Van Buren Community Mental Health Authority Ends Monitoring Report October 2021

SUBJECT: Suicide Rate will Decrease

• The suicide rate in Van Buren County will decrease.

CEO Interpretation:

The Board of Directors desires that VBCMH take actions to prevent the tragedy of suicide in the county.

Monitoring report

The VBCMH Board adopted the end of the suicide rate will decrease in 2009.

Trends

Michigan rates have increased over time since 1999 for every age level. In Van Buren County, the five-year moving average over the years we have tracked and tried to impact has both gone up and down. In last year's report we were able to note non overlapping five-year periods that showed a decrease. However, the most recent data including the years from 2015-2019 demonstrate an increase to 14.0 per 100,000 population compared with the non-overlapping five-year average of years 2010-2014 when it was 10.4 per 100,000. Comparing these five-year periods, the averages increased for those ages 25 to 74, and for those 75 years and older; and decreased slightly for those under age 25. (The chart listing the five-year moving averages is attached as the last two pages of this report.) VBCMH along with community partners through the Van Buren Suicide Prevention Coalition and throughout the state of Michigan continue to increase and work to improve our suicide prevention efforts.

The coalescence of COVID-19, economic uncertainties, and social unrest, have greatly increased national concern about the impact of this year's events on people's mental health, including suicidality. Statistical data lags behind real time but there have been some national reports indicating an increase in the occurrence of mental health problems.

Information from the Centers for Disease Control (CDC) August 2020 report was shared in last year's Board Report. The report was based on information from over 6000 surveys that were completed online by people during the summer of 2020. According to the report, younger adults, racial/ethnic minorities, essential workers and unpaid adult caregivers reported having experienced disproportionately worse mental health outcomes, including substance use and elevated suicidal ideation. The report states "Elevated levels of adverse mental health conditions, substance use, and suicidal ideation were reported by adults in the United States in June 2020. The prevalence of symptoms of anxiety disorder was approximately three times those reported in the second quarter of 2019 (25.5% versus 8.1%), and prevalence of depressive disorder was approximately four times that reported in the second quarter of 2019 (24.3% versus 6.5%)."

A 2021 report released from Mental Health America (mhanational.org) showed similar results. This report included a focus on the impact of COVID-19 on mental health based on over 1.5 million people who took an online mental health screening from January to September 2020. The report provides the following key findings:

- The number of people screening with moderate to severe symptoms of depression and anxiety increased throughout 2020 and was higher than rates prior to COVID-19. There was a 93% increase over the 2019 total number of anxiety screens, and a 62% increase over the 2019 total number of depression screens.
- More people reported frequent thoughts of suicide and self-harm than ever recorded in the MHA screening program since launching in 2014.
- Youth mental health is worsening. 2020 data compared to the same time period in 2019 showed an increase in the percentage of youth reporting symptoms of severe major depression (9.7% vs. 9.2%); for multi-race youth, the 2020 percentage was 12.4%.
- Rates of suicidal ideation are highest among youth, especially LGBTQ+ youth. In September 2020, over half of the 11 to 17 year olds reported having thoughts of suicide or self-harm more than half or nearly every day of the previous two weeks.
- People screening at risk for mental health conditions are struggling most with loneliness or isolation – 70% reported this as one of the top three things contributing to their mental health concerns. The other top two things reported were past trauma (46%) and relationship problems (43%). Coronavirus and current events were both reported 27% by screeners.
- While rates of anxiety, depression and suicidal ideation are increasing for people of all races and ethnicities there are notable differences: Black/African American screeners have had the highest average percent change over time for anxiety and depression; Native American/ American Indian screeners have had the highest average percent change over time for suicidal ideation.

Another report by the CDC released in February 2021 examined suicide related data reflecting changes prior to 2020. This reports details changes in suicide rates among different demographic groups over time. Overall, prior to 2019, there were 13 consecutive years of overall rate increases – a 33% increase from 1999 to 2019. However from 2018 to 2019, there was an overall suicide rate decline for the first time in over a decade; the overall rate decreased by 2.1%. A deeper look at the data shows significant declines occurring in 5 states; some states had significant increases, while more state did not have significant changes, including Michigan.

The report also states: "Past research indicates suicide rates remain stable or declined during infrastructure disruption like natural disasters, only to rise afterwards as the longer-term sequalae unfold in persons, families, and communities. Strategies are all the more relevant in the midst of the COVID-19 pandemic and include those focused on strengthening economic supports, expanding access to and delivery of care (e.g. telehealth), promoting social connectedness, creating protective environments including coping and problem-solving skills, identifying and supporting persons at risk and lessening harms and preventing future risk (e.g. safe media reporting on suicide)."

At the state level, a new Michigan Suicide Prevention Commission was formed in 2020. The Commission, with a membership from a broad range of representatives from the public and private sector and across various regions of Michigan, released an initial report in March 2021. https://www.michigan.gov/documents/coronavirus/Suicide Prevention Commission Initial Report Final D raft 719896 7.pdf The report identifies five priority areas with specific recommendations and examples of possible strategies by population: everyone, educators, healthcare settings, and state agencies.

Priority #1 Minimizing risk for suicidal behavior by promoting safe environments, resiliency, and connectedness.

- Reducing Access to Lethal Means Among Individuals with Identified Suicide Risk
- Building Community Connectedness and Resilience

- Incorporating Social-Emotional Learning (SEL) into Schools
- Postvention as Prevention

Priority #2: Increasing and expanding access to care to support those at risk for suicide

- Standard of care recommendations
- Strengthening Access and Delivery
- Workplace Suicide Prevention
- Telehealth and Telemedicine Options
- Crisis Lines
- Exploring and Possibly Expanding use of Peer Supports including Suicide Survivors

Priority #3: Improving suicide prevention training and education

- Ensure High Quality Suicide Recognition and Referral Trainings are Available
- Incorporate Suicide Prevention Training in Schools
- Suicide Prevention Education for Health Professionals
- Suicide Prevention Commission Requirements for Licensure

Priority #4: Implementing suicide prevention best practices in healthcare settings

- Incorporate suicide prevention into primary care
- Standardize suicide risk assessment and management
- Improve care transitions
- Zero Suicide

Priority #5: Enhancing suicide specific data collection and data systems

- Develop a statewide suicide prevention office
- Building new and expanding current data systems
- Standardizing and expanding capacity for investigating and reporting suicide deaths
- Ongoing research and evaluation
- Machine learning and artificial intelligence
- Suicide Death Review Teams

The federal Substance Abuse and Mental Health Services Agency (SAMHSA) in its <u>National Strategy</u> <u>for Suicide Prevention</u> (National Strategy) does warn that "local suicide rates, due to the significant fluctuations that occur in small populations, are often not useful in evaluating the effectiveness of suicide prevention programs, in the short run." **Thus, an examination of the means, or processes employed to reduce the rate of suicide may be the closest proxy measure for monitoring of this Board End**.

The Center for Disease Control (CDC) recommends a public health approach to suicide prevention that involves healthcare, employers, education, public health, business, government and other community organizations to work together to prevent suicide. Guidelines include:

- Identify and support people at risk of suicide.
- Teach coping and problem-solving skills to help people manage challenges with their relationships, jobs, health, or other concerns.
- Promote safe and supportive environments. This includes safely storing medications and firearms to reduce access among people at risk.

- Offer activities that bring people together, so they feel connected and not alone.
- Connect people at risk to effective and coordinated mental and physical healthcare.
- Expand options for temporary help for those struggling to make ends meet.
- Prevent future risk of suicide among those who have lost a friend or loved one to suicide.

Since the adoption of the End statement in 2009, VBCMH successfully implemented a 2.5-year communitywide Youth Suicide Prevention grant that ended September 30, 2012. The grant funding allowed VBCMH to form a community coalition to work on youth suicide prevention and gain expertise in this area. With the end of the grant, the coalition decided it wanted to continue on and to include all age groups in the community's efforts to utilize the public health approach to prevent suicide. The grant coordinator designated as the VBCMH Suicide Prevention Coordinator remains with VBCMH and active in this role. The Coalition has continued to grow.

Van Buren Suicide Prevention Coalition is coordinated by VBCMH Program Supervisor, Becky Fatzinger, and its members include those who attend meetings as well as people who have requested to be on the email list but are unable to attend meetings. Preventing suicide involves everyone in the community. The Coalition is a broad-based group which has grown to over 230 people on the email list. Coalition members represent local schools, private and public human service agencies, Family Court, the faith community, law enforcement, and people who have directly experienced loss related to suicide. Coalition members are regularly sent nationally developed materials of interest, links to free webinars, as well as information on local suicide prevention efforts. A Facebook page for the Coalition is also used frequently to communicate information.

The Coalition completed the Van Buren County Suicide Prevention Plan early in 2011 and continues to review and update it periodically. The plan continues to guide the work of the Coalition and addresses prevention for all age groups. It has been widely distributed to the Coalition and human services agencies and schools. The newly formed Michigan Suicide Prevention Coalition is working on an updated State Prevention Plan. Once this Plan is released, the Van Buren County Coalition will review and update its' own plan to integrate the state's recommendations.

The Van Buren Suicide Prevention Coalition focuses on raising awareness about suicide and suicide prevention; reducing stigma associated with mental health and substance abuse treatment; building leadership among adults and youth in community-based suicide prevention efforts; identifying people at risk of mental health problems and referring and linking them to appropriate community resources; and identifying and strengthening protective factors that reduce or mitigate mental health problems. Recent research, best practices and guidelines are routinely presented and shared with coalition members.

After the start of COVID, there was a state suicide prevention coalition formed, which has met virtually several times. Several Van Buren coalition members have participated in the state coalition. There has been a big increase in the number of virtual trainings available to professionals and others regarding suicide prevention and other mental health concerns. Most of these opportunities have been at no cost, and information about these offerings were regularly shared with Coalition members.

In 2012, VBCMH began training staff throughout the agency on the impacts and treatment of trauma. The Adverse Childhood Experiences (ACE) study conducted over a ten-year period and involving more than 17,000 people looked at effects of adverse childhood experiences (trauma) over the lifespan. The ACE Study revealed a powerful relationship between our experiences as children and our physical and mental health as adults.

People enrolled in the Kaiser Permanente health plan were asked ten questions related to the following adverse childhood experiences.

- > Physical, emotional and/or sexual abuse
- > Neglect or abandonment
- > Divorce/loss of contact with parent
- > Alcoholism or drug addiction in the family
- > Family violence
- > Poverty, homelessness, lack of food and basic needs
- > Family member in prison
- > Family member with mental illness

These experiences raise the individual's risk for severe emotional distress, suicide, physical illness, substance abuse and a host of other life difficulties. An adult who had experienced 4 of the adverse childhood experiences had a 1200% increase in attempted suicide when compared with those adults who had none of these experiences. "The ACE Study found that between 66% and 80% of all attempted suicides could be attributed to adverse childhood experiences." (http://www.liftchildren.org/show_page.asp?page_id=1)

VBCMH has trained our staff and partner agency staff (including Van Buren Department of Health and Human Services (DHHS), courts, and school personnel throughout the county) in the impact of trauma and importance of a trauma informed approach.

The VBCMH focus on treating trauma and working with community partners to reduce the occurrence of trauma and its impact are important ongoing pieces of our community's suicide prevention plan as these actions.

VBCMH is actively engaged in many activities that align with the priority areas identified by the State Suicide Prevention Commission and consistent with the National Strategy for Suicide Prevention and CDC Guidelines. Here is a summary of some of those activities

• <u>Minimizing Risk for Suicidal Behavior by promoting safe environments, resiliency and connectedness:</u>

 <u>Critical Incident Stress Management (CISM</u>): a debriefing model used by trained staff after a critical incident that impacts a group of people. Debriefings can occur after different incidents but are often used after an unexpected death, including suicides. Critical stress debriefings are an important Suicide Postvention intervention. Postvention is a critical component of suicide prevention, as research indicates those exposed to suicide (directly and sometimes indirectly) can experience an increase in distress and mental health symptoms, including an increased risk for suicide. Nonsuicidal traumatic events can also exacerbate mental health problems, including increasing suicide risk. Postvention activities help to reduce this risk by facilitating healing and mitigating other negative effects after exposure to suicide and identifying those who may need additional support or intervention. VBCMH has a total of 25 staff trained in the CISM model. The VBCMH team is part of a broader community team led by VBISD that respond to schools, work sites and other organizations as requested after a crisis.

 <u>Reducing Access to Lethal Means</u>: During FY21, 7844 opioid education flyers (including Red Med Box and Secure your Med) were distributed. The Secure Your Meds flyer includes contact information for the Suicide Prevention Lifeline and Crisis Text Line. Safely securing medication is an important part of reducing access to lethal means.

Thirteen people were trained in Naloxone (Narcan) in FY 21. Narcan kits were provided to those trained. Naloxone is used to treat a narcotic overdose in an emergency situation by blocking or reversing the effects of opioid medication, including extreme drowsiness, slowed breathing, or loss of consciousness. Recent research indicates there is a strong correlation between opioid misuse and suicidality. Often, it is unknown if the overdose was accidental, purposeful and/or related to an overwhelming sense of hopelessness about the future. First responders in Van Buren County have been trained through SWMBH for several years, including training internal trainers, with approximately 148 kits currently being carried by local law enforcement (not including Michigan State Police). There are 11 officers in Van Buren County who have trained as in-house trainers for their own agencies. In previous years, external trainers were brought in and provided Narcan training to groups of 25 or more. Internal staff are now trained to provide Narcan training.

Drug overdose deaths in the US worsened during the COVID-19 pandemic, hitting a record high death in 2020 and have stayed at elevated levels through the end of 2020. Synthetic opioids were involved in more than 60% of all overdose deaths.

- Increasing and expanding access to care:
 - The <u>Youth Intervention Screening</u> program began in 2017. This comprehensive screening program targets early identification of youth who may be at risk of involvement in the juvenile justice system. Project staff work closely with court, local schools and other organizations to identify youth who may benefit. The screening includes a brief mental health screen, trauma screening, and a CAFAS (Child and Adolescent Functional Assessment Scale). Youth are referred to appropriate services and resources ad indicated by the results of the screening. Since the start of the COVID pandemic, referrals for the screening have dropped off dramatically. Typically, many referrals come from school staff. The project has adapted to offer virtual screenings, as well as socially distanced screenings at agency sites or outside at consumers' homes. We continue to promote and encourage referral sources to make referrals.

Thus far this fiscal year, we received 63 referrals for screening; 52 youth have been screened. Forty-three received referrals to mental health service and 9 received referrals to non-mental health services/supports.

 <u>Telehealth options</u>: Telehealth options have exploded because of COVID-19 restrictions. Telehealth continues to be offered and is a vital part of service delivery. It will continue to be offered as an alternative in person services, allowing for greater access to those seeking services.

- <u>VBCMH flyer</u>: Early in the days of COVID, recognizing the likely need for additional mental health supports, VBCMH created a flyer with contact information for various crisis support resources, including VBCMH crisis line. This flyer has periodically been updated and has been distributed widely among our community partners to be shared with clients and customers several times.
- "<u>How Stress and Trauma Affect Your Health</u>" and "<u>Suicide Prevention Coalition</u>" brochures were distributed at the Grape Lake 5K in September 2021 (600 copies), and will be distributed at the Veterans Stand Down event in October. Both brochures include contact information for assistance.
- <u>Project AWARE</u>: this new project is a collaboration between VBCMH and VBISD, funded through a SAMSHA grant that was awarded to MDHHS. The 5 year grant is focused on improving the system of care for children experiencing mental health distress, through improved identification of children needing services, training of adults caring for children in suicide prevention and other mental health topics, training educators in social emotional learning, increasing school mental health supports (provided by the ISD), and identifying barriers and gaps in service delivery across systems.
- Improving suicide prevention training and education:
 - Question, Persuade and Refer (QPR) Suicide Gatekeeper training: This national evidence-based model focuses on teaching lay people to recognize the warning signs of suicide, know how to offer hope, and how to refer someone to help. The training is conducted by a CMH master's level therapist. Typically, trainings are done in person, face to face with participants. The National QPR Institute approved virtual gatekeeper trainings in the late spring of 2020. VBCMH began offering virtual QPR trainings in June 2020. Nineteen virtual trainings have been completed since then, with a total of 245 people trained virtually thus far (146 during this fiscal year thus far). Another training is scheduled for 9/30/21 for volunteers with the Victims Advocate Services program. Others who have been trained over the last 18 months include community members, staff from VBCMH, InterCare Community Health (behavioral health staff), Domestic Violence Coalition, VBSID, local school districts, Area Agency in Aging, Head Start, local churches, specialty courts and a staff person from Rep. Upton's office.

Since 2010, approximately 764 adults and 244 youth have been trained in QPR.

 <u>Assessing and Managing Suicide Risk (AMSR)</u>: this well research evidence-based training is for professionals working with customers who have suicide risk. The model provides guidance on best clinical interventions when working with those at risk. In 2010, VBCMH sponsored an AMSR training in which approximately 45 VBCMH staff were trained. In October 2021, VBCMH has arranged for virtually training of another 44 VBMCH staff in our continued efforts to strengthen suicide care for our clients. With some training spots available, we invited our partners at VBISD to include nine of their master level social work staff to attend. This training is provided through a MDHHS grant. <u>Trauma Focused Cognitive Behavioral Therapy</u>: This evidenced based model for children includes three primary components – screening for trauma, trauma treatment, and trauma informed parent/caregiver education (provided through group education). The ACES study revealed the increased risks across many health domains that trauma has on those experiencing childhood trauma, including an increased for suicide later in life. Appropriate treatment can help ameliorate those negative impacts of trauma, including reducing suicide risk.

VBCMH first began training staff in this model in 2013 through a state sponsored training initiative. Thus far, VBCMH has participated in 6 state-sponsored learning collaboratives, with the most recent concluding in August 2021. Currently, all children assessed at VBCMH have a competed trauma screen, which helps inform treatment; 13 current staff are trained in the therapy portion of the model; and 12 staff are trained as parent/caregiver educators.

- <u>Mental Health First Aid Train the Trainer</u>: one current VBCMH staff person is trained as a trainer in Mental Health First Aid (MHFA), which focuses on interactions with adults with mental health concerns or who are in crisis. Trainings are offered free to interested community members.
- <u>Suicide Risk Safety Planning</u>: In 2019, 41 VBCMH staff participated in a training provided by Dr. Lia Gaggino, former System Director for Behavioral Health at Bronson, on use of a nationally accepted Suicide Safety Planning process that is recommended by the Suicide Prevention Resource Center (SPRC), National Suicide Prevention Lifeline and the Veterans Administration.
- <u>Promotion of the Crisis Text Line</u>, a free 24/7 support for those in crisis. Text HAND to 741741 connects the texter with a trained crisis counselor. The use of the specific keyword HAND came about through the work of the Health Subcommittee of the Human Services Collaborative Council. Use of this keyword allows access to data specific to our area that may be potentially useful in better understanding local and regional needs and concerns of those in crisis.
- <u>Teen Resource Cards and Posters</u> developed by VBISD Technology Center students. Over 2,000 have been broadly distributed throughout the county over the last several years.

Conclusion

The National Suicide Prevention Plan notes that "suicide will not be reduced through implementation of short term, one-time efforts. Suicide prevention efforts are more effective when programs are long-term, with repeated opportunities to reinforce targeted attitudes, behaviors, and skills in settings where people normally spend their time: schools, community events, faith communities, and the workplace."

The guidelines presented in the CDC's report articulate the importance of suicide prevention from a public health approach. Commitment, cooperation, and leadership from numerous sectors, including mental health, public health, education, justice, health care, social services, business, labor, and government can bring about the successful implementation of these recommended guidelines.

The Institute of Medicine has found that spending in suicide prevention nationally is disproportionately low, given the magnitude of the problem. "A substantial investment of funds is needed to make meaningful progress."

Although many effective strategies have been launched, much remains to be done. The budget for VBCMH for 2022 fiscal year retains the ongoing work of the Suicide Prevention coordinator and the efforts of VBCMH discussed in this report.

The Board is asked to deliberate the questions asked when an Ends report is given

- 1. Is the interpretation by the CEO reasonable?
- 2. Is the evidence relevant and compelling?
- 3. Does this information lead the Board to believe they need to refine their Ends?

Intentional Self-Harm (Suicide) Deaths and Death Rates Michigan Residents, 1989-2019 Five Year Moving Averages

	All Ages		Age Under 25		Age	25 - 74	Age 75 and Older			
Year	Average	Age-Adjusted Rate	Average	Age-Specific Rate	Average	Age-Specific Rate	Average	Age-Specific Rate		
2015-2019	1,438.4	14.0 ±0.3	216.4	6.9 ±0.4	1,102.0	18.0 ±0.5	120.0	17.3 ±1.4		
2014-2018	1,413.0	13.8 ±0.3	217.8	6.9 ±0.4	1,082.4	17.8 ±0.5	112.8	16.6 ±1.4		
2013-2017	1,362.8	13.4 ±0.3	206.8	6.5 ±0.4	1,049.2	17.3 ±0.5	106.8	16.0 ±1.4		
2012-2016	1,332.8	13.1 ±0.3	204.8	6.3 ±0.4	1,024.4	17.0 ±0.5	103.6	15.8 ±1.4		
2011-2015	1,301.8	12.9 ±0.3	195.0	6.0 ±0.4	1,005.0	16.8 ±0.5	101.8	15.6 ±1.4		
2010-2014	1,275.2	12.6 ±0.3	190.4	5.8 ±0.4	986.8	16.5 ±0.5	98.0	15.2 ±1.3		
2009-2013	1,239.2	12.3 ±0.3	176.8	5.4 ±0.4	965.6	16.2 ±0.5	96.8	15.1 ±1.3		
2008-2012	1,214.6	12.0 ±0.3	166.6	5.0 ±0.3	955.6	16.1 ±0.5	92.4	14.5 ±1.3		
2007-2011	1,188.2	11.8 ±0.3	154.4	4.6 ±0.3	943.0	15.9 ±0.5	90.8	14.3 ±1.3		
2006-2010	1,171.4	11.6 ±0.3	145.2	4.3 ±0.3	938.0	15.8 ±0.5	88.2	14.0 ±1.3		
2005-2009	1,139.0	11.2 ±0.3	137.2	4.0 ±0.3	914.0	15.4 ±0.4	87.8	14.0 ±1.3		
2004-2008	1,125.4	11.1 ±0.3	138.8	4.0 ±0.3	902.2	15.2 ±0.4	84.4	13.5 ±1.3		
2003-2007	1,094.4	10.8 ±0.3	136.0	3.9 ±0.3	878.2	14.9 ±0.4	80.2	12.9 ±1.3		
2002-2006	1,088.8	10.8 ±0.3	138.6	3.9 ±0.3	867.8	14.7 ±0.4	82.4	13.4 ±1.3		
2001-2005	1,071.4	10.7 ±0.3	142.2	4.0 ±0.3	847.8	14.4 ±0.4	81.4	13.5 ±1.3		
2000-2004	1,045.8	10.4 ±0.3	141.4	4.0 ±0.3	821.4	14.0 ±0.4	83.0	13.9 ±1.3		
1999-2003	1,020.4	10.2 ±0.3	141.6	4.0 ±0.3	795.2	13.6 ±0.4	83.6	14.2 ±1.4		
Note: The manner in which underlying cause of death is coded and classified was revised in 1999 to reflect changing medical opinion and practice. The comparability between classification schemes for this particular cause of death is high (1.00), meaning that the change should have little or no impact on the comparisons of mortality statistics over time.										
1998-2002	1,009.8 10.2 ±0.3 144.4 4.1 ±0.3 772.8 13.3 ±0.4 92.6 16.0			16.0 ±1.5						
1997-2001	991.4	10.1 ±0.3	148.6	4.2 ±0.3	750.2	12.9 ±0.4	92.6	16.3 ±1.5		
1996-2000	1,003.8	10.2 ±0.3	153.4	4.4 ±0.3	752.8	13.0 ±0.4	97.6	17.5 ±1.6		
1995-1999	1,002.6	10.3 ±0.3	157.4	4.5 ±0.3	750.8	13.1 ±0.4	94.4	17.3 ±1.6		
1994-1998	1,013.2	10.5 ±0.3	168.4	4.8 ±0.3	747.0	13.1 ±0.4	97.8	18.3 ±1.6		
1993-1997	1,035.8	10.8 ±0.3	176.6	5.1 ±0.3	762.8	13.5 ±0.4	96.4	18.5 ±1.7		
1992-1996	1,047.8	11.0 ±0.3	179.6	5.1 ±0.3	772.6	13.8 ±0.4	95.6	18.8 ±1.7		
1991-1995	1,054.2	11.2 ±0.3	183.8	5.3 ±0.3	772.0	13.9 ±0.4	98.2	19.9 ±1.8		
1990-1994	1,074.0	11.5 ±0.3	188.0	5.4 ±0.3	780.2	14.2 ±0.4	105.6	21.9 ±1.9		
1989-1993	1,078.2	11.6 ±0.3	188.0	5.4 ±0.3	786.4	14.4 ±0.5	103.6	22.1 ±1.9		
1988-1992	1,080.0	11.8 ±0.3	192.6	5.5 ±0.3	782.2	14.5 ±0.5	105.0	23.1 ±2.0		
1987-1991	1,084.2	11.9 ±0.3	198.0	5.7 ±0.4	784.6	14.7 ±0.5	101.4	22.9 ±2.0		
1986-1990	1,080.2	11.9 ±0.3	200.8	5.7 ±0.4	781.2	14.8 ±0.5	98.2	22.8 ±2.0		
1985-1989	1,084.2	12.0 ±0.3	209.4	5.9 ±0.4	781.6	15.0 ±0.5	93.2	22.1 ±2.0		
1984-1988	1,103.4	12.4 ±0.3	214.2	6.0 ±0.4	796.8	15.5 ±0.5	92.4	22.4 ±2.0		
1983-1987	1,102.8	12.5 ±0.3	216.4	6.0 ±0.4	800.2	15.7 ±0.5	86.2	21.4 ±2.0		
1982-1986	1,106.6	12.6 ±0.3	217.8	5.9 ±0.4	804.2	16.0 ±0.5	84.6	21.5 ±2.0		
1981-1985	1,097.6	12.5 ±0.3	221.0	5.9 ±0.3	800.8	16.1 ±0.5	75.8	19.7 ±2.0		

Notes:

The underlying cause of death is the condition giving rise to the chain of events leading to death. Between January 1, 1979 and December 31, 1998, the underlying causes of death were classified in accordance with the Ninth Revision of the International Classification of Diseases (ICD-9), a coding structure developed by the <u>World Health</u> <u>Organization</u>. Starting January 1, 1999, causes of death were classified using the Tenth Revision of the International Classification of Diseases (ICD-10). With each revision there are differences in classifying the underlying cause of death. Therefore, health statistics based on one revision are not directly comparable to the other revision without the use of <u>comparability ratios</u>.

Intentional Self-harm (Suicide) Deaths: Before 1999, deaths were classified with ICD-9 codes E950-E599. Starting in 1999, deaths were classified using ICD-10 codes *U03,X60-X84,Y87.0.

Intentional Self-harm (Suicide) Death Rates: Rates are per 100,000. Computed by the direct method, using as the standard population the age distribution of the total population of the United States for the year 2000. The true rate lies between the lower and upper bounds of the interval with 95% statistical confidence. If the confidence interval is large for a single year comparison, it is suggested that you use the three year and five year moving average rates.

Source: 1989 - 2019 Michigan Resident Death Files, Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services, Population Estimate (latest update 7/2020), National Center for Health Statistics, <u>U.S. Census Populations With Bridged Race Categories</u>

Date Updated: April 27, 2021

https://www.mdch.state.mi.us/osr/chi/cri/frame.html

Five-Year Moving Averages										
	A	II Ages	Age	Under 25	Age 25 - 74		Age 75 and Older			
Year	Average	Age-Adjusted Rate	Average	Age-Specific Rate	Average	Age-Specific Rate	Average	Age-Specific Rate		
2015-2019	14.0	18.0 ±4.4	0.8	*	11.0	23.6 ±6.2	2.2	42.6 ±25.2		
2014-2018	13.6	17.1 ±4.3	1.0	*	11.2	24.2 ±6.3	1.4	27.9 ±20.6		
2013-2017	10.6	13.7 ±3.8	0.8	*	9.0	19.5 ±5.7	0.8	*		
2012-2016	10.2	13.5 ±3.8	0.8	*	8.6	18.6 ±5.6	0.8	*		
2011-2015	10.8	13.6 ±3.8	1.2	4.9 ±3.9	8.8	19.1 ±5.6	0.8	*		
2010-2014	10.4	13.4 ±3.8	1.4	5.7 ±4.2	8.2	17.8 ±5.4	0.8	*		
2009-2013	10.8	13.8 ±3.8	1.2	4.8 ±3.8	8.8	19.0 ±5.6	0.8	*		
2008-2012	11.8	15.4 ±4.0	1.4	5.5 ±4.1	9.2	19.9 ±5.8	1.2	26.3 ±21.0		
2007-2011	12.0	15.6 ±4.0	1.0	*	9.8	21.2 ±5.9	1.2	26.5 ±21.2		
2006-2010	11.0	14.1 ±3.8	0.6	*	9.4	20.3 ±5.8	1.0	*		
2005-2009	11.4	14.4 ±3.8	0.6	*	9.6	20.8 ±5.9	1.2	26.9 ±21.5		
2004-2008	11.0	14.2 ±3.8	1.0	*	8.8	19.1 ±5.6	1.2	27.1 ±21.6		
2003-2007	10.6	13.8 ±3.8	1.0	*	9.0	19.6 ±5.7	0.6	*		
2002-2006	11.4	15.0 ±3.9	2.2	8.2 ±4.8	8.6	18.8 ±5.6	0.6	*		
2001-2005	11.6	15.4 ±4.0	2.8	10.3 ±5.4	8.2	18.1 ±5.5	0.6	*		
2000-2004	10.2	13.8 ±3.8	2.4	8.8 ±5.0	7.6	16.8 ±5.4	0.2	*		
1999-2003	9.4	12.7 ±3.6	2.0	7.3 ±4.5	6.6	14.7 ±5.0	0.8	*		
Note: The manner in which underlying cause of death is coded and classified was revised in 1999 to reflect changing medical opinion and practice. The comparability between classification schemes for this particular cause of death is high (1.00), meaning that the change should have little or no impact on the comparisons of mortality statistics over time.										
1998-2002	8.8	11.9 ±3.5	1.8	6.6 ±4.3	6.2	13.9 ±4.9	0.8	*		
1997-2001	7.4	10.0 ±3.2	0.8	*	5.4	12.2 ±4.6	1.2	28.1 ±22.5		
1996-2000	7.6	10.3 ±3.3	0.2	*	5.8	13.1 ±4.8	1.6	37.7 ±26.1		
1995-1999	7.0	9.6 ±3.2	0.2	*	4.8	10.9 ±4.4	2.0	47.5 ±29.5		
1994-1998	7.4	10.2 ±3.3	1.0	*	5.0	11.5 ±4.5	1.4	33.5 ±24.8		
1993-1997	8.2	11.4 ±3.5	1.2	4.4 ±3.5	5.6	13.0 ±4.8	1.4	33.8 ±25.0		
1992-1996	7.4	10.4 ±3.4	1.0	*	5.6	13.1 ±4.9	0.8	*		
1991-1995	7.4	10.4 ±3.4	1.2	4.5 ±3.6	5.6	13.3 ±4.9	0.6	*		
1990-1994	8.4	12.1 ±3.7	1.4	5.2 ±3.9	6.2	15.0 ±5.3	0.8	*		
1989-1993	8.8	12.9 ±3.8	1.0	*	6.8	16.7 ±5.6	1.0	*		
1988-1992	8.8	13.0 ±3.9	0.8	*	6.6	16.5 ±5.6	1.4	36.1 ±26.8		
1987-1991	9.4	13.9 ±4.0	1.2	4.6 ±3.7	6.6	16.8 ±5.7	1.6	42.1 ±29.2		
1986-1990	8.6	12.9 ±3.9	1.2	4.6 ±3.7	6.0	15.5 ±5.5	1.4	37.6 ±27.9		
1985-1989	9.0	13.4 ±4.0	1.4	5.4 ±4.0	6.8	17.9 ±6.0	0.8	*		
1984-1988	10.6	15.9 ±4.3	2.4	9.2 ±5.2	7.0	18.7 ±6.2	1.2	33.4 ±26.7		
1983-1987	10.8	16.5 ±4.5	3.0	11.4 ±5.8	6.6	17.9 ±6.1	1.2	33.7 ±27.0		
1982-1986	11.8	18.5 ±4.8	3.0	11.2 ±5.7	7.8	21.3 ±6.7	1.0	*		

Intentional Self-harm (Suicide) Deaths and Death Rates Van Buren County Residents, 1989-2019

	1981-1985	13.6	21.8 ±5.3	3.4	12.5 ±5.9	9.2	25.4 ±7.3	1.0	*
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Notes:

The underlying cause of death is the condition giving rise to the chain of events leading to death. Between January 1, 1979 and December 31, 1998, the underlying causes of death were classified in accordance with the Ninth Revision of the International Classification of Diseases (ICD-9), a coding structure developed by the <u>World Health</u> <u>Organization</u>. Starting January 1, 1999, causes of death were classified using the Tenth Revision of the International Classification of Diseases (ICD-10). With each revision there are differences in classifying the underlying cause of death. Therefore, health statistics based on one revision are not directly comparable to the other revision without the use of <u>comparability ratios</u>.

Intentional Self-harm (Suicide) Deaths: Before 1999, deaths were classified with ICD-9 codes E950-E599. Starting in 1999, deaths were classified using ICD-10 codes *U03,X60-X84,Y87.0.

Intentional Self-harm (Suicide) Death Rates: Rates are per 100,000. Computed by the direct method, using as the standard population the age distribution of the total population of the United States for the year 2000. The true rate lies between the lower and upper bounds of the interval with 95% statistical confidence. If the confidence interval is large for a single year comparison, it is suggested that you use the three year and five year moving average rates.

Geocoded Residence: Between 2000 and 2019, the residence reported on the death certificate was recoded by geocoding the decedents' reported addresses of residence. As a result, counts of deaths by county may differ from previously published figures.

Source: 1989 - 2019 Michigan Resident Death Files. Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services, Population Estimate (latest update 7/2020), National Center for Health Statistics, <u>U.S. Census Populations With Bridged Race Categories</u>

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https://www.mdch.state.mi.us/osr/chi/cri/frame.html