. In order to keep those teams capable of providing essential medical care, it will also be critical that there are systems in place for easy referrals to mental health specialists. Hospitals across the state are seeing substantial drops in visits to the emergency department and urgent care for non-COVID-19 issues, as well as primary care and behavioral health visits.<sup>21</sup> This may result in a delay in individuals seeking help for behavioral health concerns and a subsequent worsening of their symptoms.

## Physical Health Problems

In the U.S., approximately 19% of individuals who contract COVID-19 require hospitalization and 6% are admitted to the ICU.<sup>22</sup> This will likely have direct impacts on their mental health as patients who require ICU medical care and recover are at increased risk for mental health difficulties. The high prevalence rates of posttraumatic stress symptoms (19-39%), anxiety (23-62%), and depression (17-43%) following physical recovery is collectively termed Post-ICU Syndrome.<sup>23-24</sup> These rates are similar to those seen in survivors of acute respiratory distress syndrome (ARDS), an acute lung condition that occurs in up to 42% of patients who are hospitalized for COVID-19.<sup>22,24</sup>



In addition to the pulmonary symptoms, COVID-19 can affect the kidneys, blood vessels, gut, and brain.<sup>25</sup> The impacts on the heart appear to be particularly severe, with patients hospitalized for COVID-19 developing cardiac arrhythmia (17%) and experiencing acute cardiac injuries (7-20%) at concerning high rates.<sup>25-26</sup> Given the adverse pulmonary and cardiac outcomes for patients with severe cases of COVID-19, it is likely that survivors will have two to three times greater odds of suicide, as has been the case for other significant pulmonary and cardiac health conditions.<sup>27</sup> Because of the physiological similarities between SARS coronavirus (SARS-CoV) and COVID-19, survivors will likely experience similar lasting physical health concerns as survivors of SARS. We can, therefore, expect that some patients will have long-term effects from their illness, including cough, shortness of breath, chronic lung disease, and kidney disease, in addition to fatigue, insomnia, and impaired emotional and social functioning.<sup>28</sup> These physical ailments have a direct impact on mental health.

## Increased Access to Guns

Added to these risks is the recent increase in gun sales: an 85% increase in overall firearm sales and a 91% increase in handgun sales in March 2020 compared to March 2019.<sup>29</sup> Access to firearms in the home more than triples the odds of suicide<sup>30</sup> given that guns are the most common means of suicide in the United States and are drastically more fatal than most other means of suicide attempt.<sup>11,31</sup>

Many factors contribute to suicide among those with and without known mental health conditions.



Note: Persons who died by suicide may have had multiple circumstances. Data on mental health conditions and other factors are from coroner/medical examiner and law enforcement reports. It is possible that mental health conditions or other circumstances could have been present and not diagnosed, known, or reported.

SOURCE: CDC's National Violent Death Reporting System, data from 27 states participating in 2015.

In 2003, an epidemic of SARS coronavirus (SARS-CoV), a rapidly spreading and sometimes fatal respiratory disease, affected 26 countries. The after-effects of the epidemic have been well studied and offer clues about how COVID-19 is likely to affect the mental health of Michiganders and what might constitute an effective response.

### Implications for Mental Health

#### Highly-educated SARS survivors 1 year later

- 1/3 were unable to return to work full-time<sup>28</sup>
- 60% experienced fatigue, 50% had difficulty sleeping<sup>28</sup>
- Impaired emotional and social functioning<sup>28</sup>
- “Significant decrement in mental health” for 33%; 43% needed psychiatric care (avg. 13 visits/year)<sup>28</sup>

#### Suicide Rates in Hong Kong After SARS

- 14-42% increase in suicide rates (depending on the subpopulation) for 2 years after SARS<sup>32-34</sup>
- Suicide peak corresponded with infection peak<sup>32</sup>
  - Increased for older adults<sup>32</sup>
- Early phases of the SARS epidemic saw increases in persistent depression, anxiety, panic attacks, psychomotor agitation, psychotic symptoms, delirium, and suicidality<sup>33</sup>

### Interventions

#### What worked with SARS

- Multidisciplinary mental health teams supporting patients & healthcare workers<sup>33</sup>
- Specialized mental health services for COVID-19 patients with comorbid mental health disorders<sup>33</sup>
- Provision of psychological counseling via tele-technology for patients, families of patients, and general public<sup>33</sup>
- Regular screening for depression, anxiety, and suicidality by mental health workers for COVID-19 patients and health care professionals<sup>33</sup>

## Groups and Persons at Risk for Behavioral Health Problems

Any one of these factors impacting millions of people would create an influx of behavioral health needs, and currently most Americans are experiencing more than one factor. When it comes to mental illness, suicide, and substance use disorder, however, some populations are especially at risk.

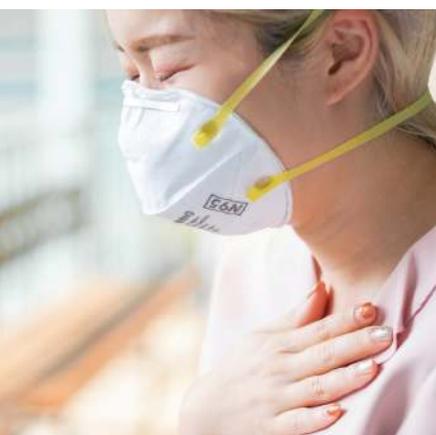
### Healthcare Providers

Healthcare providers are expressing increased concerns about infection and exposing their family members to the virus.<sup>11,35</sup> This can lead to a stricter type of isolation as providers attempt to prevent transmission to loved ones, thereby also cutting themselves off from their support systems. Evidence indicates that providers who have contracted the virus and are placed into quarantine will experience more severe depression, PTSD, anger, fear, guilt, helplessness, isolation, loneliness, nervousness, and worry than the similarly quarantined general public.<sup>12</sup>

In addition, there is the added stress of the life-and-death triaging of patients, determining who has the best chance of survival, and watching as friends and co-workers are infected and succumb to the virus, leaving these front-line workers experiencing grief, fear, and survivors' guilt.<sup>35</sup>

Even without these added factors, physicians are at a higher risk for suicide than those in many other careers, and they are three times more likely to die by suicide following a job-related stressor, such as

the COVID-19-related ones they are currently experiencing, than non-physicians.<sup>11,36</sup> Initial data from China for frontline COVID-19 healthcare responders shows a 34% increase in insomnia, 50% increase in depression, 45% increase in anxiety, and a 72% increase in psychological distress.<sup>35,37</sup>



Four weeks into the COVID-19 pandemic, some mental health providers in Michigan were already struggling with exhaustion and vicarious trauma. Therapists described the difficulty of working with a patient who contracts COVID-19 and suddenly “you’re in session with someone you have a relationship with, that you’ve worked with a couple years, that you may not see again.” Yet therapy requires focusing on the patient and supporting their processing of the emotions, fears, and logistical planning that comes with a life-threatening disease. “Afterwards, you have your own grief and loss that you have to process and deal with, but when you’re at home, with your family [due to teleworking], there is less space to process it,” stated one Michigan therapist. “You can’t discuss it with your family and you don’t have your colleagues right next door to consult and process with, so your own emotional processes can get pushed to the side and not dealt with. And then you have two or three sessions in a row like that.” Mental health clinicians are helping others manage anxiety around COVID-19 while managing their own, “that’s easier some days than others.”

Those who provide care in the mental health field are also at a higher risk of increased stress, burnout, and vicarious trauma, potentially further compromising our ability to respond as a state to a mental health crisis.<sup>38</sup>

## Surviving Caregivers

Based on data from surveys completed after the SARS epidemic, most caregivers are spouses of COVID-19 victims. This study showed that these surviving caregivers experienced significant decreases in their mental health and social functioning.<sup>28</sup>

## Older Adults

It is well-known that the COVID-19 virus has the most significant physical impact on adults over the age of 60, as they are the most vulnerable to complications and have the highest fatality rate.<sup>22</sup> Even prior to this pandemic, men in this age range had the highest rate of suicide,<sup>39</sup> and, for older adults especially, added medical illnesses increase the risk of suicide.<sup>11</sup>



## Children and Adolescents

Children are currently experiencing a multitude of suicide risk factors. They are isolated from positive external supports, are witnessing increasingly stressed, anxious, and angry family members, and may be experiencing a lack of parental engagement and monitoring as many families try to balance childcare, homeschooling, and their own work. Family conflict and low parental monitoring increases the risk of suicide for these children.<sup>40</sup> For teens, the impact of social distancing may be particularly difficult, and teens who are experiencing social isolation are two times more likely to attempt suicide.<sup>10</sup>



Children and adolescents are also at a higher risk of trauma as they may be isolated from positive external supports and witnessing increased anger and irritability erupt into fights, domestic violence, and child abuse within their home. A 1% increase in parental unemployment increases the risk of child abuse and neglect by 4.25%.<sup>41-42</sup> At the current rates of unemployment, this has the potential to increase child abuse and neglect instances in Michigan by 83%. Alarming, individuals who are victims of child abuse and neglect have three to five times greater odds of suicide than others.<sup>43</sup>

## LGBTQ Community

Members of the LGBTQ community, who already experience a five to six times greater risk of suicide, may be at a further elevated risk due to the COVID-19 crisis,<sup>44-45</sup> as many have been isolated from supportive communities, which have been proven to decrease depression, anxiety, and suicide risk.<sup>46-47</sup> For the roughly one-third of LGBTQ youth who are now in isolation with parents who do not exhibit support for the LGBTQ person, the risk of a suicide attempt is 8 times greater than the risk for other LGBTQ youth.<sup>48</sup>

## Those with Pre-Existing Mental Illness

Individuals who have depression, anxiety, interpersonal conflict, and/or felt loneliness often exhibit impaired immune functioning.<sup>49</sup> Those with preexisting mental health concerns may also be more likely to contract COVID-19, as those with mental health disorders are at increased risk of contracting pneumonia and other respiratory infections.<sup>50</sup>

Individuals living in residential or treatment settings are at a particularly elevated risk of contracting the disease due to the confined conditions present in those settings. If they do contract the virus, it can be more difficult for those who have severe mental illness to access treatment, due to factors such as cognitive impairment and/or discrimination against mental illness.<sup>50</sup>

Those with prior depression who contract the virus and survive have a three to four times greater risk of prolonged anxiety, depression, or PTSD compared to other survivors.<sup>50</sup> Even those who do not contract the virus will not be unscathed, as pandemic-related increases in worry and anxiety may worsen pre-existing depression, anxiety, and other mental health conditions.<sup>38,51</sup>

## Children and Adolescents with Autism Spectrum Disorder

Due to many providers cancelling or postponing non-life-saving procedures and treatments and the closures of schools and, with them, the special education and therapies provided there, 63% of children who are diagnosed with intellectual/developmental disabilities or autism spectrum disorder are not receiving key therapies.<sup>52</sup>

Surveyed parents and guardians report that 95% of these children have exhibited worsened behaviors due to ASD and 82% have worsened mental and emotional health.<sup>52</sup> As these behaviors and concerns worsen, parents/guardians feel the effects, with 97% stating that they feel more stressed or overwhelmed due to the disruption in services and 95% stating that their own mental health has worsened.<sup>52</sup>

## Those at Risk for Domestic Violence

Incidents of trauma are also expected to increase due to this crisis. Already, reports of domestic violence have doubled in some Michigan counties,<sup>53</sup> as people have fewer options of escape due to stay-at-home orders. Instances of domestic violence increase the risk of PTSD by six times compared to other types of trauma,<sup>54</sup> with 64% of victims developing symptoms.<sup>55</sup> Forty-eight percent of victims will experience depression, 19% will present with alcohol use disorder, and 9% will present with a different substance use disorder.<sup>55</sup>



Even more alarmingly, 18% of domestic violence victims will experience suicidal thoughts or behaviors or make a suicide attempt,<sup>55</sup> and children who witness domestic violence have a more than doubled odds of a later suicide attempt.<sup>43</sup>

## Michigan's Behavioral Health System Infrastructure: Already Stretched

A recent study entitled "Access to Behavioral Health Care in Michigan: Final Report" identified challenges in the Michigan mental health and substance abuse healthcare infrastructure.<sup>56</sup>

The report's key findings (pre-COVID-19) are as follows:

### Untreated Illness

- 1.76 million Michiganders experience mental illness, but only 62% receive treatment. The remaining 38% (approximately 666,000 people) do not receive needed mental health treatment.
- Most of the 638,000 Michiganders with substance use disorders remain untreated. A mere 20% receive treatment, leaving 80% (over half a million people) without substance use disorder treatment.
- Except for substance use disorders, anxiety and depressive disorders are the most prevalent mental health conditions amongst Michiganders. Unfortunately, they are also the least likely to receive needed treatment, particularly when symptoms remain mild or moderate in severity.

### Providers and Shortages

- Behavioral health care provider availability is extremely poor in the northern half of Michigan's lower peninsula. Seven counties in this region have no psychiatrist, psychologist, or substance use disorder treatment facility.
- Michigan's provider and treatment facility shortages are comparable to national averages; these resources are just not well distributed. Counties with the worst access have population to provider ratios that are three times greater than those of counties with the best access.

### Affordability and Awareness Barriers

- Many Michigan psychiatrists do not participate with any insurance plan, limiting access to care.
- In another recent survey, "Can't afford care" was the most-cited reason to defer treatment for mental illness or substance use disorder, along with "Didn't know where to go" and "Not enough insurance coverage."

These are just a few of the challenges in the Michigan Mental Health and Substance Use Disorder infrastructure.

### Other Challenges Are Well Known to the Michigan Community:

- Frequent Emergency Department "boarding" of patients experiencing psychiatric difficulties, waiting for an appropriate next-step treatment setting.
- Wait times for a psychiatric appointment can be months (except Psychiatric Urgent Care settings).



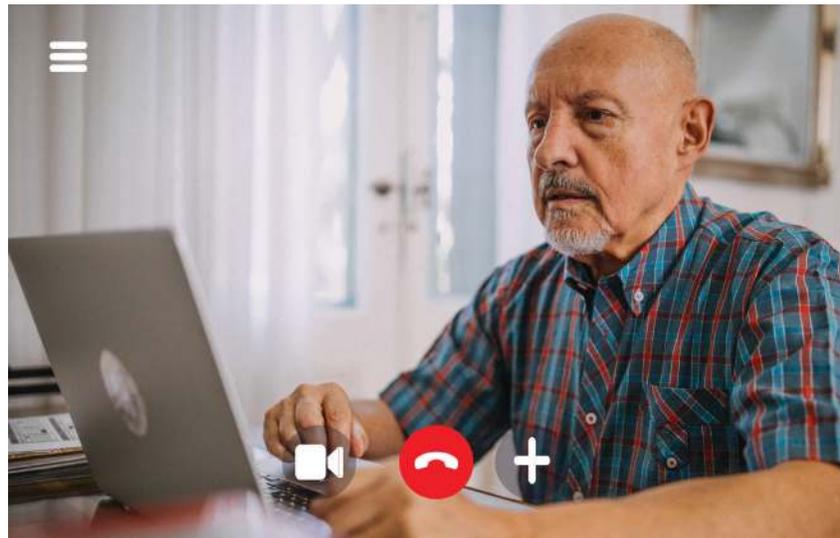
## Recommendations: Immediate Steps We Can Take in Michigan

Many of the challenges with Michigan's behavioral healthcare system are long term, beyond the scope of this report, and will require careful planning and systemic change. However, there are a number of actions that we can take as a state to immediately prepare for the "surge" of mental health needs that will be emerging in the coming months. These are but a few from a statewide behavioral health provider's point of view:

### Improve Access Through Awareness, Affordability, and Technology - 4 Interlocking Strategies

- 1. Continue to invest in telehealth resources.** In a time of social distancing, and because there are areas of Michigan that are underserved for behavioral health, teletherapy and telepsychiatry must be a key strategy to addressing the coming behavioral health demand. Many providers have already made the jump to virtual behavioral health services, and we applaud the rapid pivot of most payers in Michigan to reimburse for tele-behavioral health services and to waive copays and deductibles for these services. We should also take the following steps as a state:

- Encourage payers to continue to reimburse providers for tele-behavioral health through at least June of 2021, given that high-risk Michiganders will likely be social distancing for an extended period of time, and many are not in an area where providers are conveniently located.
- Support the expansion of provider capability through grants from public and private foundation sources. (The Michigan Health Endowment fund with four other partners recently awarded almost \$3 million in grants to behavioral health organizations in Michigan.)
- Communicate broadly the tele-behavioral health options currently available in Michigan (see below).



- 2. Dramatically increase public awareness of the availability of services and the importance of seeking these services now before mental health and substance use disorder issues escalate.** The usual institutions where behavioral health concerns are detected and referrals are made—primary care offices, schools and universities, community health centers, emergency departments, and houses of worship—are either closed or not functioning at their usual capacity. Consequently, treatment for mental illness and substance disorders are being deferred and serious concerns are not being detected at the same time that stressors leading to suicide and mental illness/SUD are increasing dramatically.

  - Initiate statewide communication from the highest levels, urging people to reach out now for behavioral health assistance, noting the availability of tele-behavioral health services.

- 3. Match behavioral health capacity with need statewide.** In recent weeks the Michigan Department of Health and Human Services has utilized a “COVID-19 Relief Healthcare Facility” infrastructure to implement a Statewide Load Balancing Plan, helping hospitals at maximum surge identify acute care hospitals with capacity. As behavioral health needs expand dramatically in the coming weeks and months, the same Relief Healthcare Facility infrastructure could be temporarily expanded to match behavioral health capacity with need. Michigan should also take the following steps:
- Immediately expand EMResource as an emergency statewide psychiatric hospital “bed board,” identifying day-to-day capacity for inpatient and partial hospitalization psychiatric care.
  - Create a statewide clearing house for real-time availability in outpatient teletherapy and telepsychiatry openings (perhaps also using EMResource) for healthcare providers. Prioritize the statewide expansion of the OpenBed application used by LARA to promote access to substance use disorder resources and currently being considered as a potential statewide behavioral health resource tool. This would be readily available to all types of providers seeking a range of behavioral health services.
  - Build a consumer-friendly clearing house for these resources, particularly outpatient services, widely publicized and available to United Way, the National Suicide Hotline, and the recently developed Mental Health “warmline” in Michigan.
  - Offer grants to help providers start up 365/24/7 call centers that can immediately link referring providers and consumers to behavioral health resources.
- 4. Waive behavioral health co-pays and deductibles for the short term.** Studies have shown that the primary reported barrier to behavioral health services is perceived affordability. We applaud the work of many Michigan insurance companies who have waived copays and deductibles for tele-behavioral health during this crisis. We recommend that these waivers be expanded to include face-to-face treatment when that resumes in Michigan, and that they continue through June of 2021. This is a similar practice to those promoting access in other areas of Primary Care.

## Workforce Development

In order to meet the upcoming behavioral health needs, we will need to improve and increase access to psychiatry and clinical therapists. This will require recruiting and training entry-level and professional staff, and ensuring they are able to treat those who are experiencing trauma, loss, substance use disorder, and suicidal ideation. The problem of the shortage of behavioral health providers is a longer-term problem and beyond the scope of this document. But there are some steps that could be taken immediately to address this issue.

### Retraining Existing Providers

Due to a low percentage of graduate training programs in counseling, marriage and family therapy, social work, and psychology providing formal training in suicide, a majority of mental health clinicians lack confidence and competence in providing effective treatment for suicidality. Fortunately, training in evidence-based suicide prevention is available that can equip clinicians to assess suicide risk, collaborate with patients in safety planning, reduce risk by working with patients to reduce access to lethal means, and intervene using psychotherapy modalities and frameworks proven to reduce suicide attempts and

deaths. Some of these evidence-based treatment models include the Columbia Suicide Severity Scale (C-SSRS), used to assess suicide risk,<sup>57-59</sup> and the Collaborative Assessment and Management of Suicidality (CAMS), an effective framework that clinicians and prescribers can utilize to assess, treat, and manage suicide risk.<sup>60</sup> In addition, some widely used treatment modalities have adjusted their content to focus on suicidal risk, such as Cognitive Behavioral Therapy for Suicide Prevention (CBT-SP), which uses a relapse prevention approach to reduce risk.<sup>61-62</sup> Finally, Dialectical Behavior Therapy (DBT) is the most well-validated and intensive treatment for suicide prevention, as it is designed for individuals with chronic suicidal thoughts, behaviors, and attempts and can reduce suicide attempts by two-thirds.<sup>63-64</sup>

On a systemic level, the SAMHSA-recommended **Zero Suicide** framework of evidence-based practices and quality improvement equips healthcare systems to incorporate all of these elements, as well as other effective practices and procedures, and has reduced suicide rates by 64-75% in systems where it has been implemented.<sup>65</sup>

## Entry-level Recruitment and Training

Prior to the COVID-19 crisis, there was a shortage of candidates to fill vital psychiatric and nurse technician roles. The employment pool of newly displaced workers could be a valuable source of applicants for these jobs, allowing the expansion of access for behavioral health patients. These workers, with investment in recruitment and new skills training, could quickly start providing frontline care to meet the community need.

From the first point of contact, it is imperative that behavioral health employees, including non-clinicians, know how to recognize and assess for suicide risk. There are a limited number of research-informed trainings for these employees, including Question, Persuade, Refer (QPR); Applied Suicide Intervention Skills Training (ASIST); and Assessing and Managing Suicide Risk (AMSR) for direct care staff. Although the cost of these trainings for a single employee is nominal, it can quickly add up for mental health care organizations and is not easily absorbed. Yet studies show that this investment can significantly increase the ability of entry-level staff to recognize suicide warning signs, assess suicide risk, engage at-risk individuals in treatment, and produce hope and decreased suicidality in individuals receiving care.<sup>66-68</sup> If this training can be provided at-scale, mental health organizations could help reduce the ranks of unemployed Michigan residents by hiring displaced workers who can be quickly trained in these interventions and equipped to meet the growing mental health needs.

## Fixing Gaps in Critical Behavioral Health Infrastructure

### Intensive Care Rate for COVID-positive/High Acuity Psychiatric Inpatient Settings

Michigan has a serious problem with the boarding of psychiatric patients in Emergency Departments. High acuity individuals (both psychiatric acuity, and psychiatric patients who are COVID-positive) are particularly difficult to place because psychiatric hospitals are not equipped with the extra staff and facilities to provide safe and effective care for patients with a highly infectious disease.

*A Psychiatric Intensive Care enhanced per diem rate would dramatically improve access to appropriate care for these difficult-to-place populations and would immediately ease the burden on Emergency Departments in Acute Care Hospitals.*

## Zero Suicide Implementation Throughout Michigan

When adopted by healthcare providers, the Zero Suicide programs and protocols have been shown to dramatically reduce the rate of death by suicide.<sup>65</sup> Working with funding from SAMHSA, health systems that are willing and able to fully implement Zero Suicide protocols within six months should be awarded grants to do so.

## Health Reimbursement Arrangement (HRA) Funding

In terms of distributing additional dollars to psych hospitals, the State of Michigan has already developed an efficient mechanism for allocating dollars from the Psych Pool for the HRA Program. This well-developed mechanism allocates dollars from the pool based on Medicaid utilization. In response to the COVID crisis, it would make sense to tap into this established procedure that has already worked out all the mechanics for delivering precious additional funds for psychiatric hospitals. The MHA has worked diligently to ensure accuracy and fairness in this process. Rewarding psychiatric facilities that deliver services to the Medicaid population seems a reasonable proxy for psychiatric facilities who are stepping up to deliver care in the midst of the COVID crisis. A consideration might be to exclude facilities if there is evidence that they have not embraced the COVID challenge.

## Additional Services

Treatment will also need to expand to provide additional services such as case management, care coordination with external providers, group treatment, psychoeducational classes, support groups, and a transition clinic so that those moving from one level of care to another have a seamless experience. With the influx of individuals seeking treatment, using these alternative methods of care will allow for relationships and connections beyond a scheduled appointment with a therapist or psychiatrist. In order to provide these services, the reimbursement system would need to provide coverage for these encounters.

### ***Increased Support Groups***

- For people quarantined at home
- For caregivers
- For healthcare providers and mental health clinicians
- Family support for LGBTQ individuals



## Conclusion

Just as we took steps to reduce the impact of COVID-19 on the physical health of Michiganders, we must also take steps to reduce the impact of this disease on their mental health. We must improve access to care through awareness, must make that care affordable, and we must make sure people can receive that care, regardless of their geographical location within the state. We must also move quickly to train and develop our workforce and to reduce the gaps in our current infrastructure. Together, we can impact the second wave of this virus. Together we must act, and we must act now.

## Appendix - Summary of Relevant Behavioral Health Research

Factor	Impact of COVID-19	Implications for Mental Health
<b>COVID-19: Direct and Indirect Effects</b>		
COVID-19	<ul style="list-style-type: none"> <li>• Study of 1,200 individuals in China:               <ul style="list-style-type: none"> <li>• 54% reported moderate or severe psychological impact of outbreak; 29% reported moderate to severe anxiety symptoms<sup>69</sup></li> </ul> </li> <li>• Those who were hospitalized with COVID-19 have higher rates of delirium that can lead to long-term memory deficits; it is suspected that COVID-19 directly damages the brain.<sup>70</sup></li> <li>• Those who survive Acute Respiratory Distress Syndrome (ARDS; develops in 20-42% of those hospitalized for COVID-19<sup>22</sup>) often have prolonged (3 years) and substantial symptoms of anxiety (38%), depression (32%), and PTSD (23%).<sup>51</sup></li> <li>• Medical illnesses are associated with increased suicide risk, especially for older adults.<sup>11</sup></li> <li>• Other lung disorders (e.g. COPD) are associated with a 3 times greater risk of suicide.<sup>27</sup></li> </ul>	
Lessons from SARS	<ul style="list-style-type: none"> <li>• COVID-19 is too new to know long-term effects, but we can use SARS to estimate impacts.</li> </ul> <p>Similarities:</p> <ul style="list-style-type: none"> <li>• Respiratory illness caused by coronavirus<sup>71</sup></li> <li>• Spread by respiratory droplets or contact with contaminated objects<sup>71</sup></li> <li>• Can lead to serious illness and require mechanical ventilation<sup>71</sup></li> <li>• Similar at-risk groups (older adults, those with co-morbid medical conditions)<sup>71</sup></li> <li>• No specific treatments or vaccines<sup>71</sup></li> </ul> <p>Differences:</p> <ul style="list-style-type: none"> <li>• SARS has a higher case fatality rate (10% vs 4% for COVID-19)<sup>22,71</sup> and ventilation rates (20-30% vs 3.2% for COVID-19)<sup>22,72</sup></li> <li>• COVID-19 is more infectious and can be spread when individuals are asymptomatic, resulting in more infections and deaths<sup>22</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Early phases of the SARS saw increases in persistent depression, anxiety, panic attacks, psychomotor agitation, psychotic symptoms, delirium, and suicidality.<sup>33</sup></li> </ul> <p>Highly-educated SARS survivors 1 year later:</p> <ul style="list-style-type: none"> <li>• 1/3 were unable to return to work full-time<sup>28</sup></li> <li>• 60% experienced fatigue, 50% had difficulty sleeping<sup>28</sup></li> <li>• Impaired emotional and social functioning<sup>28</sup></li> <li>• “Significant decrement in mental health” for 33% &amp; 43% needed psychiatric care (avg. 13 visits/year)<sup>28</sup></li> </ul> <p>Suicide Rates in Hong Kong After SARS</p> <ul style="list-style-type: none"> <li>• 14-42% increase in suicide rates for 2 years after SARS<sup>32-34</sup></li> <li>• Suicide peak corresponded with infection peak<sup>32</sup></li> <li>• 41% increase in suicide rates for older adults<sup>32</sup></li> </ul> <p>Interventions that mitigated SARS impact:</p> <ul style="list-style-type: none"> <li>• Multidisciplinary mental health teams supporting patients &amp; healthcare workers<sup>33</sup></li> <li>• Specialized mental health services for COVID-19 patients with comorbid mental health disorders<sup>33</sup></li> <li>• Provision of psychological counseling via tele technology for patients, families of patients, and general public<sup>33</sup></li> <li>• Regular screening for depression, anxiety, and suicidality by mental health workers for COVID-19 patients and health care professionals<sup>33</sup></li> </ul>

Factor	Impact of COVID-19	Implications for Mental Health
Social Isolation (social distancing)	<ul style="list-style-type: none"> <li>Michigan has been particularly good at social distancing (likely saving many lives), and was in the top 4 states for social distancing by mid-April, with a 40-55% reduction in average mobility;<sup>73</sup> unfortunately, this also resulted in more social isolation.</li> <li>Churches, Synagogues, Mosques, etc. have been closed or are only accessible online</li> </ul>	<ul style="list-style-type: none"> <li>Living alone and felt loneliness both strongly predict increases suicidal thoughts and suicide attempts<sup>10-11</sup></li> <li>Prison studies show social isolation increases suicide attempts even when social isolation is forced/mandated<sup>10</sup></li> <li>Weekly attendance of religious services decreases suicide risk 5-fold<sup>11</sup></li> </ul>
Quarantine	<ul style="list-style-type: none"> <li>At least 2,038,344 Americans, 59,621 Michigan residents, 4,054 Kent County residents, 721 Muskegon County residents, and 857 Ottawa County residents have been diagnosed with COVID-19, resulting in quarantine and, often, the self-quarantine of their family members.<sup>1, 74-75</sup></li> <li>In Michigan, at least 815,374 individuals have been tested for COVID-19, often indicating presence of COVID-19 symptoms/high-risk exposure and concurrent self-quarantine.<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>Quarantines increased acute stress disorders/PTSD, anxiety, irritability, insomnia, cognitive symptoms, &amp; depression.<sup>12</sup></li> <li>Among those who were previously quarantined<sup>12</sup>: <ul style="list-style-type: none"> <li>Low mood/depression (73%)<sup>12</sup></li> <li>Irritability (57%)<sup>12</sup></li> <li>Increased risk of PTSD 3 years later<sup>12</sup></li> <li>Even higher risk of anxiety and anger for those with a history of psychiatric illness<sup>12</sup></li> </ul> </li> <li>A telephone support line, staffed by psych nurses, decreased the impact of quarantine.<sup>12</sup></li> <li>Support groups for people quarantined at home can help reduce psychological impact.<sup>12</sup></li> </ul>
Financial Stress/ Problems	<ul style="list-style-type: none"> <li>US unemployment rate rose to 14.7% in April (compared to 3.5-3.6 in Jan. &amp; Feb.)<sup>76</sup> <ul style="list-style-type: none"> <li>1 in 7 Americans are now out of work.<sup>76</sup></li> <li>Between the March 13 and May 2, 2020, &gt;33 million Americans filed for unemployment,<sup>77</sup> including 1.25 million Michigan residents.<sup>77</sup></li> <li>At 23% unemployment, Michigan had the 2<sup>nd</sup> highest unemployment rate in April 2020; this constitutes a 19.4 percentage point rise since February 2020.<sup>4</sup></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Financial stress is associated with worse academic performance.<sup>78</sup></li> <li>Debt increased risk of:<sup>79</sup> <ul style="list-style-type: none"> <li>Suicide death (8x)</li> <li>Alcohol or Drug Dependence (9x)</li> <li>Mental disorders (3x)</li> <li>Depression (3x)</li> <li>Psychotic disorder (4x)</li> </ul> </li> <li>Economic downturns predict higher suicide rates.<sup>2,11</sup> (See Suicide Section)</li> </ul>
Caregivers	<ul style="list-style-type: none"> <li>Based on SARS data, most of the caregivers were the patients' spouses.<sup>28</sup></li> </ul>	<ul style="list-style-type: none"> <li>Significant decreases/impairment in caregivers' mental health and social functioning<sup>28</sup></li> </ul>

Factor	Impact of COVID-19	Implications for Mental Health
<b>Suicide: Predicted to increase by 15-32% by the peak of the pandemic and last 2 years (7,252 to 15,470 MORE US lives lost to suicide annually)</b>		
Suicide Risk	<p>Since COVID-19 pandemic began, there has been an increase in calls to suicide crisis hotlines:</p> <ul style="list-style-type: none"> <li>• Colorado calls to National Suicide Prevention Lifeline increased 47% in March '20 (compared to March '19), with 20-30 extra calls/day and lasting 2-4 min. longer than usual.<sup>6</sup></li> <li>• Didi Hirsch Mental Health Services in LA received 1,800 crisis calls in March, vs. 20 in February.<sup>80</sup></li> <li>• Some crisis lines are seeing a 300% increase in calls.<sup>7</sup></li> <li>• Early phases of the SARS saw increases in suicidality.<sup>33</sup></li> <li>• Hong Kong had a 14-42% increase in suicide rates for 2 years after SARS.<sup>32-34</sup> <ul style="list-style-type: none"> <li>• Economic factors (unemployment and GDP) improved relatively quickly; the reduction in suicide rate to the pre-SARS level was much slower.<sup>32</sup></li> <li>• If this occurs with COVID-19, this would result in an increase of 6,768-20,304 suicides nationwide and 217-650 in Michigan (in addition to 48,344 U.S. suicides and 1,548 Michigan suicides annually).<sup>81</sup></li> </ul> </li> <li>• Suicide rate peak corresponded to SARS infection peak.<sup>32</sup> <ul style="list-style-type: none"> <li>• Particularly increased rate for older adults (who are more vulnerable to COVID-19 and SARS)<sup>32</sup></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Amongst those who died by suicide, 16% had experienced a job loss or financial problem, 22% a physical health problem, 29% a crisis in the past or upcoming 2 weeks,<sup>5</sup> all of which increased with COVID-19.</li> </ul> <p>Economic downturns are associated higher rates of suicide,<sup>11</sup> with suicide rates increasing 1.3% for every percentage point increase in unemployment rate.<sup>2</sup></p> <ul style="list-style-type: none"> <li>• April unemployment data predicts a 25% increase in the Michigan suicide rate and a 15% rise in the US suicide rate.<sup>2,4</sup></li> <li>• This would result in 7,252 more suicides nationwide and 387 in Michigan (in addition to 48,344 U.S. suicides and 1,548 Michigan suicides annually).<sup>81</sup></li> </ul> <p>Zero Suicide: A framework of evidence-based practices/treatments for suicide prevention that has reduced suicide rates by 64-75% in systems where it was implemented.<sup>65</sup> It includes some interventions that are feasible with social distancing:</p> <ul style="list-style-type: none"> <li>• Outreach to at-risk individuals via phone, letters, texting, and/or emails (Reduced suicides &amp; suicide attempts by &gt;50%<sup>82-83</sup>)</li> <li>• Safety Plan Intervention: Reduced suicide attempts by 45-76% when used with at-risk individuals<sup>84-85</sup></li> </ul>

Factor	Impact of COVID-19	Implications for Mental Health
Community Gatekeepers	<ul style="list-style-type: none"> <li>• PCPs offices are closed/have reduced hours.</li> <li>• (Anecdotally) PCPs report increased behavioral health calls; this will likely increase following the pandemic.</li> <li>• Hospitals across Michigan are seeing substantial drops in ED and Urgent Care visits for non-COVID-19-related reasons. Outpatient healthcare visits have decreased by approximately 50% during the pandemic, indicating delayed help-seeking by individuals needing behavioral health intervention.<sup>21</sup></li> <li>• Schools, places of worship, etc. are closed or online only.</li> </ul>	<ul style="list-style-type: none"> <li>• 66% of those who die by suicide saw their PCP within a month of death (but we have lost valuable screening and intervention by these community gatekeepers).<sup>83</sup></li> <li>• When the pandemic has passed, the gatekeepers are likely to be overwhelmed by patients with behavioral health symptoms.</li> </ul>
Insomnia	<p>There are numerous indicators that COVID-19 directly and indirectly causes sleep impairment/insomnia (e.g., anxiety, studies of quarantines, COVID-19 healthcare workers, SARS effects).</p>	<ul style="list-style-type: none"> <li>• Insomnia increases suicide risk 2-4 times in the general population and 18 times amongst those with mental illness.<sup>19</sup></li> </ul>
Gun Sales	<ul style="list-style-type: none"> <li>• Many 1<sup>st</sup> time buyers when pandemic started in region<sup>84</sup></li> <li>• 3.7 million background checks in March<sup>29</sup> <ul style="list-style-type: none"> <li>• Highest month since FBI began tracking in 1998 and approx. 1 million more than March 2019<sup>29</sup></li> </ul> </li> <li>• 2.5 million firearm sales (March 2020)<sup>91</sup></li> <li>• 85% increase from prior year, 91% increase in handgun sales<sup>91</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Access to firearms increases odds of suicide by more than 3 times.<sup>30</sup></li> <li>• Guns are the most common means of suicide in the US.<sup>11</sup></li> <li>• Gun ownership, access, and unsafe storage are all associated with increased risk of suicide.<sup>11</sup></li> <li>• 90% of suicide attempts are non-fatal and 80-95% of survivors don't die by suicide, but 90% of suicide attempts involving guns are fatal.<sup>31</sup></li> </ul>
<b>Special Populations</b>		
Older Adults	<ul style="list-style-type: none"> <li>• Age group that is most vulnerable to COVID-19 and has highest case fatality rate<sup>22</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Highest rate of suicide (particularly for men)<sup>39</sup></li> </ul>
LGBTQ Individuals	<ul style="list-style-type: none"> <li>• Decreased connection to LGBTQ community due to social distancing</li> <li>• LGBTQ youth are quarantined/homebound with their parents, who vary in supportiveness.<sup>85</sup></li> <li>• 1/3 of LGBTQ youth report parental acceptance, 1/3 parental rejection<sup>85</sup></li> </ul>	<ul style="list-style-type: none"> <li>• LGBTQ suicide rate is 5-6 times the general population<sup>44-45</sup></li> <li>• Connection/access to LGBTQ community decreases depression, anxiety, and suicide risk.<sup>46-47</sup></li> <li>• Those reporting high parental rejection are 6x more likely to report severe depression, 8x more likely to attempt suicide.<sup>48</sup></li> </ul>
Mental Healthcare Workers	<ul style="list-style-type: none"> <li>• At risk of increased stress/burnout &amp; vicarious trauma<sup>38</sup></li> <li>• At increased risk of contracting COVID-19 in some settings (e.g., residential, inpatient)<sup>38</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Will need increased support and “child and elder care should be made available for mental health clinicians working extra shifts”<sup>38</sup></li> </ul>

Factor	Impact of COVID-19	Implications for Mental Health
Healthcare Providers	<ul style="list-style-type: none"> <li>Increasing rates of health care workers' "concerns about infection, exposure of family members, sick colleagues, shortages of necessary personal protective equipment, overwhelmed facilities, and work stress"<sup>11</sup></li> <li>Outpatient physicians and healthcare providers are often not working, taking cuts to productivity, being furloughed, or taking pay cuts</li> <li>Sources of distress for healthcare workers treating COVID-19 include: felt vulnerability &amp; loss of control, concerns about health, spread of virus, health of family and others, changes in work, and isolation.<sup>35</sup></li> <li>Increased risk of moral injury/distress during COVID-19 for a variety of reasons: life/death triaging, resource allocation, witnessing "unfair acts or policies," impact of job on their family, survivor's guilt, development of COVID-19 in family or friend, or belief they may have exposed another<sup>87</sup></li> <li>Moral injury increases guilt, shame, anger, difficulty sleeping, compulsive behaviors, shame, and isolation.<sup>87</sup></li> <li>Increased "job-related issues," such as changes to practice that reduce patient appointments (impacting job performance, productivity expectations, sometimes pay), fear of job/career loss, lack of sufficient PPE, burnout, and stress</li> </ul>	<ul style="list-style-type: none"> <li>Physicians already have elevated rates of suicide.<sup>11</sup> <ul style="list-style-type: none"> <li>Increased with job-related issues (3x more likely to suicide after job-related issue than non-physicians)<sup>36</sup></li> <li>Job-related issues include increased pressure, feared layoff, lack of control over working conditions, and role conflicts<sup>36</sup> (which are all increasing with COVID-19)</li> </ul> </li> <li>Quarantined healthcare workers had more severe depression, PTSD symptoms, anger, fear, guilt, helplessness, isolation/loneliness, nervousness, sadness, and worry than general public who were quarantined.<sup>12</sup> <ul style="list-style-type: none"> <li>Reported greater stigmatization and had more avoidance behaviors afterwards<sup>12</sup></li> </ul> </li> <li>Healthcare workers in China treating COVID-19 experienced: <ul style="list-style-type: none"> <li>Insomnia (34%)<sup>37</sup></li> <li>Depression (50%)<sup>35</sup></li> <li>Anxiety (45%)<sup>35</sup></li> <li>Psychological Distress (72%)<sup>35</sup></li> <li>Even higher rates for <i>nurses</i> (compared to physicians), <i>frontline workers</i>, and those in <i>areas with higher COVID-19 rates</i><sup>35</sup></li> </ul> </li> <li>During SARS outbreak, healthcare providers reported depression, anxiety, fear, frustration, &amp; PTSD, particularly if they worked on SARS units, were quarantined, or had friends/family who were infected.<sup>33</sup></li> </ul>

Factor	Impact of COVID-19	Implications for Mental Health
Those with Current or Prior Mental Health Conditions	<ul style="list-style-type: none"> <li>• Could have dual stigma (COVID-19 and mental illness)<sup>38</sup></li> <li>• May be at increased risk of contracting COVID-19, based on data from China<sup>1</sup> and the following: <ul style="list-style-type: none"> <li>• Mental health disorders increase risk of pneumonia and other infections.<sup>49</sup></li> <li>• Cognitive impairments may decrease awareness of risk.<sup>50</sup></li> <li>• Confined conditions in inpatient &amp; residential settings<sup>50</sup></li> <li>• Those with depression, anxiety, interpersonal conflict, and loneliness exhibit impaired immune functioning.<sup>49</sup></li> </ul> </li> <li>• May face more barriers to treatment due to mental illness discrimination &amp; mental health symptoms may complicate care<sup>49-50</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Associated with more psychological distress after various types of disaster-related trauma<sup>12</sup></li> <li>• Those with prior depression who survived ARDS had a 3-4 times greater risk of prolonged anxiety, depression, and/or PTSD.<sup>51</sup></li> <li>• Interventions, such as support groups, cognitive-behavioral stress management, and narrative interventions for trauma, can improve immune system functioning.<sup>49</sup></li> <li>• Worry/anxiety may worsen pre-existing depression, anxiety, and other mental health conditions.<sup>38,50</sup></li> <li>• Nationwide quarantines pose barriers to ongoing mental health treatment.<sup>50</sup></li> </ul>

**Substance Use Disorders (SUDs)—Predicted increase in incidence of SUDs and relapses**

Alcohol & Marijuana Use	<ul style="list-style-type: none"> <li>• Alcohol sales were up 24-95% depending on type (36% increase in beer sales in MI) in March 2020 compared to prior year.<sup>13</sup></li> <li>• MI Marijuana sales were up 41% in March 2020 from February and were more than double January 2020 sales.<sup>14</sup></li> <li>• Individuals who smoke, vape, use opioids, have used meth, or have a SUD are more vulnerable to COVID-19 and the most serious consequences of COVID-19.<sup>15</sup></li> <li>• Risk of being deprioritized if they have COVID-19 due to stigma<sup>15</sup></li> <li>• COVID-19 barriers to SUD treatment, including detox, medically-assisted treatment, residential, and IOP<sup>15</sup></li> </ul>	<ul style="list-style-type: none"> <li>• 17-24% who die by suicide are acutely intoxicated at time of death.<sup>16</sup></li> <li>• Alcohol dependence lifetime suicide risk: 7% (higher than for bipolar, depression, psychosis, etc.)<sup>17</sup></li> <li>• 25-32% of suicide victims with known mental illnesses had SUD.<sup>88</sup></li> <li>• Groups critical for recovery (peer support, AA/NA) are limited by social distancing, increasing risk of relapse.<sup>15</sup></li> <li>• Increased risk of substance use to cope<sup>15</sup></li> <li>• Relapse risk with others' increased use<sup>15</sup></li> <li>• Financial, housing, and legal difficulties<sup>15</sup> in the SUD population decreases access to technology needed for telehealth.</li> <li>• Pine Rest sub-acute detox program reports increased re-admissions.</li> </ul>
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Factor	Impact of COVID-19	Implications for Mental Health
<b>Children &amp; Adolescents</b>		
COVID-19 & Children/ Adolescents	<ul style="list-style-type: none"> <li>• Parental unemployment and financial stress are increasing.<sup>4</sup></li> <li>• Many children are separated from positive external family members (e.g., grandparents), teachers, and other supportive adults who may be protective against mental health symptoms.</li> <li>• Parents are likely experiencing more anxiety/irritability due to juggling work at home/exposure anxiety (if essential workers)/possible change in childcare/homeschooling and parenting</li> <li>• Working remotely may lead to some decreased emotional engagement/monitoring within the home.</li> <li>• Loss of involvement in school activities</li> </ul>	<ul style="list-style-type: none"> <li>• Quarantine children have 4x higher post-traumatic stress scores;<sup>12</sup> 30% met criteria for PTSD.<sup>89</sup></li> <li>• Children separated from caregivers due to COVID-19 may be more susceptible to mental health problems.<sup>89</sup></li> <li>• Family conflict and low parental monitoring increases kids' risk of suicide.<sup>40</sup></li> <li>• Teens experiencing social isolation are 2x more likely to attempt suicide attempts.<sup>10</sup></li> <li>• Involvement in school activities is protective against suicide.<sup>90-91</sup></li> <li>• A 1 percentage point increase in parental unemployment predicts a 4.25% increase in child abuse and neglect.<sup>41-42</sup> <ul style="list-style-type: none"> <li>• This predicts a 82% rise in child abuse and neglect in Michigan.<sup>4</sup></li> </ul> </li> </ul>
Children with Autism Spectrum Disorder (ASD) or other Special Needs	<ul style="list-style-type: none"> <li>• School closures and social distancing is preventing many of these children from accessing services and professionals they need to progress, learn, and maintain gains (7 million US children receive special education services).<sup>92</sup></li> <li>• Individuals with ASD often struggle to adjust to changes in environment and schedule.<sup>93</sup></li> </ul>	<p>Recent survey of parents/guardians of children/adolescents with ASD:</p> <ul style="list-style-type: none"> <li>• 63% of kids with ASD are missing key therapies.<sup>52</sup> <ul style="list-style-type: none"> <li>• Only 35% are receiving remote services or therapies.<sup>52</sup></li> </ul> </li> <li>• 58% do not “moderately” understand information about COVID-19, 95% have worsened ASD behavior, 82% have worsened mental/emotional health<sup>52</sup></li> <li>• 97% of parents/guardians feel stressed/overwhelmed due to disruption in ASD services; 95% report their own mental health has worsened.<sup>52</sup></li> </ul>
<b>Trauma</b>		
Domestic Violence (DV)	<p>DV rates have increased worldwide (stay-home orders, increased stress, decreased options for escape/safety, etc.), with rates tripling in some areas.<sup>94</sup></p> <ul style="list-style-type: none"> <li>• DV calls to Michigan law enforcement has increased 17-200% across the state.<sup>53</sup></li> <li>• 66% increase in DV-related requests for emergency shelter in Ottawa County<sup>95</sup></li> <li>• Kent County Prosecutor's Office reported a 48% increase in DV cases within the first 2 weeks of the pandemic.<sup>96</sup></li> </ul>	<ul style="list-style-type: none"> <li>• DV increases risk of PTSD 6 times compared to other types of trauma.<sup>54</sup></li> <li>• 64% of DV victims develop PTSD, 48% depression, 18% suicidality, 19% alcohol use disorder, 9% other SUDs<sup>55</sup></li> <li>• Some European countries are using code words at pharmacies to help victims get help, but this is not implemented in the US.<sup>97</sup></li> </ul>

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