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## MEETING THE MENTAL HEALTH NEEDS OF MICHIGAN YOUTH WITH SCHOOL-BASED HEALTH SERVICES

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# MEETING THE MENTAL HEALTH NEEDS OF MICHIGAN YOUTH WITH SCHOOL-BASED HEALTH SERVICES

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# MEETING THE MENTAL HEALTH NEEDS OF MICHIGAN YOUTH WITH SCHOOL-BASED HEALTH SERVICES

### Key Takeaways

1. Children and adolescents in Michigan are facing increasing behavioral health challenges and conditions, but Michigan lacks adequate prevention efforts and access to treatment.
2. Untreated behavioral health conditions diminish opportunities for academic, social, and occupational success and often follow youth into adulthood.
3. Youth behavioral health may be addressed through school health personnel, school-based health centers, teacher and staff training, and various other school-based interventions and services.

### Summary

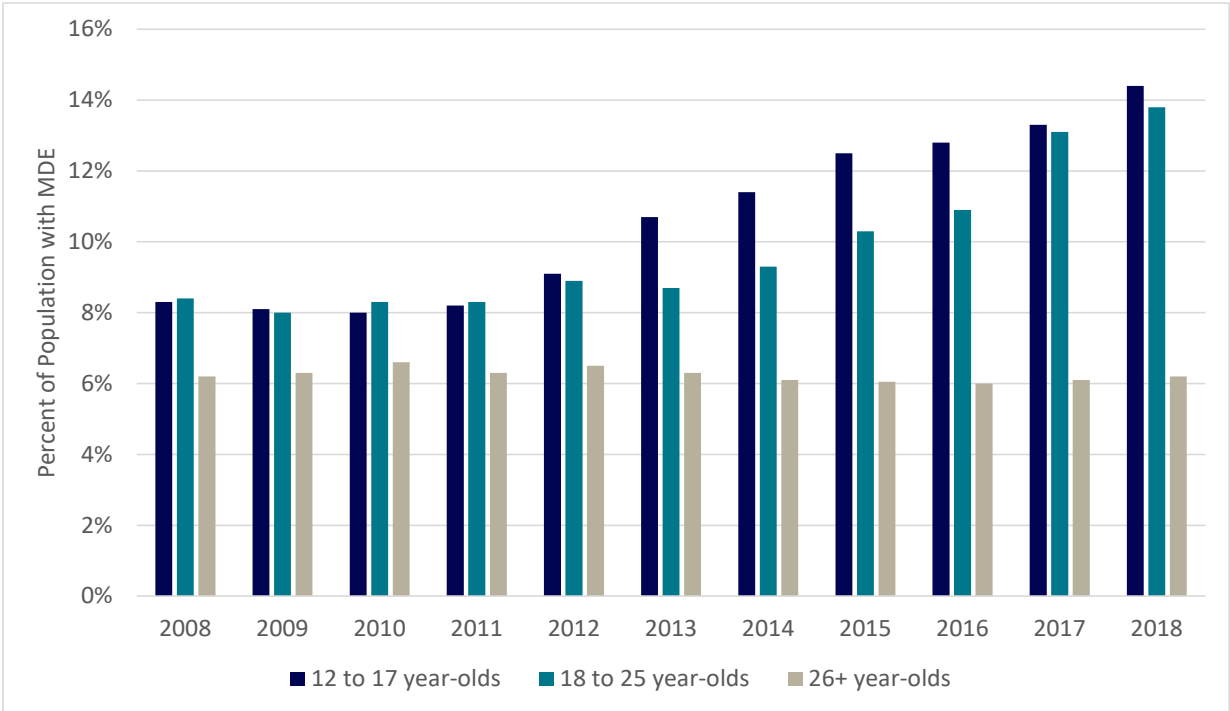
Children and adolescents in Michigan and throughout the U.S. are experiencing alarming increases in the prevalence of mental, emotional, and behavioral health conditions. Although mental health concerns have been rising at a rapid pace while the nation contends with COVID-19, this trend (along with its underlying causes and risk factors) was underway long before the coronavirus pandemic began.

Mental, emotional, and behavioral disorders are a ma-

ajor source of morbidity for children and adolescents and have become the most common illnesses that children experience. Approximately one in five youth have a diagnosable mental health disorder, resulting in significant impairment for one in ten youth. The problem is not only large, but also growing, with increasing rates of anxiety, depression, and suicidal ideation in America's youth. The number of adolescents and young adults experiencing a major depressive episode (MDE) has nearly doubled over the last decade (see **Chart A**).

### Chart A

Major Depressive Episode in the Past Year by Age Group in the U.S., 2008-2018



Data Source: National Survey on Drug Use and Health (NSDUH)



# MEETING THE MENTAL HEALTH NEEDS OF MICHIGAN YOUTH

At the same time, suicide has risen to the second leading cause of death for adolescents and young adults, surpassed only by motor vehicle fatalities.

Despite this serious and growing problem, many children and adolescents are not able to access needed treatment. Among Michigan’s youth experiencing any mental illness, more than a third are not receiving care (with even larger gaps for substance use disorders). The problem of access is complex, due in no small part to both provider shortages and a maldistribution of services. Stigma and other social factors coupled with uncertainties about care seeking, transportation, and payment also create barriers for youth in need of behavioral health services.

The tragedy that is unfolding is hardly *a fait accompli*; the tides can be shifted with a public health approach that prioritizes multiple levels of prevention and facilitates treatment for those in need. Mental health disorders and substance abuse disorders are both treatable and preventable, as are suicides. Steps can be taken to prevent damage from adverse childhood experiences (ACEs) and other sources of youth trauma.

Just because a problem is solvable, however, does not mean there is a simple solution; indeed, address-

ing treatment and prevention will require Michigan to examine a wide range of economic, social, and legal structures at the state level and in each community. Treatment and prevention depend on society as much as the individual.

A strategy that coordinates health care, public policies, and community-based interventions has the best chance of success for enhancing treatment and prevention in Michigan. Given the rapidly growing problems facing our youth, the future well-being of our state may very well be dependent upon mounting a sizable, multifaceted response.

Schools are uniquely suited to assist youth with mental health concerns. Youth spend a substantial amount of time within school buildings, providing a greater chance for the identification of a mental health concern and referral to treatment.

Despite the growing mental health needs of students, Michigan has a dearth of health professionals working in schools. Michigan falls short of recommended ratios of health professionals to students employed in schools, and, in most cases, falls far behind the national average (see **Table A**).

**Table A**  
Recommended and Actual Ratios of Health Professionals to Students in Michigan Schools

	<b><u>Recommended</u></b>	<b><u>U.S.</u></b>	<b><u>Michigan</u></b>
<i>School Counselors</i>	1:250	1:464	1:744
<i>School Social Workers</i>	1:250	1:2,106	1:1,051
<i>School Psychologists</i>	1:500	1:1,211	1:1,521
<i>School Nurses</i>	1:750	1:936	1:4,199

Data Sources: National Association of School Psychologists, Education Trust Midwest, American Civil Liberties Union

To address existing student needs, and to provide multitiered approaches to prevention and student support, it is essential that schools increase the number of nurses, social workers, psychologists, and counselors.

In tandem with school health professionals, school-based (and school-linked) health centers offer further opportunity to bolster student health and address youth behavioral health needs. School-based health centers are clinics located within or adjacent to schools that provide a wide array of medical and behavioral health services. These centers may be operated by health systems, federally qualified health centers, or by governmental entities (i.e., local public health departments). School-based health centers can provide economical, and easy access to behavioral health services for youth, and can facilitate destigmatization and foster treatment-seeking behaviors throughout the formative years for children and adolescents.

While collocation of health care providers and school campuses offers a proven way to improve access to and utilization of behavioral health services, school-based health centers also offer schools a valuable partner for collaboration on population-level interventions within school buildings and/or districts. School-based health centers may be used as a catalyst and resource to foster health-improving innovations to school operations and curricula, offering a means to proactively improve youth mental health while also fostering resilience and health-enhancing behaviors that will follow students into adulthood.

As places centered around learning, schools are also an ideal milieu to deliver information about mental health and teach social and emotional skills that foster resilience. Because schools are also venues of socialization and psychological development, they are important venues for dismantling stigma and normalizing treatment-seeking behaviors, as well as encouraging positive behaviors while reducing bullying and discrimination. To be successful, these efforts require both engaged school health personnel and training for teachers in social and emotional learning (SEL), as well as various domains of behavioral health.

Aspirational solutions to Michigan's youth mental health crisis would consider collaborative efforts to center school environments on individual/community well-being as a prerequisite for academic and student success. This means increased opportunities for quality nutrition and physical activity, as well as investment in music and the arts as vehicles of community-building and social/emotional enrichment, expression, and healing. In contrast, providing students with base levels of access to school health professionals and behavioral health treatment is not aspirational – it is the fundamental starting point for addressing the growing youth mental health crisis.

For Michigan to have successful students who graduate into healthy and productive workers and community members, the state must invest in strategies to bolster health and prevent disease within schools and communities throughout the state. The usual incremental approach to policy change in schools and government will not keep pace with the growing behavioral health needs in our state; swift, multi-faceted actions are needed. Given the long-term social and economic costs of inactivity, swift investment is not only essential but justified.

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# MEETING THE MENTAL HEALTH NEEDS OF MICHIGAN YOUTH WITH SCHOOL-BASED HEALTH SERVICES

## Introduction

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Children and adolescents in Michigan and throughout the U.S. are experiencing alarming increases in the prevalence of mental, emotional, and behavioral health conditions.<sup>1</sup> Although mental health concerns rose at a rapid pace while Michigan and the rest of the nation contended with the advent of COVID-19, this trend of increasing child and adolescent mental health concerns (along with various underlying causes and risk factors) was underway long before the coronavirus pandemic began.

While an increasing proportion of youth are experiencing a wide range of behavioral health conditions, more than one in three do not receive any treatment, and, among those who do access treatment, many do not receive the care they need from a specialty provider.

This lack of behavioral health care providers and services in Michigan was not caused by the pandemic. Likewise, the pandemic is not the principal cause of poverty, stress, social inequities, societal strife, childhood trauma, and other factors that foster and exacerbate the prevalence of youth mental health issues. Addressing youth mental health in Michigan means examining these systemic factors and considering policies, interventions, and investments that will endure after the policy focus on coronavirus recovery has subsided.

Mental, emotional, and behavioral health issues have wide-reaching social and economic consequences. Untreated youth mental health disorders are associated with adverse academic, occupational, and social outcomes. For instance, children and adolescents suffering from untreated mental health issues are less likely to succeed in school and are more likely to withdraw from their studies or drop out entirely. Untreated mental health disorders may also precipitate drug abuse, self-harm, and suicidal behaviors.<sup>2</sup>

Addressing youth mental health is essential for preventing problems that may continue, or worsen, into adulthood, as the majority of psychiatric disorders begin in childhood or adolescence.<sup>3</sup> By one estimate, half of all serious adult psychiatric disorders start by the age of 14, but treatment may not begin until decades after onset.<sup>4</sup> Adult mental health issues can negatively

affect employment and family life, and place individuals at a greater risk for poverty, unemployment, disability, and homelessness.

The specter of a growing youth mental health concerns will not be exorcised with any single policy or intervention – this is a multidimensional problem that requires numerous complex solutions. Provider shortages and the maldistribution of mental health providers throughout the state limit access to treatment in many communities. Logistical barriers – from transportation and waiting times to costs and insurance limitations – all stand between individuals and needed care and may dissuade people from pursuing treatment until more serious (and costly) conditions emerge. Social factors and stigmatization may lead to embarrassment and cause struggling individuals to attempt to hide their condition rather than seeking care.

These barriers may be addressed through top-down policy changes such as incentives for psychiatrists, psychologists, and other providers to practice in rural/underserved areas. They can also be approached with bottom-up interventions such as school-based programs to eliminate stigma, foster individual/group well-being and resilience, and implement multi-tiered prevention strategies addressing violence, trauma, substance abuse, and suicide.

One multifaceted and often-overlooked solution is the expansion of school-based (and school-linked) health centers. These are clinics located within or adjacent to schools that provide a wide array of medical and behavioral health services. They may be operated by hospital systems, federally qualified health centers, or by governmental entities, such as local public health departments.

School-based health centers can provide economical, and easily accessible behavioral health services for youth, and can facilitate destigmatization and foster treatment-seeking behaviors throughout the formative years for children and adolescents. School-based health centers may also be used as a catalyst and resource to foster health-improving innovations to school operations and curricula, offering a means to proactively improve youth mental health while also

## MEETING THE MENTAL HEALTH NEEDS OF MICHIGAN YOUTH

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fostering resilience and health-enhancing behaviors that will follow students into adulthood.

Regardless of the presence or absence of a school-based health center, schools should endeavor to maintain adequate staffing of school nurses, social workers, and psychologists to address student needs and engage in building or district-wide prevention strategies. Facilitated by these school health professionals, schools should also maintain referral networks for behavioral health treatment, as well as other social supports and wrap-around services.

Mental health training and trauma-informed practices can help teachers foster healthy emotional and behavioral development in their students and to understand

the inextricable link between childhood trauma, youth mental health, and student success. Training can also help school personnel identify when a student may be in need of additional help. School health professionals can provide invaluable instructional support and direct aid to teachers in these areas, as well as supporting building and district wide health interventions.

This report examines the prevalence of youth and adolescent mental, emotional, and behavioral health conditions in the U.S. and Michigan, highlighting the corresponding lack of treatment and supports. It focuses on K-12 schools as intervention settings and examines ways school districts can coordinate and collaborate with school-based health care providers to improve child and adolescent health.

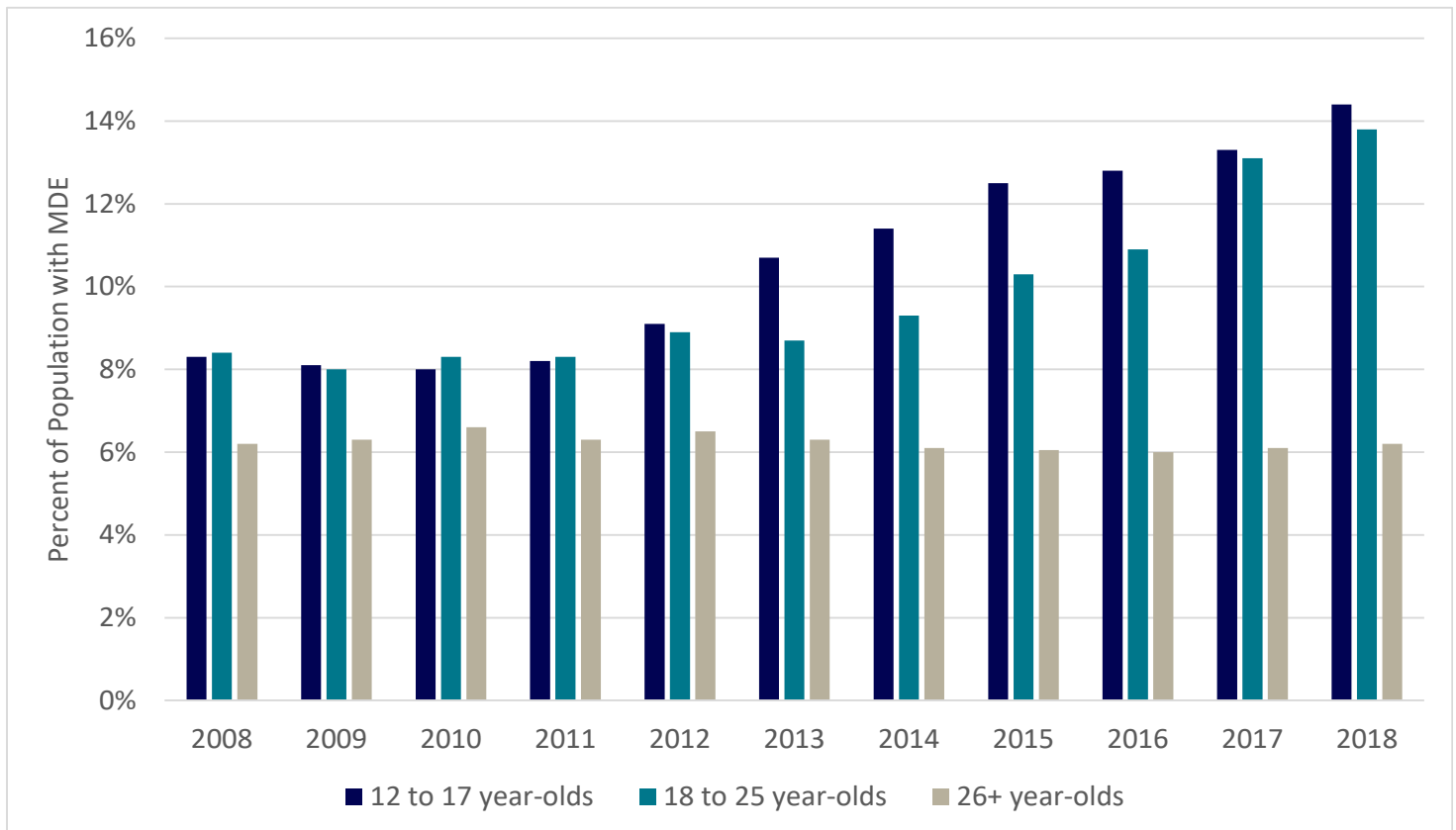
## A National Crisis

Mental, emotional, and behavioral disorders are a major source of morbidity for children and adolescents and have become the most common illnesses that children experience in the United States. Approximately one in five youth have a diagnosable mental health disorder, resulting in significant impairment for one in ten.<sup>5,6</sup> The problem is not only large, but also growing, with increasing rates of anxiety, depression, and suicidal ideation.<sup>7,8,9</sup> The number of youths experiencing a major depressive episode in the United States has nearly doubled over the last decade (see **Chart 1**).

This crisis is a self-evident catastrophe, but the scale of tragedy is compounded by the fact that nearly half of youth with mental, emotional, and/or behavioral health issues are not getting the mental health treatment that they require.<sup>10</sup>

Some good news is that the scope of this problem is now widely recognized, with more than 75 percent of adults believing that youth have worse mental health status than they did at similar ages.<sup>11</sup> Seven in ten teens see depression and anxiety as major problems among their peers. Broad recognition of this crisis makes it more likely that policymakers can find the common ground needed to act.<sup>12</sup>

**Chart 1**  
Major Depressive Episode in the Past Year by Age Group in the U.S., 2008-2018



Data Source: National Survey on Drug Use and Health (NSDUH)

### ACEs and Trauma

Adverse childhood experiences (ACEs) are traumatic events that occur during childhood.<sup>13</sup> This can include abuse and neglect, parental mental illness, divorce, substance abuse, incarceration, domestic violence, community violence, and severe forms of loss.

A large number of children are impacted by ACEs and early life traumas.<sup>14,15,16</sup> Children who experience traumatic events often also experience severe, prolonged stress. Without adequate support and mechanisms for coping, this can develop into toxic stress: an excessive, prolonged activation of the body's stress response system that causes extreme wear and tear on the body and mind.<sup>17</sup> Toxic stress leads to negative health effects throughout life (placing individuals at greater risk for heart disease and other conditions), as well as disrupted neural connections that impact child development, cognitive functioning and mental, emotional, and behavioral health.<sup>18</sup>

Exposure to ACEs follows youth into adulthood. Studies estimate that between three and fifteen percent of youth develop post-traumatic stress disorder from these experiences.<sup>19</sup> Adults that experienced multiple ACEs have a four to twelve fold increase in health risks for substance abuse, depression, and suicide attempts.<sup>20</sup> Because of the wear and tear placed on the body and mind by childhood trauma, people who experience six or more ACEs have been observed to die nearly 20 years earlier on average than people who did not experience these traumas.<sup>21</sup>

The problems associated with ACEs may also be transmitted intergenerationally. Parents who experienced a greater number of ACEs in childhood are more likely to have higher levels of parenting stress.<sup>22</sup> They are also more likely to have children with a higher ACEs score and behavioral health problems. Many of the physiological issues associated with toxic stress, such as heart disease, are themselves heritable as well.<sup>123</sup>

Adverse childhood experiences in Michigan are a critical public health issue. Two-thirds of adults and almost half of all youth in Michigan say that they have experienced one or more ACEs.<sup>24,25</sup> Michigan is one of few states where divorce is a more prevalent ACE than economic hardship, but the state remains similar to other states with the other most prevalent ACEs being substance abuse, neighborhood violence, and household mental illness occurrence.<sup>26</sup>

Michigan physicians are beginning to recognize that understanding ACEs is beneficial for both adult patients and children, though only a small fraction use trauma assessment as part of their practice. Screening for traumas helps assist in the treatment of patients and their families and provides more in-depth knowledge on what a person requires to best improve their health. Understanding the signs and effects of trauma is not only essential for improving health and human services, but also for improving the provision of education, public safety, and criminal justice.

It is widely recognized that ACEs are deeply linked with later mental health disorders, substance abuse, and suicidal ideation and completion. Yet, much of the activity in addressing each of these crises remains separate. Integrated approaches that address shared risk factors and solutions promise greater success in stemming the tide of these unfortunate trends in human health and well-being.

## Common Mental Health Disorders Affecting Youth

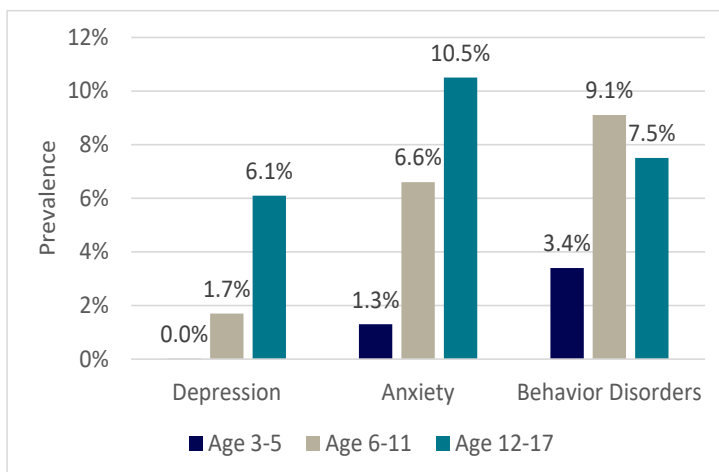
The most common mental health conditions in children and adolescents are mood, anxiety, behavioral, and attention disorders.<sup>27</sup> According to the Centers for Disease Control and Prevention (CDC):

- 9.4 percent of children aged 2-17 years have been diagnosed with attention deficit/hyperactivity disorder (ADHD)
- 7.4 percent of children aged 3-17 have a diagnosed behavior problem
- 7.1 percent of children aged 3-17 have been diagnosed with anxiety
- 3.2 percent of children aged 3-17 have been diagnosed with depression

Rates of mental disorders also change with age. For instance, behavioral disorders are most common in children aged 6-11 years, whereas depression and anxiety are more likely to manifest and/or receive diagnosis at older ages (see **Chart 2**).<sup>28</sup>

Attention deficit/hyperactivity disorder is commonly diagnosed in childhood and adolescence, but, like depression and anxiety, follows individuals into adulthood.

**Chart 2**  
Prevalence of Currently Diagnosed Depression, Anxiety, and Behavioral Disorders by Age in the U.S., 2018



Data Source: Ghandour et al., The Journal of Pediatrics

### Mood Disorders

Mood disorders, such as depressive disorders and bipolar disorder, are a serious affliction among adolescents. The teen depression rate has grown substantially in recent decades; 13 percent of teens in 2017 reported having a major depressive episode in the past year.<sup>29</sup> It is estimated that 2.9 percent of adolescents (including 4.3 percent of 17-18 year-olds) are affected by bipolar disorder.<sup>30</sup> While bipolar disorder may have its onset in childhood, it is more commonly observed in adolescents and adults.<sup>31</sup>

Compared to adults, adolescents with depression are less likely to experience symptoms like fatigue but are more likely to experience irritability. Depression can severely interfere with school, work, and interpersonal relationships—especially when the condition and its symptoms go unmanaged. Depression also places adolescents at greater risk for both substance abuse and suicide. Moreover, adolescents with a mood disorder are also likely to experience a co-occurrence of other mental health conditions. In fact, among children aged 3-17 years with depression, almost one-half have behavioral problems and nearly three in four have anxiety.

### Anxiety Disorders

Anxiety disorders are the most common mental health disorders in adolescents and manifest in many forms, such as generalized anxiety disorder, panic disorder, social anxiety disorder, and various phobias. While many people are likely to experience anxiety at some point in their lives, anxiety disorders are characterized by their prolonged impairment of an individual’s ability to function in school, work, and other activities/relationships. People with anxiety disorders often experience physical symptoms such as chest pain, nausea, and headaches.

Anxiety often occurs in conjunction with depression or ADHD and increases the risk of suicide. Anxiety also affects sleep patterns, appetite, and energy levels. Adolescents with anxiety disorders may also attempt to self-medicate in the form of substance abuse.

## Disruptive Behavior Disorders

Disruptive behavior disorders, such as conduct disorder and oppositional-defiant disorder, affect children at home and in the classroom. It is estimated that conduct disorder affects 9.5 percent of the U.S. population.<sup>32</sup> Children and adolescents with disruptive behavioral disorders may be argumentative and resistant to advice from adults and other figures of authority, including health care providers. While there are observed demographic differences, the earlier the onset of conduct disorder, the greater the risk for persistent difficulties; conduct disorders can be more debilitating for children and families than is often recognized, even by health providers.<sup>33</sup>

Females with conduct disorder are more likely to run away from home and are at an increased risk for sexual exploitation or trafficking. Disruptive behavior disorders also increase the likelihood of high-risk sexual behaviors and often co-occur with anxiety, depression, and substance abuse in adolescents.<sup>34</sup>

## Attention-Deficit/Hyperactivity Disorder

The most diagnosed and yet widely misunderstood disorder in children is attention-deficit/hyperactivity disorder (ADHD). This disorder is commonly classified as a neurodevelopmental disorder, of which it is the most common. Autism spectrum disorder is the second most prevalent neurodevelopmental disorder in children.

An estimated 9.4 percent of American youth have been diagnosed with ADHD.<sup>35</sup> More than half of these children have at least one other mental, emotional, or behavioral disorder. The number of children diagnosed with ADHD increased by 42 percent from 2003 to 2011.<sup>36</sup> While ADHD can be a major problem and source of disability for adults, it is most likely to be diagnosed in school age children.

Attention-deficit/hyperactivity disorder is also extremely misunderstood and stigmatized, with widely varying public understandings and perceptions.<sup>37</sup> While some might believe an individual with ADHD is just lazy, undisciplined, or “scatterbrained,” the neurological and psychosocial realities of the disorder are far more complex and varied. This misunderstanding of ADHD (alongside lack of treatment) can lead to poor school and/or occupational performance, behavioral issues, bullying, and may precipitate other mental health issues and concerns.

## Other Psychiatric Disorders

When examining major mental illnesses that can manifest during childhood or adolescence, it is difficult to estimate prevalence due to small sample sizes and diagnostic difficulties. For example, estimates of schizophrenia are hard to produce due to difficulties in diagnosis and co-occurrence with other disorders, even though it is known that schizophrenia is likely to manifest between the late teens and early adulthood.<sup>38</sup> Estimates suggest that a sizable amount of youth endure these illnesses throughout their lives.

## Youth Substance Abuse

Substance use disorders remain a major issue among youth. Approximately half of all teens report drug and alcohol use as being a major problem among their peers.<sup>39</sup> Nicotine, alcohol, and cannabis are the most common drugs used by youth.

The use of combustible tobacco has generally declined among young people, but the use of vaping products has increased significantly; one in four 10th graders and one in three 12th graders are current users of vaping products.<sup>40</sup> The increase in vaping has offset much of the public health progress made in reducing youth tobacco use.

While electronic nicotine delivery systems do not carry the full magnitude of health risks associated with combustible tobacco, vaping nonetheless presents numerous serious health risks. Moreover, nicotine is a highly addictive drug regardless of delivery method and carries many physiological and mental health risks – in particular for youth and adolescents.

The use of alcohol has also been declining among teens but remains quite high in comparison with nicotine. Two-thirds of youth have tried alcohol by the time they are in 12th grade, making it the most common drug of abuse for adolescents.<sup>41</sup> A total of 7.9 percent of 8th graders and 29.3 percent of 12th graders report using alcohol in the past month, and 3.8 percent of 8th graders and 14.4 percent of 12th graders reported binge drinking in the past month.<sup>42</sup>



The proportion of teens using cannabis nationally has remained relatively steady, but daily cannabis use has increased among teens as more states legalize the drug.<sup>43</sup> Cannabis use poses a wide range of health and behavioral risks for children and adolescents. Additionally, studies have shown that teens reporting cannabis use in the past month are at greater risk for other negative health behaviors.<sup>44</sup>

Youth with previously diagnosed mental health conditions, such as anxiety and depression, are at higher risk for developing a substance use disorder. Likewise, youth who abuse substances are at increased risk of depression. Current evidence suggests a complex, bidirectional relationship exists between these behavioral health disorders.<sup>45</sup>

Young people who persistently abuse substances are at risk for an array of adverse consequences, including problems in school, health issues, and exposure to the juvenile justice system. Substance abuse is also associated with the leading causes of death among youth: unintentional injury (including motor vehicle fatalities) and suicide.

Youth substance abuse, therefore, takes an immense toll not only on individuals and families, but on entire communities. Public safety, corrections, and health care spending all reflect inadequate approaches to substance abuse treatment and prevention.

### Youth Suicide

Youth suicide is a tragic and growing problem. Suicide is the second leading cause of death for people aged 10-24, surpassed only by motor vehicle fatalities.<sup>46</sup> In less than two decades, the suicide rate among young people has increased by 56 percent.<sup>47</sup>

No single factor causes a person to end their own life. Social isolation, bullying, violence, and sexual abuse all increase suicide risk, as do family history of suicide and past experience of child abuse/neglect. Various stressors, like relationship, financial, or legal problems can also be a factor in suicidal ideation and completion.

Suicide is not merely an individual phenomenon; community and societal factors also play a role in suicide risk. Barriers to health care or economic opportunity occur at the community level and affect suicide risk. Societal decisions governing access to lethal means (such as firearms and medications/drugs) affect the prevalence of suicide. Likewise, exposure to community experience of suicide, unsafe media portrayals of suicidal acts, and religious or cultural beliefs all influence the way individuals perceive and interact with suicide.

The presence of mood disorders and/or anxiety disorders also increases suicide risk, as do substance use disorders.<sup>48,49,50</sup> Alcohol intoxication, in particular, increases depressed mood and reduces inhibitions, increasing proximal risk for suicidal attempt and completion. At the community level, then, lack of access to treatment and stigma surrounding mental health and substance use disorders increase each person's risk of suicide.

### Youth Obesity

Youth obesity is strongly associated with depression, and this relationship is complex.<sup>51</sup> Obesity, like depression, often develops as a consequence of stress and trauma, and both may be symptoms of underlying issues.

Bullying and social stigma associated with obesity may also lead to greater mental health challenges for obese youth. Depression may affect sleep, diet, and physical activity, leading depressed youth to be more likely to develop obesity.

This bidirectional relationship and the impact of individual and societal stigma directed at obese individuals require greater attention.

# MEETING THE MENTAL HEALTH NEEDS OF MICHIGAN YOUTH

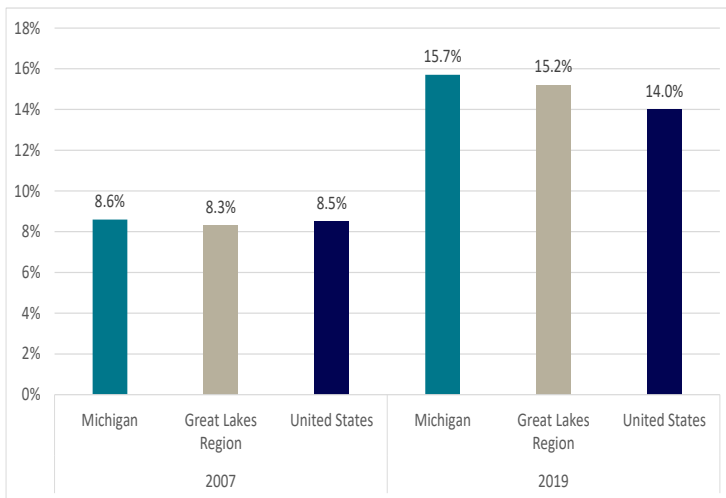
## Youth Mental Health and Suicide in Michigan

Amid a nationwide mental health crisis, Michigan performs worse than average on many measures of youth mental health.

Nearly 20 percent of Michigan youth have been diagnosed with depression, anxiety, and/or ADHD.<sup>52</sup> Nearly two in five Michigan youth have reported feeling sad or hopeless every day for a two week period in a way that impacted their usual activities.<sup>53</sup> The proportion of youth in Michigan experiencing a major depressive episode has increased by 83 percent since 2007, outpacing both the Great Lakes Region and United States (See **Chart 3**).<sup>54</sup>

**Chart 3**

Percentage of Youth with a Major Depressive Episode in 2007 and 2019 in Michigan, the Great Lakes Region\*, and the United States



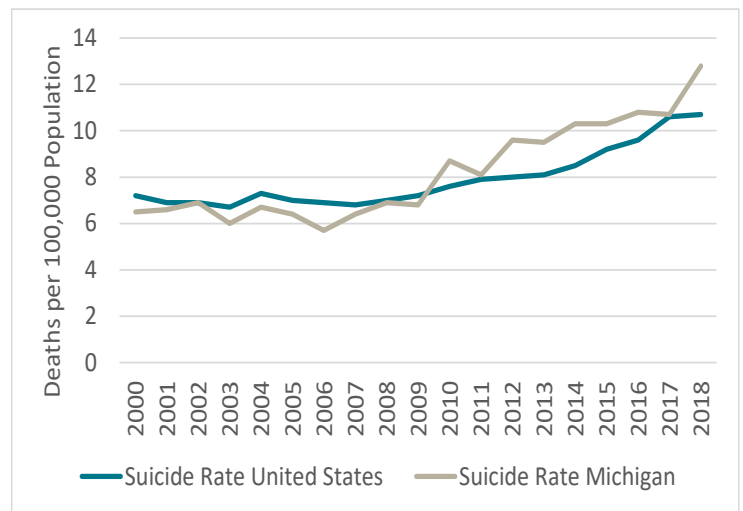
Data Source: Substance Abuse and Mental Health Services Administration (SAMHSA)

\*Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin

Tragically, the suicide rates of adolescents and young adults in Michigan are also higher than the national rate, with the increase in suicides in Michigan outpacing the nation (see **Chart 4**).<sup>55</sup>

**Chart 4**

Suicide Death Rates Among Persons Aged 10-24 in the United States and Michigan, 2000-2018



Data Source: Centers for Disease Control and Prevention (CDC)

While annual fluctuations in the suicide death rate are possible, these long-term data reveal a sobering trend. Taking the three-year averages of the suicide death rate provides a more stable estimate. Comparing 2009 to 2018, the average suicide death rate among adolescents and young adults increased from 7.0 to 10.3 persons per 100,000 in the United States and from 6.7 to 11.4 persons per 100,000 in Michigan, increases of 47.1 percent and 70.1 percent respectively.



### Disparities in Youth Mental Health

Policies are needed that address the mental health needs of all youth in Michigan. At the same time, different youth (whether by virtue of individual characteristics or group factors like community and/or cultural identity) may face different challenges and have different needs. Equality of treatment under the law (and by core public institutions like schools) is a fundamental value that seeks to ensure equality of opportunity for all people; however, the experience of mental, emotional, and behavioral health conditions is not the same for every individual or group, and so one-size-fits-all solutions may not be the best approach to resolve a mental health crisis.

Youth who identify as part of the lesbian, gay, bisexual, transgender, queer or questioning (LGBTQ+) community are at a substantially higher risk for mental health concerns than their non-LGBTQ+ peers.<sup>56</sup> These young people are more likely to face harassment, hate crimes, violence, and sexual harassment—experience that often begin in youth.<sup>57</sup> LGBTQ+ youth are also more likely than other youth populations to experience family rejection based on gender identity or sexual orientation. Family rejection has been linked to adverse health outcomes such as suicide attempts and illicit drug use.<sup>58</sup>

LGBTQ+ youth have significantly more depressive symptoms than their peers, and are disproportionately harassed and bullied in school, facing a higher burden of rejection trauma.<sup>59</sup> In a screening conducted by Mental Health America, 86 percent of LGBTQ+ youth screened as positive or moderate to severe for a mental health condition.<sup>60</sup> They also have a higher prevalence of suicidal ideation; 40 percent of LGBTQ+ youth reported seriously thinking of suicide in the past year with more than half of transgender individuals reported seriously thinking about it.<sup>61</sup>

When LGBTQ+ youth reach out for help, they are often faced with inadequate healthcare that lacks cultural competency and appropriate consideration for the unique health needs and risks of this community. The fear of discrimination makes it less likely for individuals to seek help.

The mental health concerns of Black, indigenous, and people of color (BIPOC) communities also warrants increased attention.

Minority youth generally have similar rates of mental health concerns and illnesses as their white peers, but they often lack comparable access to services.<sup>62</sup> Children in minority communities are also more likely to experience ACEs due to cumulative adversity and compounded community trauma.<sup>63,64</sup> These experiences take a toll on youth over time and lead to higher levels of toxic stress.

Youth Access to Behavioral Health Care

Unmet Need

Even though many children and adolescents are experiencing mental health concerns, illnesses, and crises, there is a corresponding lack of mental health services and providers to meet these needs. Even for those who can access services, there are numerous barriers to surmount before access is achieved. Nationally, about half of all youth with a treatable mental illness do not receive needed treatment.<sup>65</sup> Furthermore, only about 20 percent of children with mental, emotional, or behavioral disorders receive care from a specialized provider.<sup>66</sup>

For Michigan’s youth experiencing any mental illness, more than one third are not receiving care (with even larger gaps for substance use disorders).<sup>67</sup> For those requiring inpatient care, only 276 child/adolescent psychiatric beds are available across the state leaving the potential that some are unable to access that avenue of treatment.<sup>68</sup> The majority of counties in Michigan have either no child psychiatrists or severe shortages of these professionals contributing to difficulty in accessing medical treatment for mental health.<sup>69</sup>

Mental Health America ranked Michigan as a top 10 state for adult mental health prevention and treatment, but the state ranked 27<sup>th</sup> for youth mental health due to a high prevalence of mental illness and lower rates of access to care.<sup>70</sup> The state has also been ranked in the bottom half for youth alcohol dependence and

illicit drug use and Michigan has a higher prevalence of illicit drug use than is observed nationally.<sup>71,72</sup>

Barriers to Access and Treatment

The problem of access to care is complex, due in no small part to provider shortages, costs of care, and reluctance to seek care.<sup>73</sup>

Provider shortages continue to hinder access to treatment, particularly in rural areas. Michigan has a total of 241 designated Health Professional Shortage Areas (HPSA)<sup>A</sup> for mental health care (including 179 facilities, 47 geographic areas, and 15 population groups). This places more than 40 percent of the state’s population (4.2 million people) in a HPSA with unmet behavioral health care needs (see **Table 1**).<sup>74</sup>

Michigan has had a longstanding shortage of psychiatrists, with just 11.8 psychiatrists per 100,000 population (a ratio below the national average of 12.9 per 100,000).<sup>75</sup> There are 239 child and adolescent psychiatrists in Michigan, a ratio of approximately 10.9 per 100,000 population;150 of them are located in

<sup>A</sup> A Health Professional Shortage Area (HPSA) is an area with a shortage of primary, dental, or mental health care providers as designated by the federal Health Resources & Services Administration (HRSA) based upon the ratio of practicing health care providers to population observed in a given area relative to standard estimates of adequate health provider density. Health Professional Shortage Areas can be geographic areas, populations, or facilities, such as a correctional facility or state mental hospital.

**Table 1**  
Designated Health Professional Shortage Areas (HPSAs) for Mental Health Care in Region 5 States, 2021

State (Region 5)	Total HPSA Designations	Population of Designated HPSAs	Percent of Need Met Within HPSAs
Illinois	172	5,152,758	23.74
Indiana	81	4,426,818	31.99
Michigan	241	4,216,659	27.86
Minnesota	119	1,786,542	28.61
Ohio	113	2,390,519	42.82
Wisconsin	114	2,185,992	32.13

Data Source: Health Resources & Services Administration (HRSA)

## MEETING THE MENTAL HEALTH NEEDS OF MICHIGAN YOUTH

Washtenaw, Wayne, and Oakland Counties (see **Map 1**).<sup>76</sup> The American Academy of Child and Adolescent Psychiatry estimates that 47 child and adolescent psychiatrists are needed per 100,000 population under 18 years of age.<sup>77</sup> By this metric, only Washtenaw County has a mostly sufficient supply of child and adolescent psychiatrists.

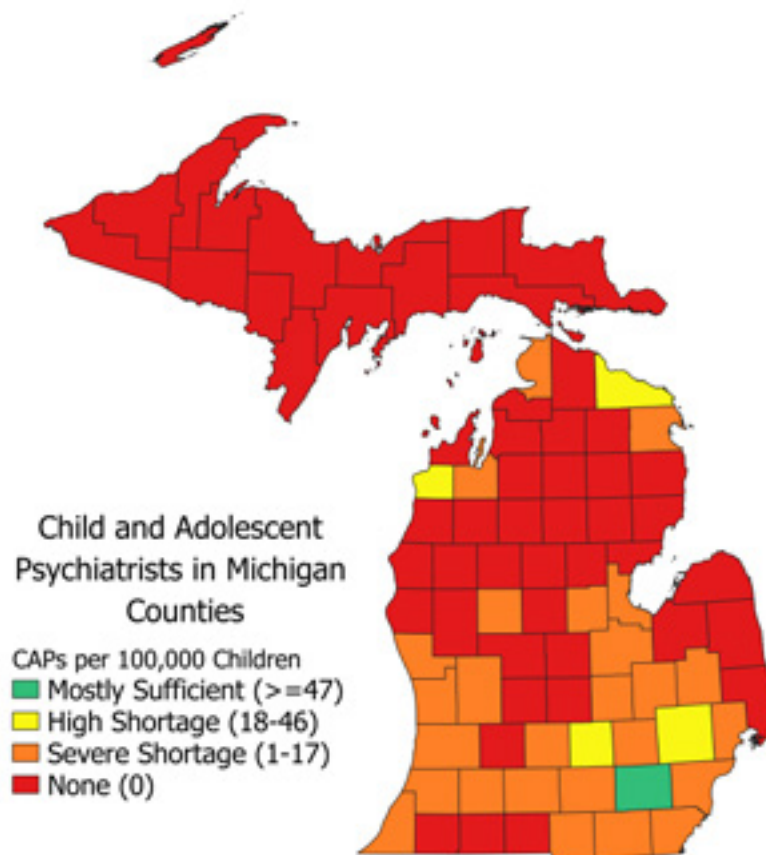
While referrals are not generally required to initiate behavioral health treatment, family physicians and pediatricians nonetheless play a critical gatekeeper role and may be the first to identify a child's need for counseling and/or psychiatry; however, family physicians themselves face many barriers, such as a lack of specialty knowledge, time, resources, and reimbursement, along with the aforementioned shortage of behavioral health specialty providers to whom they may refer patients.<sup>78</sup> Moreover, Michigan has also ex-

perienced shortages and a geographic maldistribution of primary care physicians.<sup>79</sup>

Given the shortage of child and adolescent psychiatrists, pediatricians may also take an active role in care for youth with mental health disorders. Amid rising scrutiny on antidepressants and other psychiatric medications, as well as an increasing youth suicide rate, however, some might argue that general practice physicians/pediatricians are an imperfect substitute for providers with specialized expertise in prescription medications and other therapies used to treat mental, emotional, and behavioral health disorders. Programs like the University of Michigan's MC3 program enable pediatricians and other primary care providers to confer with psychiatrists through use of technology may mitigate some of these deficiencies.

### Map 1

Ratio of Practicing Child and Adolescent Psychiatrists (CAPs) per 100,000 Children by Michigan County, 2017



Data Source: American Academy of Child and Adolescent Psychiatry

## MEETING THE MENTAL HEALTH NEEDS OF MICHIGAN YOUTH

Other mental health providers (such as psychiatric nurse practitioners and clinical psychologists) may also offset some of the need for additional child and adolescent psychiatrists. It should be noted, though, that Michigan has experienced shortages of these provider types as well. Even when all mental health providers are considered, shortages remain throughout the state.

Overall, there is one mental health provider<sup>B</sup> for every 370 people in Michigan, though the distribution of providers varies throughout the state (see **Map 2**)<sup>80</sup>. Top performing counties nationwide have a provider to population ratio of 1:290 (90th percentile). In Michigan, seven counties achieve this distinction: Washtenaw (1:190), Grand Traverse (1:230), Kalamazoo (1:260), Ingham (1:260), Marquette (1:270), Kent (1:290), and

Oakland (1:290). Fifteen Michigan counties have ratios exceeding 1:1,000, ranging from Cheboygan (1:1,060) to Presque Isle (1:6,370).

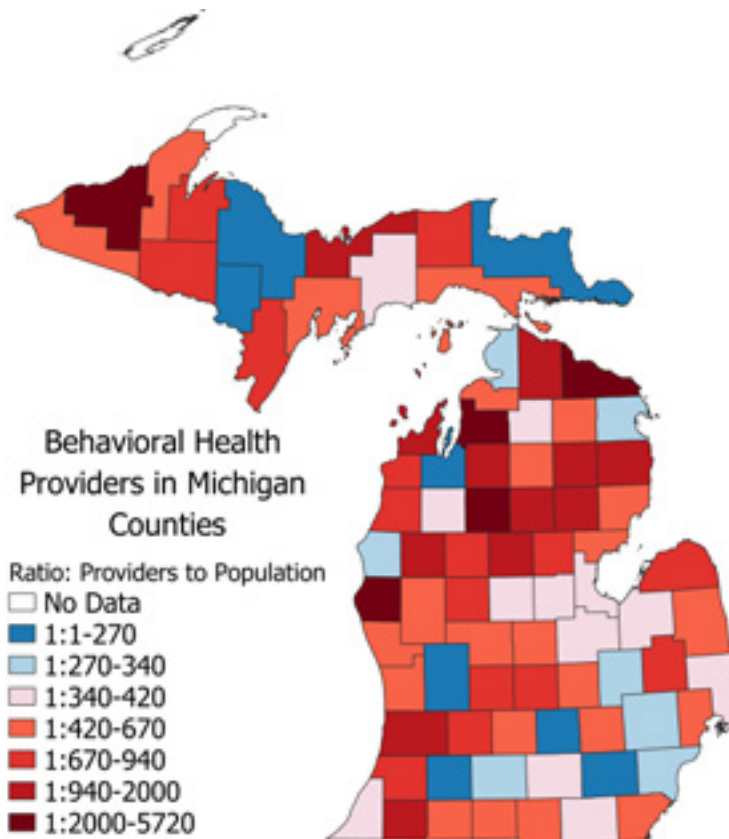
Examining providers at the county level may obscure access disparities that occur between communities within the same county. Indeed, many factors may limit a population's access to care even when providers are present in the same county or community.

Cost is an often-cited concern in behavioral health care. Despite laws granting ostensible parity with other forms of health care, individual's seeking care often find that providers are out of network for their insurance (if a given insurance is accepted at all). Moreover, different modalities of treatment may come with differing levels of coverage and differing cost-sharing responsibilities for the patient. Other costs, such as travel/transportation and wait times may likewise stand between individuals and treatment.

<sup>B</sup> Psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, and substance abuse treatment providers, as well as advanced practice nurses specializing in mental health care.

### Map 2

Ratio of Population to Mental Health Providers in Michigan Counties, 2020



Data Source: County Health Rankings

Beyond cost and access, stigma and a variety of related social factors may be the largest barriers erected between individuals and treatment. Studies of the barriers to children and adolescents seeking and accessing professional help for mental health problems highlight social factors like perceived stigma and embarrassment as major barriers to treatment even more often than systemic/structural issues, such as cost, logistical barriers, and availability of professional help.<sup>81</sup> A study of youth suicide cases in Utah identified consistent barriers among the decedents: belief that nothing could help, perception that seeking help is a sign of weakness, denial or reluctance to admit having mental health problems, and feeling too embarrassed to seek help.<sup>82</sup> These social perceptions all illustrate the ways stigma presents a significant barrier to mental health treatment. Social barriers like stigma must be surmounted if gaps in treatment are to be closed.

Fortunately, there are numerous approaches that may help to address these barriers to treatment.

### Strategies to Increase Access

Strategies to increase access to behavioral health services should address the various barriers discussed above: availability and distribution of providers/services, structural obstacles (such as cost, waiting times, and transportation), and treatment-seeking behaviors and patient perceptions. A focus on youth behavioral health must address the ways parents confront these behaviors while also recognizing that young people can also take an active role in seeking help – especially as they get older. Thus, parent and child views and experiences with these barriers are both important factors.

Increased training opportunities and retention of providers are viable ways to bolster the availability of behavioral health services in Michigan. Expanding graduate medical education (GME) residencies in psychiatry, as well as psychiatric specialty training for nurse practitioners and physician assistants, would help increase the number of trained providers. The MIDOCs program is an exemplar that increases residency slots in medically underserved areas of the state and then provides incentives (such as loan repayment) for physicians who remain to practice in these areas post-residency.

Because many rural parts of Michigan lack mental health care providers or services, particular attention should be paid to efforts to attract professionals to these areas. Recruiting from rural/underserved communities may increase the likelihood that providers will return to these areas to practice. Scholarship and loan forgiveness programs may be used to nudge providers to underserved areas, providing a more optimal provider distribution.

In tandem with increasing the supply of providers, it is important to address the ease with which they may be accessed. Even among individuals/families with health care coverage, cost is a commonly cited reason for not seeking care; this is compounded by the fact that behavioral health clinicians are less likely than other providers to participate in Medicaid. For privately insured individuals, behavioral health providers are more likely to participate in fewer networks. The costs of co-payments and deductibles are therefore compounded by location and timeliness of care.

Emerging telehealth technology may not only solve issues of timeliness and location for some but may also be useful to increase access in geographic areas that lack providers. Allowing various providers (e.g., advanced practice nurse practitioners, licensed professional counselors, and social workers) to work at their full scope of practice may also help to address issues of access and affordability.

Absent these barriers of cost and availability of treatment, however, youth may still be reluctant to seek behavioral care. They may worry about what their peers will think of them. They also may not wish to discuss issues with their parents, upon whom care seeking may be predicated. Thus, social dimensions of access should not be ignored.

Increased information about available services in a given community, alongside continuing public service efforts to destigmatize mental illness and substance use disorders, can make it more likely individuals will seek treatment.<sup>83</sup> Providing greater education on self-care and resilience strategies may also provide immense benefits to individuals who have not yet accessed formal treatment. Additional social interventions may be targeted to specific communities, or to the places where youth spend the majority of their time, such as schools.



## Policies to Improve Youth Behavioral Health

Mental health has a large impact on student success in schools. Depression, anxiety, and other conditions have been linked to lower grades and an increase in dropout rates.<sup>84,85</sup> Mental health problems may precipitate lack of motivation, negative attitudes, cognitive disturbances, hyperactivity, lack of focus, lack of concentration, and low energy levels, preventing affected students from performing as well as they are capable.<sup>86</sup> Students with mental health concerns are more likely than their peers to face academic discipline (ranging from reprimands by teachers to suspensions), setting the stage for later interaction with the juvenile justice system—a pathway that can be prevented when adequate intervention and treatments are available.

The mental health of one student can also impact that student’s peers; mental illness often yields a ripple effect on friends and family that can then impact those individuals’ mental health. This problem is clear when schools must help students recover from the suicide of a peer.<sup>87</sup> Behavioral and performance issues related to mental health can also spread among students as a social contagion.<sup>88</sup>

The effects of a student’s mental health on their ability to engage with their schoolwork and on their school success makes it of great concern to schools to safeguard the mental health of all the youth attending them. Students dealing with mental illness are more likely to miss school. When in class, mental health issues can prevent a student from engaging in the learning process, affecting not only mood, but also memory and cognition. Schools have an obligation and responsibility to protect and serve all children; a large part of this obligation rests on ensuring student health and safety—an undeniable prerequisite for academic and, subsequently, career success.

Schools are uniquely suited to assist youth with their mental health concerns. With the large amount of time most youth spend attending school (and other school-based extracurricular activities), there may be a greater chance for the identification of a mental health concern and referral to treatment within the educational milieu than exist in other settings (such as doctors’ offices or places of worship).

As places centered around learning, schools are also an ideal setting to deliver information about mental health and provide teaching about emotions, behavioral health, and mental health care. Because schools are also venues of socialization and psychological development, they are important settings for creating campaigns against stigmatization, facilitating open and honest dialogue to expand understanding and dismantle stigma, as well as creating nurturing spaces for youth to engage with programs that teach personal resilience and help create buffers.

While there are many valuable strategies to target the major barriers to youth behavioral health treatment, one approach has been proven to check all the boxes: expansion of school-based health professionals, services, and centers.

### School Health Professionals

Health professionals play an important role in school settings, but, as **Table 2** shows, Michigan does not meet the recommended professional to student ratios for school nurses nor behavioral health professionals like counselors, social workers, and psychologists.

**Table 2**  
Recommended and Actual Ratios of Health Professionals to Students in Michigan Schools

	<b>Recommended</b>	<b>U.S.</b>	<b>Michigan</b>
<i>School Counselors</i>	1:250	1:464	1:744
<i>School Social Workers</i>	1:250	1:2,106	1:1,051
<i>School Psychologists</i>	1:500	1:1,211	1:1,521
<i>School Nurses</i>	1:750	1:936	1:4,199

Data Sources: National Association of School Psychologists, Education Trust Midwest, American Civil Liberties Union

**School Counselors** are an essential component to student success. In the context of a comprehensive school counseling program, counselors provide vital academic, career, and social-emotional development and support.<sup>89</sup> In practice, however, short-staffed and overburdened school counseling offices are oftentimes only able to provide the most basic curricular, college, and/or career guidance. With one counselor for every 744 students<sup>c</sup> in Michigan schools, the state lags both the recommended ratio of 250:1 and the national average of 1:464.<sup>90</sup>

**School Social Workers** perform complex, multifaceted roles.<sup>91</sup> For instance, they may provide individual or group counseling to students (and their families), provide liaison, coordination, and case management services with schools, families, community agencies, and other resources, develop multi-tiered behavioral intervention strategies and encourage school wide positive behavior supports, and conduct needs assessments to determine the policies, programs, and services needed to meet the educational and mental health needs of students (and to support safe school climates conducive to learning). School social workers can also identify and work to prevent bias, prejudice, and discrimination that may interfere with individual rights in the educational process.

School social work services are also integral to special education, providing assessments, evaluations, and services needed for Individualized Education Programs (IEP) and Individual Family Service Plans (IFSP). It is recommended that schools provide one social worker for every 250 students (though a professional to student ratio of 1:50 may be more appropriate when a social worker is dealing with high-need student populations).<sup>92</sup>

Michigan schools have approximately one social worker for every 1,051 students.<sup>93</sup> Because of low staffing numbers, many school social workers' activities and responsibilities are almost entirely comprised of services and supports for high-need and special-need students. While it is essential that the needs of these students are met, a more robust level of school social workers could ensure that all students benefit from multifaceted supports and interventions social workers can provide within schools.

**School Psychologists** apply expertise in learning, behavior, and mental health to support both learning and teaching. School psychologists provide direct support and interventions to students, as well as consultation for families, teachers, and other school-based health professionals. They may help families develop/improve parenting skills and enhance home-school collaboration. They may also work with teachers to develop a variety of instructional/classroom supports.

School psychologists may also work with administrators on policy development. They may collect and analyze data related to school improvement, student outcomes, and accountability requirements, as well as designing/implementing school-wide behavioral interventions and prevention programs. Like social workers, school psychologists may also coordinate with community providers and assist with student transitions to and from residential treatment or juvenile justice programs. The ratio of school psychologists to students recommended by the National Association of School Psychologists is 1:500; Michigan schools meet only one third of this need, with one school psychologist for every 1,521 students.<sup>94</sup>

### School Librarians

Much like school nurses, social workers, and psychologists, school librarians have faced massive elimination of positions in recent decades. Even though library media specialists can provide essential support to both teachers and students, and increase student success (such as improving literacy and reading ability), Michigan has just one library media specialist for every 3,343 students.<sup>95</sup>

Trained and certified masters-level professionals in library and information science may also be an important component of improving student health and well-being. The CDC identifies libraries as important partners in health literacy efforts.<sup>96</sup> Beyond vital health literacy efforts, school libraries can also be a source of various mental health resources, as well as bibliotherapeutic practices (i.e., reading for pleasure).<sup>97</sup>

<sup>c</sup> The ratio in Michigan high schools is closer to one counselor for every 378 students.

**School Nurses** are essential personnel with responsibility for students physical and behavioral health. The practice of school nursing is rooted in public health, focusing on community disease prevention and health promotion. School nurses work in primary prevention, addressing topics like healthy lifestyles and preventative self-care; infection control is also a critical role of school nurses (a need now amplified by the experience of the coronavirus pandemic). School nurses employ secondary prevention by screening for physical and mental health issues, providing referrals, and performing care coordination and follow-ups. School nurses also are important for assisting students with chronic health issues (e.g., asthma, diabetes). Like school social workers, school nurses can promote health equity by engaging in health promotion, as well as connecting students and families to healthcare services and wrap-around services like food, shelter, and financial resources.

A ratio of one school nurse for 750 students is widely accepted as adequate; however, this one-size-fits-all approach should not obscure the fact that much smaller ratios are needed in student populations with more complex health needs.<sup>98</sup> The increasing chronic care needs of students alongside changing economic, social, and cultural circumstances that leave communities exposed to various social determinants of health suggest the need for school nurses will likely continue to increase.

A 2014 report from the Michigan School Nurse Task Force found that Michigan ranked last in the nation for the ratio of nurses to students; at the time, more than half of Michigan's school districts did not employ any nurses.<sup>99</sup> There is little evidence to suggest this gap has been closed, namely because the state does not collect and publish data on school nurse employment. Recent estimates suggest that Michigan has only one nurse for every 4,199 students.<sup>100</sup>

### Increasing School Health Professionals and Services

Increasing the number of health professionals in schools is essential for improving child and adolescent mental health.

Generally, as schools have focused limited funding on instructional resources and personnel, school health

personnel have not been prioritized. Given the relationship between student health and academic achievement, failing to create and fill positions for school health professionals has proven to be a penny-wise but pound-foolish decision in Michigan schools. Multiple efforts are needed to reverse course.

Local school districts should prioritize health professionals as essential school personnel, resisting temptation to eliminate these positions in the face of budget constraints. Additionally, while Michigan has generally favored local control for schools, stronger state guidance and standards on the presence and proportion of health professionals in schools could help to address issues of equity and parity between different districts and regions of the state.

While local support for school health professionals is essential, local schools are heavily limited in revenue raising capacity. This suggests the need for greater state-level investment. Given the substantial cost Michigan is incurring from the growing youth mental health epidemic, increased funding for school health professionals will be dollars well spent in offsetting the costs mental health issues impose on academic success, occupational preparedness, and individual and community well-being.

States utilize a variety of sources to fund school-based health initiatives. By combining/braiding direct appropriations of state funds with Medicaid dollars and federal education funding, along with a variety of other federal grants, Michigan already does a good job at leveraging various funding streams available to states.<sup>101</sup>

In 2019, Michigan was one of the first states to receive approval on a plan to obtain Medicaid reimbursement for school-based health services provided to Medicaid-eligible students.<sup>102</sup> Previously, only students with an Individualized Education Program (IEP) were eligible for this kind of reimbursement. Given that slightly more than half of all students in Michigan are classified as economically disadvantaged, this new funding option holds great promise to expand services to the Medicaid-eligible student population.<sup>103</sup> It will also help to expand the presence of school-based health services and professionals that are beneficial to all students.

At the same time that Michigan received approval to expand Medicaid reimbursement for school-based



health, a new stream of funding to support behavioral health services in schools was authorized in the FY2019 State School Aid budget totaling \$31 million. These funds flow to intermediate school districts and are then distributed to local school districts. Current funding for FY2021 is \$36.9 million.

While new investment in student mental health in Michigan is promising after decades of neglect, the incremental shifts typical of public budgeting may be insufficient to keep pace with growing needs.

Michigan's traditional public and charter schools enrolled 1.4 million students in the 2020-21 school year. Based upon the aforementioned professional to student ratios, this suggests that approximately 4,300 additional school social workers, 1,900 additional school psychologists, and 1,500 additional school nurses would need to be hired for Michigan schools to even approach adequate health professional staffing.<sup>D</sup>

Given the massive scale of need in combination with the shortages of school health personnel in Michigan, current funding could be more than tripled and remain insufficient.

Funding alone may also be insufficient to close the health professional gap in Michigan schools. The sudden increase in demand for new services and positions may reveal shortages in the supply of trained and licensed professionals, particularly given observed shortages of nurses and mental health providers in Michigan. Even if the right combination of incentives facilitates ease in hiring new school health professionals, new problems may be created if these professionals are drawn away from practice in communities already experiencing shortages of health care providers.

Lessons learned from Michigan's teacher pipeline may have some applicability to school health personnel.<sup>104</sup> Efforts to increase capacity in university programs, particularly those that place emphasis on school-based practice would help ensure a viable supply line for new professionals. Loan forgiveness programs for health professionals who elect to work in schools provides one possible incentive approach, although, given statewide shortages of mental health providers, grants that encourage students to pursue social work, professional counseling, and clinical psychology may be another viable strategy.

Schools wishing to avoid hiring challenges cannot only focus on recruitment strategies, but also employee retention and development. This means creating stable, rewarding, and appropriately-compensated positions with opportunities for personal and professional growth. It also means a fundamental culture change that recognizes health professionals as integral school personnel with well-defined roles who work as collaborative partners with educators, school administrators, and other school staff.

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<sup>D</sup> For perspective, an appropriation of \$36.9 million to fund mental health professionals in schools could support around 590 school social workers, 394 school psychologists, or 537 school nurses (assuming full-time average salaries of \$50,000, \$75,000, and \$55,000, respectively, with a benefits multiplier of 1.25).

## School-Based Health Centers

School-based Health Centers (SBHCs) began during the 1970s in elementary schools as a way to provide services to those who could not afford or access primary health care. Over the past 50 years, the school-based health model has expanded to provide a range of services in school and community settings. While SBHCs continue to focus on providing services in at-risk and/or medically-underserved communities, the model holds promise to help a growing number of children and adolescents with increasingly complex health challenges and needs.

SBHCs provide affordable services conveniently located where youth spend much of their day, helping to remove numerous barriers to access. They provide a full range of primary care services, including behavioral health and dental care. SBHCs are typically partnered with outside health providers for staffing and other needs. In Michigan, they collaborate with health systems, local health departments, and federally qualified health centers in relatively equal proportion.

Locating SBHCs within the schools allows students to access healthcare services during the school day, as well as before or after school. These centers reduce barriers to behavioral health care for students such as transportation and/or scheduling difficulties, uncertainty of where to go to for help, and delays between referral and treatment.<sup>105</sup> Moreover, by integrating behavioral health and wellness within a school setting, opportunities are created to normalize treatment seeking behaviors and reduce stigma, making it more likely that people will be willing and able to seek care during their school years and throughout life.

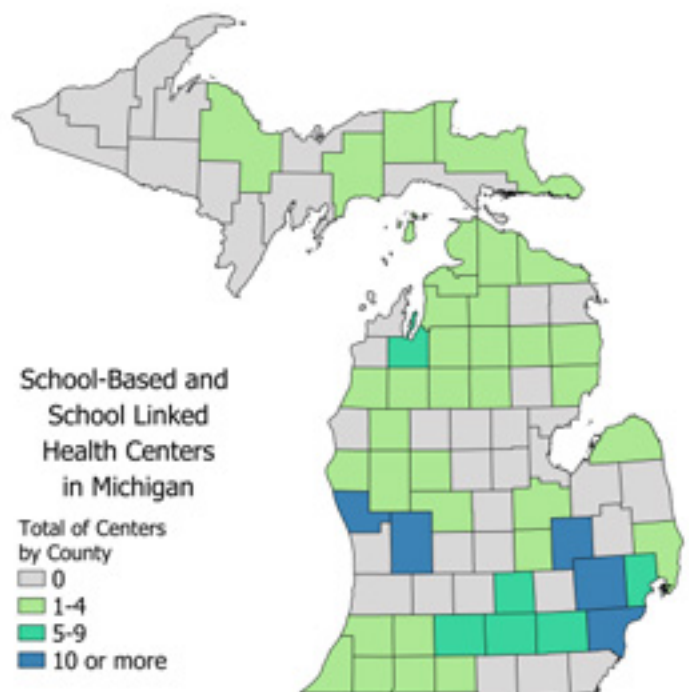
Social/emotional well-being counseling and crisis intervention are the most common behavioral health services provided by SBHCs.<sup>106</sup> SBHCs also efficiently and effectively provide screening and early identification of various behavioral health conditions.<sup>107</sup> Evidence suggests services provided through SBHCs also increase the proportion of students who receive mental health care, by facilitating access and removing barriers to treatment.<sup>108</sup> There is also evidence that SBHCs improve academic performance, particularly for high-risk groups.<sup>109,110</sup>

It is important to recognize that SBHCs do not eliminate the need for school nurses, social workers, or psychologists. Ideally, school-based health centers communicate, cooperate, and collaborate with school personnel.<sup>111</sup> An individual's health is often determined by the intersection of complex social, environmental, physical, mental, and emotional factors; SBHCs complement the work of school health personnel by providing services for students in need of more complex care and enabling school health personnel to focus on population health efforts.

Currently in Michigan, there are nearly 200 school-based/school-linked health centers and programs that provide a variety of health services to students (see **Map 3**). Just as Michigan's school districts fall short on school nurses and behavioral health professionals, nearly one half of Michigan's 83 counties do not have any SBHCs. This represents a major missed opportunity for care access in rural parts of the state, along with other health professional shortage areas, as SBHCs can be ideal settings for tele-psychiatry and other telehealth services that provide valuable treatment that students might otherwise have no way to access.

**Map 3**

Location of School-Based and School-Linked Health Centers in Michigan by County



Data Source: School-Community Health Alliance of Michi-

While SBHCs were historically conceptualized to expand services to less advantaged communities, the school-based health model offers promise for a wide range of communities. SBHCs provide an ideal mechanism for both treatment and prevention at an early juncture in people's lives, and efforts should be made to expand this model, including in wealthier areas of the state.

As with many endeavors, some of the major barriers to opening SBHCs are organizational and financial.

SBHCs draw funding from a broad range of sources, such as those common in health care (insurance reimbursements and other patient care revenues), community mental health (patient care revenues and federal/state service grants), public health (general revenue, tobacco tax, and HIV/AIDS prevention, as well as the maternal and child services, family planning, and social services block grants), and education (general revenue, safe and drug free schools, violence prevention, health-related special education services, and other school health appropriations). Additional funding may come from in-kind contributions from partnering organizations, as well as general philanthropic support.

The specific funding breakdown will be specific to each community, and moreover to each individual health center. Before a center is opened, a sustainable menu of funding sources must be identified. Financing will be heavily determined by demand and service utilization vis-à-vis patient care revenues.

Promotion and utilization of school-based health services are contingent upon community buy-in and support, including school boards and administrators, educators, parents, students, and other community members. For this reason, the organizational and strategic challenges to opening a SBHC can sometimes overshadow financial concerns.

There is no singular process or model for opening a school-based health center – the impetus could come from a school, public health agency, health care provider, or other interested party. Successful SBHCs often begin with the formation of a community advisory committee to involve various stakeholders and educate the community about school-based health; this planning phase also enables interested parties to conduct needs assessments, draft operational and marketing

plans, and ultimately identifying a suitable school location (including any remodeling needs). The opening of a SBHC is reliant on collaborative partnerships and the development of memorandums of understanding between the school district, primary medical sponsor, and partner agencies.

Strategic planning, community engagement, and stakeholder management can all be labor intensive throughout the process of opening an SBHC. Leaders in this process might ideally be drawn from school health professionals, like a school social worker, or from staff at local public health departments; however, these are areas that have long been short staffed and under-funded, compounding the challenge of finding individuals to assume the lead in opening new SBHCs.<sup>112</sup>

Given the financial and organizational barriers to opening a SBHC, policies to mitigate financial risk (e.g., SBHC grant or loan programs to provide starting capital), as well as investment in positions for school health professionals and for local public health. The organizational fragmentation between public health, community mental health, and health care services creates additional obstacles, but none that are insurmountable by careful planning and stakeholder engagement.

### Health Care Referrals

Schools can play an integral part in identifying and providing behavioral health care through school mental health professionals and/or school-based health centers.<sup>113</sup> Even with on-site services and health providers, there will be times when school-based health services are not able to fully meet a student's need. At these times, schools should be able to provide referrals to these students for services within the community. Outside services may include mental health professionals that provide more intensive services, individual and group support, and crisis services that are accessible around the clock.

The Substance Abuse and Mental Health Services Administration (SAMHSA) has created a School Mental Health Referral Pathways Toolkit that relies on a prevention-focused, multi-tiered system to help guide the referral process for schools.<sup>114</sup> This toolkit, which several states have adopted, can be utilized by schools to create and/or improve their standardized

process for referrals.

A standardized referral process for mental health services will provide a recognizable and easily followed process for teachers and staff to follow when assisting students with mental health needs. District and state-wide standardization ensure that this process doesn't change as staff and teachers change schools. In order to access these referrals, all teachers and staff at the school must be aware of the referral process and the resources available to students in order to start them on this path. Additionally, the dearth of school counselors, social workers, psychologists, and nurses may hinder the referral process and infrastructure.

In Michigan, under Public Act 211 of 2020, school identifications must contain a crisis/suicide prevention number.<sup>115</sup> This referral to crisis hotlines is intended to give students a place to turn to when they need immediate assistance or support. Additionally, this legislation charges the Department of Health and Human Services (DHHS) with developing or adopting model information materials regarding suicide, depression, and anxiety and suicide prevention services.

Students also can access a number of mental health apps on their own to supplement treatment they are receiving and guide their own support to what they feel they need. Engagement with these types of apps has been shown to have positive effects for those using them, though more in-depth research is needed.<sup>116</sup> As with many mental health services, not all apps will work for an individual and referrals should be made to students in a way that they can find the app that works best for them, such as talking about app options and reviewing the consumer reviews of these services.<sup>117</sup>

### Social Services and Supports

Schools can provide students a variety of other supports that are not specific to mental health, but nonetheless impact mental health and help seeking behaviors. Examples include assistance with food, housing, and other basic necessities, as well as transportation, and language and literacy services.

Much of a person's health and well-being is socially determined, and social services and supports can provide students with the additional support they need to thrive in school and life. These services, such as food assistance, impact mental health in a positive way by reducing stress that a student experiences struggling to obtain necessary resources for daily life. School social workers are ideal facilitators for linking students to external resources and supports.

For children with serious mental illness or emotional disturbance, wraparound services are often planned to meet the needs of the children and their families. According to the Michigan Department of Health and Human Services, wraparound services are an established vehicle for delivery of services and supports to children and families with severe and multiple needs and risks being served by multiple agencies.<sup>118</sup> Wraparound services have been shown to positively impact the schools in which they are active and have improved the effectiveness in assisting students with their emotional, social, and educational needs.<sup>119</sup> They have also been shown to reduce student attrition and improve graduation rates.<sup>120</sup>

A community school model, such as the one pioneered in Flint in partnership with the Charles Stuart Mott Foundation, provides a structural approach to provide students with evidence-based educational and enrichment opportunities, along with nutritional support, physical activity, mindfulness exercises, and personnel to connect students and their families with needed resources.<sup>121</sup> These kinds of strategies can improve schools' effectiveness in serving students with, or at risk of, academic, emotional, and behavioral challenges.<sup>122</sup>



### School Nutrition

Nutrition is a major risk factor for various mental health disorders, such as depression. School nurses, dietitians, and health education specialists may all play a role in educating students about the health benefits of quality nutrition.

Poor nutrition not only affects physical and mental health – it also has a negative impact on student performance. Efforts to teach students about nutrition and health must be matched by schools providing healthy food options in school cafeterias. Yet, for a variety of reasons, and despite decades of scrutiny, many school lunch options remain less than nutritious.<sup>123</sup>

Student health and success would be greatly amplified by collaborative efforts between health professionals, educators, and school cafeterias to teach and reinforce healthy eating.

It is also important to recognize that not all students have equal access to healthy food outside of school. Food insecure students have been found to struggle with school and have increased stressors related to food insecurity that impact their mental health.<sup>124</sup> When schools provide breakfasts and lunches to their students and make many of these meals free for families who need them, they are taking important steps to help students get through the day and focus on learning by lessening their food insecurity.

The foods provided in breakfasts, lunches, and outside food support programs should ideally be healthy options in order to best support students in their nutrition and mental health, since unhealthy food can have an adverse impact on children's health.

There is certainly a difficult balance between student preference and food desirability on the one hand, and nutritional value and health impact on the other. Ultimately, because students develop social and behavioral norms within schools, schools have an opportunity to help students develop healthy behaviors and make healthy food choices. At the very least, schools should ensure that choosing healthy food is the easiest choice for students to make, and that these healthy choices are available to all students regardless of ability to pay.

### Additional Strategies for Improving Behavioral Health in Schools

While behavioral health treatment and interventions provided by trained/licensed providers are indispensable, schools have other mechanisms to further enhance and buffer the mental health of students. These generally include educator and staff training and social interventions to reduce stigma and improve social environments.

#### Educator Training, Social Emotional Learning, and Trauma-informed Practices

Although teachers and staff at schools are in a unique position of interaction with children, many are not provided any sort of training in order to identify and deal with trauma and various mental health issues. Many teachers may feel unprepared to assist their students with mental health concerns and to help in finding resources and supports, as this has not traditionally been a part of educators' education and training. In fact, most educators self-identify a need for more training, such as training in mental health disorders, behavior management, and other specialized skills.<sup>125</sup>

Teachers and school staff should be trained so that they can best guide their students, as well as feel prepared to identify concerns and intervene when needed. Trainings for teachers and staff should ideally include understanding of ACEs and trauma, identification of mental health issues, response to crisis and mental health issues, and referral information to resources and supports, as well as what classrooms and schools can do to assist students in the development of social skills and emotional maturity.

Absent state requirements for training, school districts may elect to identify and implement training opportunities for teachers. For example, Transforming Research into Action to Improve the Lives of Students (TRAILS) offers an evidence-based model developed at the University of Michigan in 2013 that has provided training to mental health providers and school staff in numerous school districts to improve mental health outcomes for students (and staff).<sup>126</sup> Nonetheless, there is statewide inconsistency in the availability and quality of training opportunities for educators.

Social and emotional learning (SEL) is the process of developing important competencies like self-awareness, self-management, social awareness, relationship skills, and responsible decision making – skills that are essential for success in school, work, and life. Michigan has developed SEL competencies to help educators understand the developmental progression of social and emotional skills in children and adolescents, as well as to provide skill-building strategies.<sup>127</sup> While SEL provides immense benefit to educators and has been shown to improve school environment and student emotional and behavioral regulation, implementation remains inconsistent, with a small pilot program for 20 school districts to implement or scale up district-wide SEL.

The lack of clear requirements and standards from either the legislature or Department of Education has created a patchwork approach to behavioral health strategies across Michigan's 891 school districts, with substantial variability sometimes observed even between buildings in the same district. Programs like TRAILS have shown promising results, but the rate of implementation has been outpaced by the incidence of youth mental, emotional, and behavioral health conditions. There are strong arguments that favor local standards and approaches that best meet local needs; however, given the scale of the crisis we face, state leadership may be necessary to accelerate the process of incorporating mental and behavioral health training for educators and school staff.

A teacher's primary role is without question to provide instruction to students, and teachers will never replace trained mental health professionals. Nonetheless, giving teachers the proper skillsets to help their students overcome mental health obstacles to educational success may be an important means for improving quality of instruction. Children once dismissed as problem students might be regarded differently when educators have awareness of trauma in the home and the effect ACEs can have on a child's development and behavior.

### School Arts Programs

Much like the penny-wise, pound-foolish elimination of school health personnel, school art and music programs are common targets when it comes time for budget cuts. While school arts programs may seem like low-hanging fruit to administrators when seeking to reduce expenditures (without engaging the in difficult process of systemic operational and/or budgetary reforms), these cuts have a wide-ranging impact that encompasses not only students' academic success and enrichment, but also emotional and social well-being.

Substantial research has demonstrated an association between school arts and both students' academic achievement and social and emotional development.<sup>128</sup> A large scale, randomized-controlled trial in Houston found that an increase in arts education improved standardized writing scores, reduced disciplinary infractions, and increased student compassion for others.<sup>129</sup> Art and music classes are ideal settings for incorporating SEL.<sup>130</sup>

Approaches to connection between arts and mental health have existed for decades.<sup>131</sup> There are also many evidence-based interventions in art and music therapy proven to reduce stress levels and improve mental health symptoms.<sup>132,133,134,135</sup> The benefits of art and music therapy are not only psychologically based, but also demonstrated from a neurobiological basis.<sup>136</sup>

Schools would be wise to invest in art and music programs to improve student achievement and well-being. State standards guaranteeing greater access to arts education are also needed.

### Destigmatization and School Environment

Many individuals who have a mental health condition face interpersonal and societal stigma, even from family and friends. When people face outdated assumptions that their behavioral health issues are due to personal failings or weaknesses, they tend to internalize a sense of personal blame; in this way, stigma can serve to exacerbate underlying health conditions and make it less likely that people will seek treatment.<sup>137</sup> These outdated societal views can also sometimes lead to discrimination against individuals

who identify as having a mental illness or who seek help for behavioral health conditions.

Some evidence suggests stigma against mental illness is on the rise, and yet there is a dearth of strategies geared towards combating the factors (such as misinformation) that foster the development of stigma.<sup>138</sup>

Combating stigma relies on a variety of approaches, such as having open and honest conversations about mental health, providing education about mental illness, changing language choice surrounding these topics, and empowering people with mental health concerns instead of shaming them.

Schools are in a position to have conversations with students regarding stigmatization and discrimination, to provide education about behavioral health issues, and to foster empathy. Incorporating destigmatization into school environments is, perhaps, the most fundamental way that schools can aid in improving the health of their students and communities. Successful implementation hinges on both educator training and the presence of school health personnel.

Schools can also engage with state, local, and/or non-profit partners to promote mental health and lessen stigma. Anti-stigma interventions in schools have increased positive attitudes about mental illness and tolerance of mental illness.<sup>139</sup> Similarly, programs aimed at mental health education have been shown to improve attitudes towards mental health concerns and seeking help.<sup>140</sup> Social changes in school environment, such as changing the ways that teachers and staff talk about mental health, promoting classroom communication about students' wellbeing, and making sure to combat misinformation, can also provide buffers against the stigmatization of mental health treatment.

Another important facet is the work to create safe and respectful environments in schools that promote positive social interactions between students and their peers (as well as students and staff).<sup>141</sup> While supported by research, it is also self-evident that positive and inclusive school social environments promote better mental health, whereas environments rife with discrimination, bullying, and other forms of victimization are related to negative mental health outcomes (for both perpetrators and victims). Addressing discriminatory attitudes and behaviors within schools is therefore of continued importance.

Participation in school extracurricular activities (when available) is associated with better adjustment of students and more positive attitudes towards school. A specific option geared towards mental health can be the creation of mental health clubs on campus which can empower students to engage in mental health concerns, advocate, and learn coping skills.<sup>142</sup>

Along with the arts, sports are a promising context for efforts to improve and support mental health for students who participate.<sup>143</sup> Moreover, making sure that there is adequate opportunity for voluntary physical activity and movement within the school day should also be considered at all levels. Physical activity decreases depression levels in teens, but it should be recognized that depression symptoms often inhibit motivation for physical activity.<sup>144</sup> For younger children, recess is integral to optimal child development.<sup>145</sup> Small changes to the school day can promote better mental and physical health for students.

Schools can also work towards creating a positive environment in their spaces for students by creating safe spaces for students to go to for support. While sometimes maligned in public discourse, there is ample evidence to support the value of providing students with designated spaces where they can be open and feel comfortable. Safe spaces can encourage students to be open and honest about mental health as well as practice mindfulness and coping skills. Extensive research on such safe spaces revolves around those for the LGBTQ+ community. Robust presence and activity groups geared towards the LGBTQ+ community, as well as a diversity of safe adults, are found to promote better psychosocial well-being and buffer victimization in school.<sup>146,147</sup>

Destigmatization cannot be legislated or created by fiat. Leaders of individual school districts and principals of school buildings must create environments where this is valued and promoted. Perhaps the best way to do so is to expand the number of school nurses, social workers, and other professionals who are capable of engaging in primary prevention and social/behavioral interventions.

## Conclusion

The coronavirus pandemic has drawn increased attention to issues of youth mental health, but child and adolescent mental, emotional, and behavioral health conditions have been on the rise for more than a decade. While the pandemic may have exacerbated the situation, its effect has been primarily to uncover and expose an ongoing epidemic with systemic causes that long predate the advent of COVID-19.

There is no single cause for the increasing number of youth with mental health needs, nor even a simple set of causes; rather, it has come about because of innumerable interwoven social, economic, and political factors. Moreover, given the national scale of the crisis, it may be an issue that cannot be solved entirely through state and local policy. Nonetheless, state and local variability indicate that Michigan has ample room for improvement.

The tragedy that is unfolding is hardly a *fait accompli*; the tides can be shifted with both treatment and prevention. Mental health disorders and substance abuse disorders are both treatable and preventable. Addressing treatment and prevention will require Michigan to examine a wide range of economic, social, and legal structures at the state level and in each community.

A strategy that coordinates health care, public policies, and community-based interventions has the best chance of success for enhancing treatment and prevention in Michigan.

Even though there is no single cause for the increase in mental, emotional, and behavioral challenges facing Michigan's youth, evidence indicates that childhood trauma is a major risk factor for a wide array of health issues, including mental health disorders. Adoption of prevention strategies for adverse childhood experiences (ACEs) in tandem with incorporation of trauma-informed practices in health care, education, and criminal justice settings is essential.

While public health approaches to youth mental health should focus on community health and prevention, managing access to behavioral health care services is equally essential. Sadly, more than a third of Michigan's youth with mental health conditions go untreated. Barriers to treatment (such as provider maldistribution and shortages, structural barriers like cost and transportation, and social barriers like stigma) have been identified in this report and previous research. Increasing access to and utilization of care relies on multifaceted solutions that address the vast array of barriers to treatment.

Perhaps the most promising way to improve youth mental health is through schools. On a practical level, because youth spend much of their time in school, collocation of health services increases access by removing many of the structural barriers that can often prevent treatment. Moreover, because schools are places of learning and social development, they are prime settings to increase health literacy among children and adolescents, to mount interventions that reduce stigma and bias, and to normalize the process of seeking care for a wide range of health issues, including mental, emotional, and behavioral health concerns.

Michigan has long had among the lowest proportions of school nurses, counselors, social workers, and psychologists. These school health professionals perform essential roles, addressing the needs of individual students and whole buildings/communities alike. They are also vital for providing referrals to services and resources not provided within schools, and for designing and implementing school wide interventions to ensure schools are safe and welcoming for all students and community members. Recognizing the value school health professionals provide and investing accordingly will be essential to improve the health of our youth and stem the tide of a growing mental health crisis that will surely follow youth into adulthood.



A complementary but often overlooked approach is the school-based health center. These centers do not replace the need for school nurses or social workers; rather, they provide a location for complete primary care services – often in communities where health care access is limited – and complement the work performed by school health personnel (enabling the latter to focus more on prevention and population health while offering a valuable treatment provider to which students and their families may be referred). While school-based health centers have traditionally focused on low-income communities, they provide a tested and proven model that could improve the health of all youth in all communities.

While there are no simple solutions to the growing youth mental health crisis Michigan faces, the costs of inaction will be massive. Mental health disorders, especially when left untreated, can follow children throughout their lives, negatively impacting academic and occupational outcomes, and causing extensive disability, morbidity, and, eventually, mortality. Michigan has made small investments to address these issues over the past two years, but such incremental policy shifts (while typical and expected) are inadequate in the face of an epidemic. Bold actions are needed to safeguard the social, emotional (and economic) well-being of our state, now and into the future.

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