Michigan Association for Suicide Prevention

Suicide Prevention Plan for Michigan Evaluation

May 1, 2012

Developed in consultation with

September 2011 – May 2012

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Six years into the implementation of *The Suicide Prevention Plan for Michigan,* we had two statewide surveys completed and were attempting to assess the implementation successes, identify the gaps, and make recommendations for moving the plan forward. We realized after a period of time that our work was lacking concrete data with which to make our recommendations. In November 2011 the Michigan Association for Suicide Prevention commissioned ReFocus, L.L.C. to conduct a data based evaluation of the plan. This document is the result of this effort.

In 2011, Jack Calhoun of Refocus, L.L.C., worked with Cheryl King, PhD and Cindy Ewell Foster, PhD at the University of Michigan Depression Center to develop a plan for completing an evaluation of *The Suicide Prevention Plan for Michigan.* They also revised a brief internet survey that we used twice previously to obtain information on suicide prevention activities being conducted locally across the state. The survey was opened for responses for approximately two months and promoted to individuals in communities statewide. The evaluation team at ReFocus, L.L.C. also obtained data from the National Suicide Prevention Lifeline, a national crisis line that re-routes calls to the closest Crisis Center according to calls' area codes. In addition, the evaluation team was provided with suicide statistics from the Michigan Department of Community Health. The use of these data and more allowed the evaluation team to provide us with state maps showing us counties where suicide prevention was active and make recommendations to strengthen our efforts to address this important public health problem.

It will be up to all of us to look at this document and data to project the future of suicide prevention in Michigan. With the end of the state's federal grant for youth suicide prevention in the fall of 2012, we know that funding for state and local efforts is likely to be even more scarce than it has been in recent history. It will be up to all of us to make sure we do not lose the momentum to keep our plan on track. We hope this document will help us see where best to put our limited resources and will inspire you to join us in our forthcoming effort to update and revise *The Suicide Prevention Plan for Michigan*.

Sincerely,

Larry G. Lewis, MSW
Chairman Michigan Suicide Prevention Coalition
Michigan Association for Suicide Prevention

Goal of the Suicide Prevention Plan for Michigan: It is the primary goal of the Suicide Prevention Plan for Michigan to increase awareness across the state, to develop and implement best clinical and prevention practices, and to advance and disseminate knowledge about suicide and effective methods for prevention.

Introduction: In 2005 the Michigan Suicide Prevention Coalition completed a suicide prevention plan that was modeled after the National Strategy for Suicide Prevention. That plan was accepted by the Michigan Department of Community Health as the suicide prevention plan for the state. Through the emphasis of ten goals and related objectives, the plan was designed to encompass all of the many at-risk populations and "address suicide risk across the lifespan." The focus of the plan was "on building the infrastructure necessary to support prevention efforts across the state and on assisting communities in developing and initiating their own action plans," and based on a set of assumptions concerning recommendations involving local efforts:

1. Much of the final planning and execution must occur at the local level;
2. All tools and protocols must be appropriate for the local community and its diverse members;
3. There should be uniform messages and language across all activities, across all locations, and across all priority groups;
4. Only the local communities themselves can establish what their priorities will be; and
5. All prevention programs and interventions must be delivered in appropriate ways given the specific community and its diversity.

In April, 2011, the Michigan Association for Suicide Prevention produced the "Status of the State Plan" report, which was intended to present a progress report on the implementation of the state's suicide prevention plan. The document reviewed the plan on a goal by goal basis, identifying some relevant successes and gaps in achieving the respective goals. It is the intention of this evaluation to augment that status report and quantifiably evaluate the plan.

According to the "Status of the State Plan" report, when the "plan was formulated it set many objectives to be accomplished within 18 months to 3 years. With dwindling human resources available for implementation the timelines for many of the objectives were unrealistic." Thus, it is not the intention of this evaluation to assess, by each objective, whether the specific action was completed on time or completed at all. Rather this evaluation addresses each goal and seeks to assess the degree to which progress has been made over the five-year life of the plan.

Evaluation Methodology: The purpose of this evaluation is four-fold:

1. To determine the degree to which the Suicide Prevention Plan for Michigan goals have been achieved.
2. To identify and recommend actions to improve the plan.
3. To maintain accountability to funding sources and other stakeholders.
4. To demonstrate the program's value and increase support among Michigan communities.

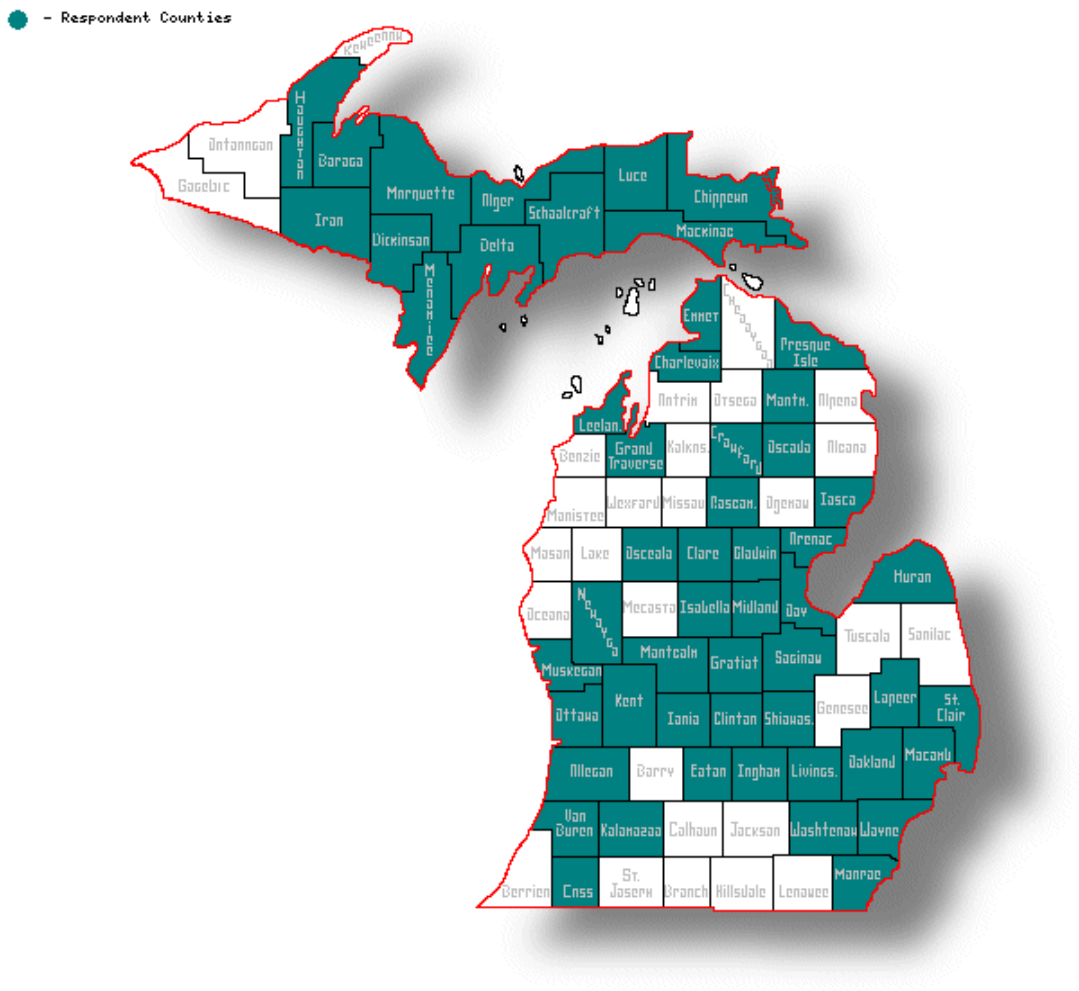
Therefore, this evaluation uses a Behavioral-Objectives approach, focusing primarily on the degree to which the goals of the plan have been achieved. The evaluation is structured in order to answer the following questions:

1. To what degree has Michigan's suicide prevention plan been implemented?

2. What changes in the pervasiveness of suicidal ideation, suicide attempts, and suicide completions have occurred since implementation of Michigan's Suicide Prevention Plan?
3. To what degree has Michigan's Suicide Prevention Plan encouraged local communities to implement prevention and treatment efforts?
4. What insights were gained through implementation of Michigan's Suicide Prevention Plan that can inform revisions to the plan?

Key to this evaluation, the Michigan Association for Suicide Prevention surveyed persons from across the State of Michigan who are, or have been, involved with local suicide prevention efforts. Conducted in the fall of 2011, this survey was a follow-up to, and built upon the design, of two previous surveys of community leaders across the State of Michigan conducted in 2008 and 2009. As with the previous administrations of this survey, the evaluation team sought information about the scope of suicide prevention efforts throughout the state. Figure 1, below, displays the counties represented among the survey respondents. It shows that sixty-four percent (64%) of Michigan counties (and two Indian Tribes) were represented by survey respondents.

Figure 1. Michigan counties represented among 2011 MASP Survey respondents.



In addition to the statewide survey, the evaluation team gathered information from other sources to perform this evaluation, including the National Suicide Prevention Lifeline (SAMHSA), the Michigan Profile for Healthy Youth (MiPHY), local Health Departments, the Centers for Disease Control and Prevention, the United States Census Bureau, the Transforming Youth Suicide Prevention in Michigan program, and the Suicide Prevention Resource Center.

The Michigan Association for Suicide Prevention obtained the services of ReFocus, L.L.C. to perform this evaluation. Prior to forming the organization in 2005, the ReFocus, L.L.C. partners worked for more than thirty-six combined years within local community mental health systems in the State of Michigan as both clinicians and administrators. ReFocus, L.L.C. provides strategic planning and program evaluation services, focusing primarily on not-for-profit and governmental entities, including mental health agencies, Substance Abuse Coordinating Agencies, community coalitions, school districts and circuit and family courts. Thus, Refocus, L.L.C. was uniquely positioned to evaluate the Suicide Prevention Plan for Michigan's scope and impact across the state from a community collaboration perspective.

Goal #1: Reduce the incidence of suicide attempts and deaths across the lifespan

According to the "Status of the State Plan" report, goal #1 represents the "first and foremost" impact the framers of the State Suicide Prevention Plan wished to have: to ultimately "help reduce the rates" of suicide across the state. Objectives under the goal address the number of suicide attempts among Michigan youth and to reduce suicide deaths among all Michigan populations utilizing evidence based best practices.

In order to evaluate the incidence of suicide attempts among youth, this evaluation looked at the Michigan Profile for Healthy Youth (MiPHY), which was developed by the Michigan Department of Education in collaboration with the Michigan Department of Community Health. The MiPHY is an online, anonymous student survey available to all Michigan schools on a biennial basis to assess risk behaviors, risk factors, and protective factors in Grades 7, 9, and 11. The evaluation team obtained county-level MiPHY data published for 2007 and 2009 (the two survey administrations that have occurred since the State Suicide Prevention Plan was implemented.[1]) Three items are important to remember when reviewing the MiPHY data. First, there is not one hundred percent participation across the state. Not all counties are represented in the datasets nor are all school districts within counties for which data are reported represented. For purposes of this evaluation the MiPHY information should be considered a sample of youth across the state of Michigan. Second, MiPHY data have not been published for the State of Michigan in aggregate. Thus, the data presented here represents the sum of county-level data published by the State of Michigan (See Attachments A and B for MiPHY data by county for 2007 and 2009). Third, these data represent participating students' self-report and are not verified as to accuracy.

As figure 2 displays, the MiPHY questions are based on an understanding of the progression of suicidal behavior, from feelings of depression to taking action to end one's own life.

[1] For county-level MiPHY results see Appendix A (2007) and Appendix B (2009).

Figure 2. Progression of suicidal behavior

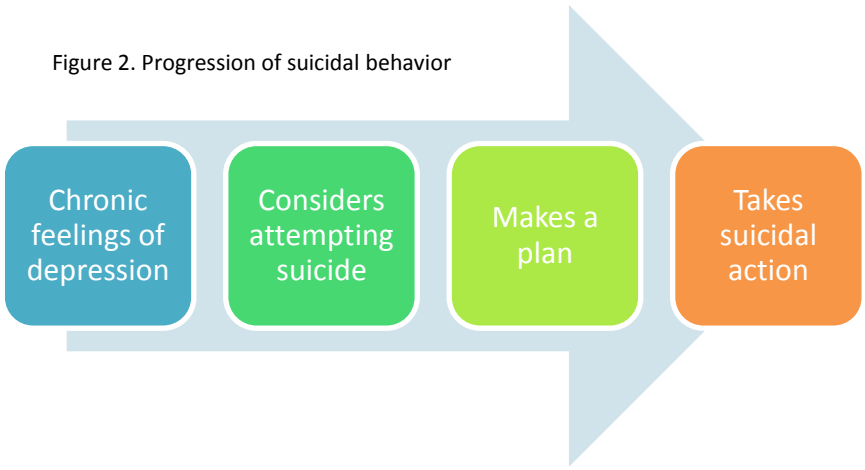


Figure 3 compares 2007 and 2009 MiPHY results for questions that address suicidal behavior. It shows a large increase from 2007 to 2009 in the number of Middle and High School students that took the MiPHY survey. It also shows a slight decrease in the percent of Middle School students who ever seriously considered attempting suicide (from 21.59% to 21.3%) as well as a slightly larger decrease in the percent of High School students who made a plan about how they would attempt suicide during the past 12 months. It shows that the percent of High School students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months increased in 2009 from the 2007 results. Overall, this analysis would indicate that the percent of students considering suicide to the point of making a plan has remained stable.

Figure 3. 2007 and 2009 MiPHY results: suicidal behavior

	Middle School Number MiPHY Respondents	High School Number MiPHY Respondents	Percent of Middle School respondents who ever seriously considered attempting suicide	Percent of Middle School respondents who ever made a plan about how they would attempt suicide	Percent of High School respondents who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months	Percent of High respondents who seriously considered attempting suicide during the past 12 months	Percent of High School respondents who made a plan about how they would attempt suicide during the past 12 months
2007	18933	34911	21.59%	13.22%	29.14%	14.60%	12.93%
2009	34430	61231	21.30%	13.36%	32.33%	16.24%	12.00%
+/-	15497	26320	-0.003	0.001	0.032	0.016	-0.009

Figure 4 compares 2007 and 2009 MiPHY results for questions that address student reported suicide attempts. It shows slight increases in the percent of Middle and High School students reporting that they had attempted suicide. (Note the variation between the questions asked to Middle and High School students. While Middle School students are asked if they *ever* tried to kill themselves, High School students were asked if they had attempted suicide *during the past 12 months.*)

Figure 4: 2007 and 2009 MiPHY results: suicide attempts

	Middle School Number MiPHY Respondents	High School Number MiPHY Respondents	Percent of Middle School respondents who ever tried to kill themselves	Percent of High School respondents who actually attempted suicide one or more times during the past 12 months	Percent of High School respondents whose suicide attempt resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse during the past 12 months.
2007	18933	34911	7.44%	9.03%	3.60%
2009	34430	61231	7.86%	9.39%	3.90%
+/-	15497	26320	0.004	0.004	0.003

These data should be compared to the results of the 2011 MiPHY administration, which is due for public release in June 2012; however, based upon the analysis above there does not appear to have been significant shifts (positively or negatively) in the percent of youth considering, planning, nor taking suicidal action between the 2007 and 2009 survey administrations.

According to state vital records data, there were 1,265 suicides in the state of Michigan in 2010 (the most recent year for which data have been published). Figure 5, below, displays the counts of suicides in Michigan by year and age grouping between 2005 and 2010. Figure 6 displays the distribution of persons by age grouping who died by suicide between 2005 and 2010. It shows that 38.0% of persons that died by suicide in the time period were between the ages of 45 and 64 and 12.5% were among persons age 24 and under. There were no suicides by persons under the age of 5 years during the period under review.

Figure 5. Counts of suicides in Michigan by year and age grouping[2]

Michigan	Total Count of Suicides	5-14	15-24	25-44	45-64	65 and Older
2005	1,103	6	136	423	378	160
2006	1,132	8	114	414	437	159
2007	1,123	7	129	380	437	170
2008	1,173	7	138	431	431	166
2009	1,164	10	131	360	472	191
2010	1,265	11	171	411	490	182
Totals	**6,960**	**49**	**819**	**2,419**	**2,645**	**1,028**

[2] Michigan Department of Community Health, http://www.mdch.state.mi.us/pha/osr/chi/FATAL/DX09LTN4.ASP.

Figure 6. Distribution of age groupings of persons committing suicide between 2005 and 2010

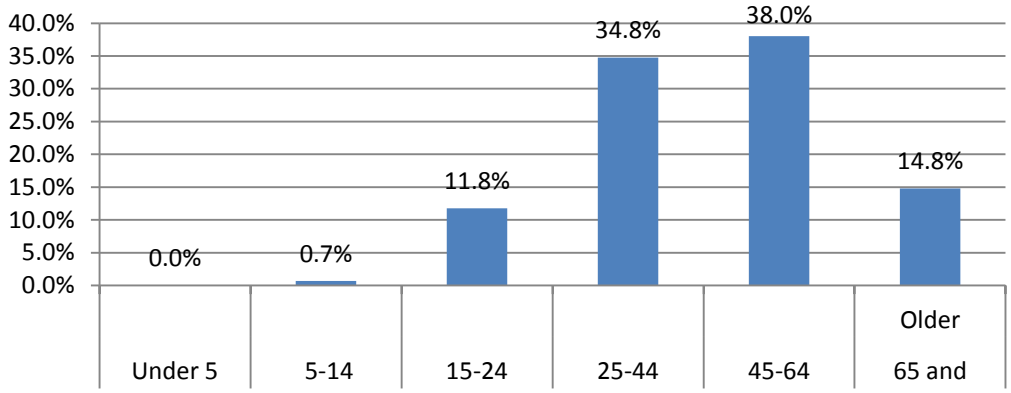


Figure 7 displays the suicide trends of persons in Michigan by age grouping between 2005 and 2010 using state vital records data (shown above). It shows that while the count of suicides among adults ages 25 to 44 is stable; the count of suicides among adults ages 45 to 64 and adults age 65 and older are increasing. The count of suicides among youth between ages 15 and 24 has remained stable throughout the five years.

Figure 7. Suicide Trends by Age Grouping 2005 - 2010

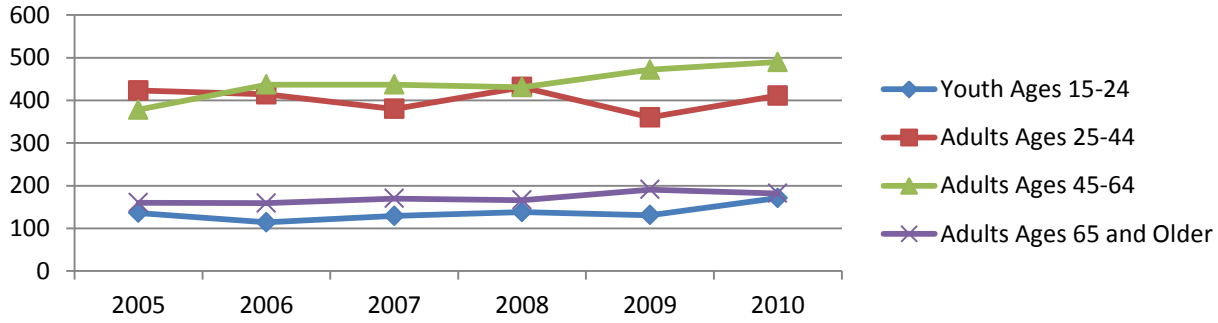
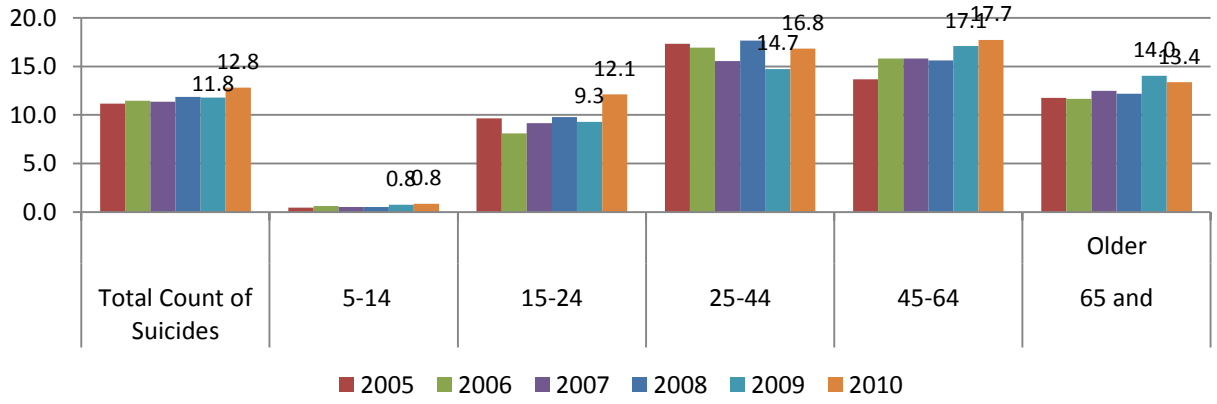


Figure 8, below, displays suicides in Michigan per 100,000 residents for each year between 2005 and 2010.[3] This analysis is used to account for variations in the sizes of age groupings relative to the other age groupings and the population of the state as a whole. For example, if there are twice as many persons over the age of 65 in the State of Michigan than there are children between ages 5 and 14, one would expect the number of suicides to be twice as high for the more aged group than for the children. By accounting for the size of each age demographic, one can more easily identify variations in the rates of suicides between the age groupings. Figure 8 displays that in 2010 there were 17.7 suicides per 100,000 persons age 45-64 and 13.4 suicides per 100,000 persons age 65 and older. Suicides per 100,000 residents increased in 2010 for all age groupings between ages 15 and 64 as well as for the state as a whole. When evaluated per 100,000 Michigan residents, there has been a steady increase in the annual rate of suicides since 2005.

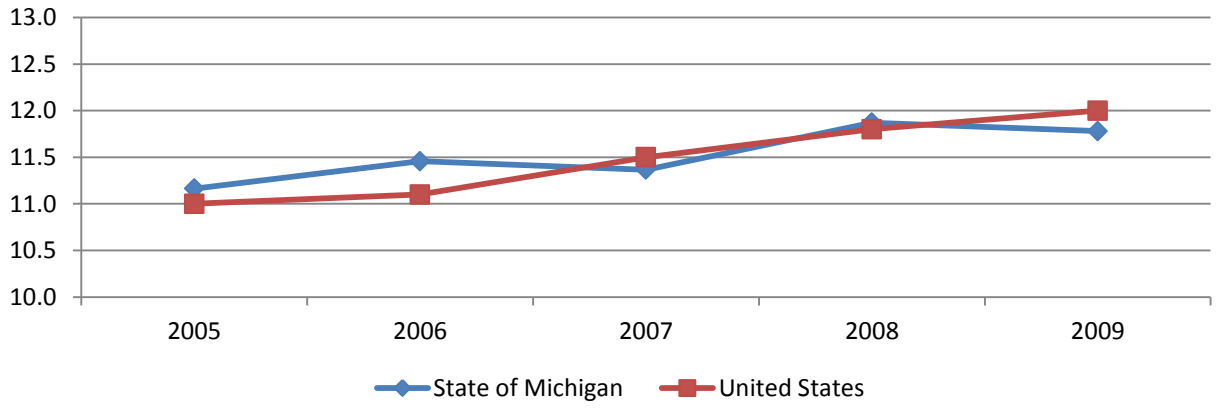
[3] Census data used in this analysis is taken from the 2010 United States Census, published by the U.S. Census Bureau.

Figure 8. Michigan Deaths by Suicide per 100,000 residents by year



One must ask, then, how does Michigan compare to the United States as a whole. The last year for which national statistics are available from the Centers for Disease Control and Prevention is 2009[4]. In that year suicides per 100,000 residents in the United States was 12.0; the rate in Michigan was comparable at 11.8. Figure 9, below, displays the suicide rates per 100,000 residents for Michigan and the United States, trended between 2005 and 2009. It shows that the suicide rates for both the United States and Michigan have been increasing at a comparable rate. In 2009 Michigan's rate was slightly lower than that of the United States as a whole.

Figure 9. U.S. & MI Suicides per 100,000 residents, trended over time



Based on the fact that the age grouping with the highest rate of suicide in Michigan is adults between the ages of 45 and 64, Figure 10, below, compares deaths by suicide per 100,000 residents in Michigan to the United States as a whole in 2008.[5] It shows that in that year deaths from suicide in Michigan for persons aged 45 -64 per 100,000 residents was well below the rate for the same age grouping across the country. Based upon the increase of suicides within this age grouping in Michigan in 2009, however, the rate within the state may be catching up to the national rate (assuming it has not significantly shifted).

[4] *National Vital Statistics Reports, 60(3).* 5 January 2012.

[5] 2008 figures are used in this analysis because it is the most recent year for which U.S. statistics for the comparable age grouping can be obtained. U.S. Suicide data is from the Centers for Disease Control and Prevention. According to the CDC, "the suicide death rate for persons aged 45 – 64 years increased overall (from 13.2 [in 1999] to 17.6 per 100,000 population)" National Vital Statistics System. CDC Health Data.

Figure 10. Deaths from Suicide Among Persons Aged 45 - 64/per 100,000 (Michigan vs. United States)

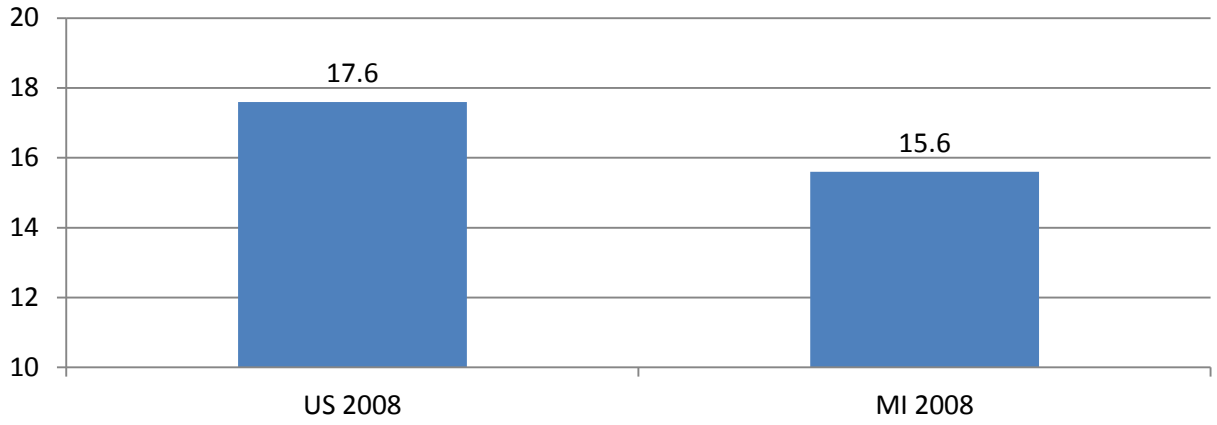
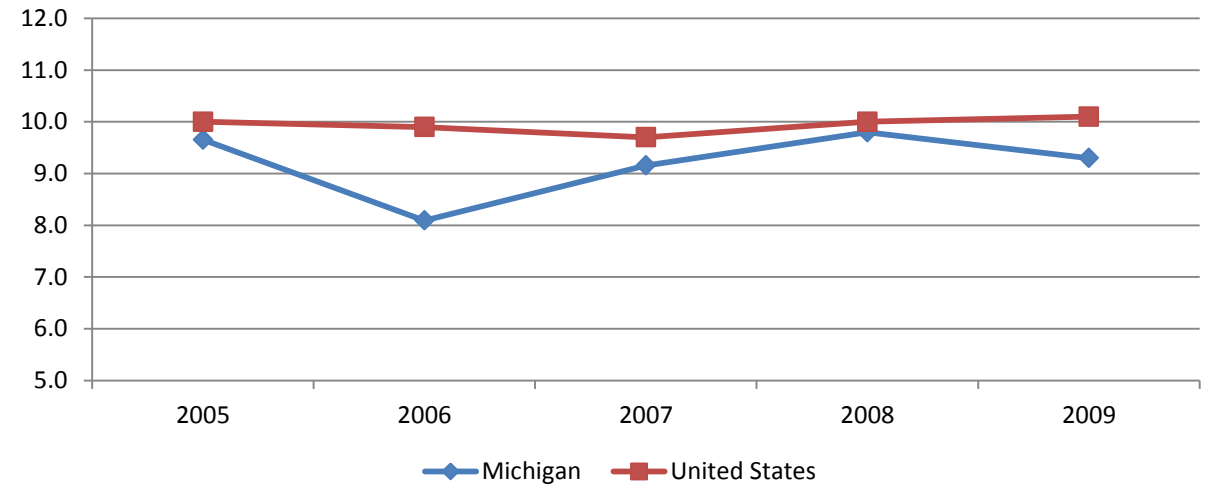


Figure 11, below, displays suicide rates per 100,000 residents between ages 15 and 24, trended between 2005 and 2009 for both the United States and Michigan. It shows that Michigan's suicide rate among this age group has consistently trended below the United States as a whole and that there was a positive downward shift in 2009.

Figure 11. US & MI Suicides per 100,000 residents between ages 15 & 24, trended over time



It is difficult to evaluate suicides and suicidal ideation and behaviors due to two factors. First, it is difficult to obtain recent suicide data. Thus, the impact of current interventions may not be statistically noted for several years. The Michigan Department of Community Health has implemented the Michigan Violent Death Reporting System, which collects data about violent deaths that occur in the State of Michigan, including suicide. This system is new and the first year's data (2010) may be released this year. This will be a significant step in facilitating the evaluation of the state suicide prevention plan and the impact local coalitions are having upon their communities. Second, while the MiPHY data suggests that significantly more youth think about and develop suicide plans than actually attempt or die by suicide,

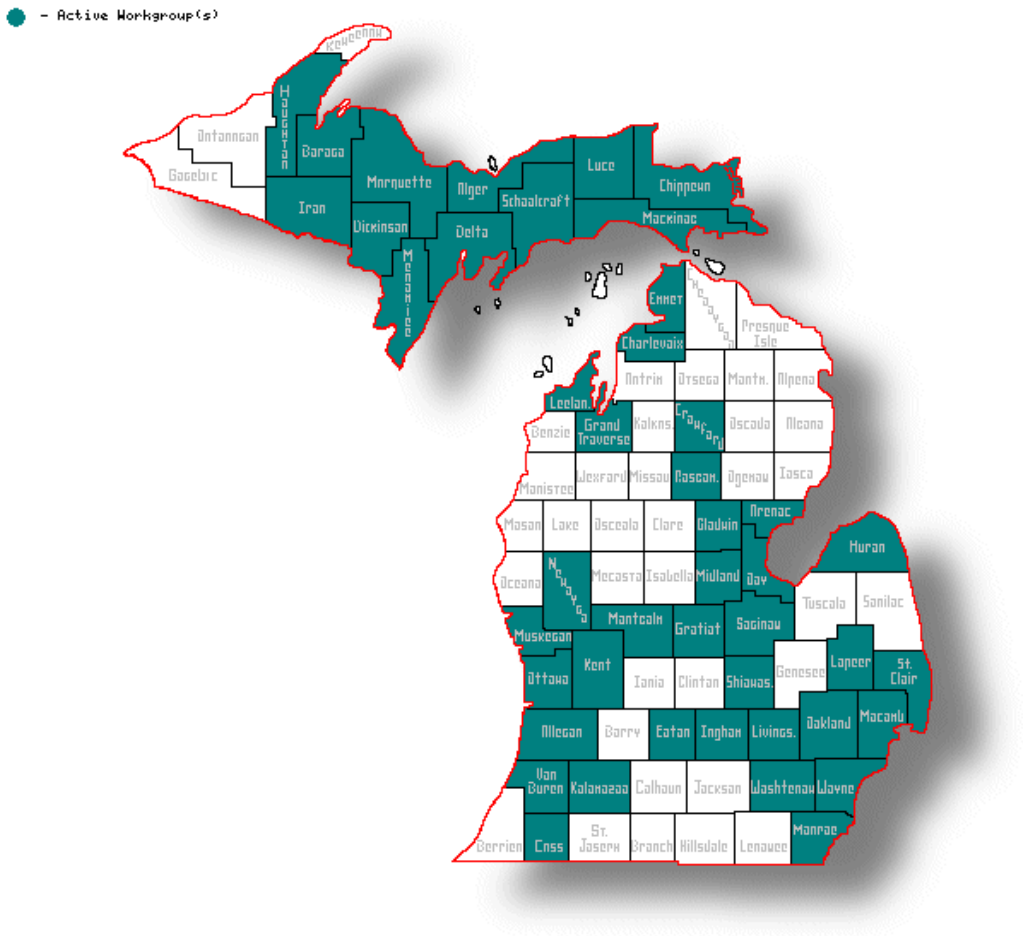
similar data are not yet available regarding suicidal behaviors in adults. Through local coalitions, some communities in Michigan are working to address this issue through the implementation of surveillance systems, however, these systems are new and there are relatively few across the state (surveillance systems development will be discussed in greater detail later in this evaluation). *It is recommended that the Michigan Association for Suicide Prevention should, with the assistance of the Michigan Department of Community Health, continue to support the implementation of local surveillance systems across the state and promote the development of a process that facilitates the reporting of all surveillance data collected to a central data repository. It is further recommended that the Michigan Association for Suicide Prevention update the portion of this evaluation after the 2012 MiPHY data is released.*

Goal #2: Develop broad-based support for suicide prevention.

According to the *State of the State Plan* document, "the state plan was developed with the knowledge that the State of Michigan would have little or no money to contribute toward [the implementation of a broad-based state-level support for suicide prevention]. However, plan developers felt very strongly that there needed to be strong leadership at the state level to effectively and efficiently coordinate the implementation effort." Goal #2 in the state plan includes five objectives, one of which calls for the establishment of an Office of Suicide Prevention (OSP) within the Michigan Department of Community Health. Economic conditions within the state over recent years have prohibited the realization of this objective. As the *State of the State Plan* document identifies, however, there is an MDCH staff member who works predominantly within the area of suicide prevention. *It is recommended that the Suicide Prevention Plan for Michigan be revised to identify and plan for implementation of a sustainable method for state-level support of local suicide prevention efforts that is feasible based upon the current economic environment.*

While the OSP was not developed, the remaining four objectives under goal #2 focus on the support of local coalitions in Michigan communities. As noted earlier, this evaluation was based, in part, on survey responses from across the state. Several questions from that survey are used to measure the use of coalitions to lead the suicide prevention efforts. The first of those questions was, "does your community have a formal group working on suicide prevention activities?" Figure 12, below, displays the counties in Michigan that have at least one formal workgroup that is currently active. It shows that at least one suicide prevention workgroup is active in 45 out of the 83 Michigan counties (54.2%). Following the close of the survey the evaluation team learned of three additional counties that have active suicide prevention coalitions that did not complete the survey as requested. Thus, there are currently active suicide prevention workgroups in at least 48 of Michigan's 83 counties (57.83%). It is noteworthy that all counties that include larger metropolitan areas in the state are known to have at least one suicide prevention workgroup with the exception of Genesee County (Flint) and Calhoun County (Battle Creek). It is also interesting to note that 80% (12 of 15) of counties in the Upper Peninsula are known to have at least one active workgroup, while only 33% (11 of 33) of counties in the northern half of the Lower Peninsula are known to have active workgroups.

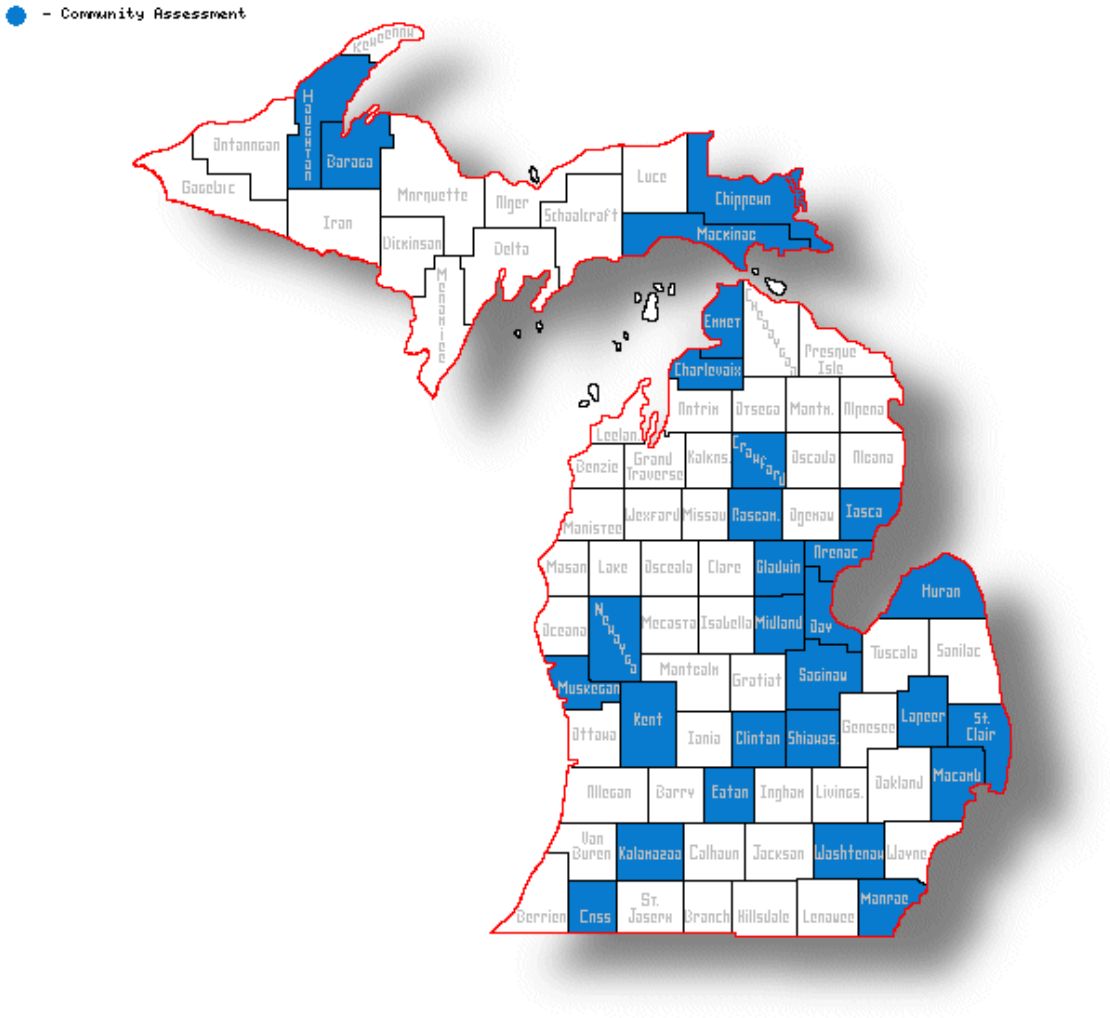
Figure 12. Michigan Counties with formal suicide prevention workgroups



With the exception of three, all respondents who indicated there was a suicide prevention workgroup within their county identified a broad coalition of community representatives including, hospitals, substance abuse coordinating agencies and providers, Community Mental Health (and mental health services practitioners), schools (including Intermediate School Districts), law enforcement, human services agencies (including the Department of Human Services), universities and colleges, the National Guard, local Health Departments, women's services providers, survivors of suicide, the faith community, Youth focused organizations, Tribal services, courts, the United Way, community businesses, media, Area Agencies on Aging, Veterans' service providers, and bereavement support services. Respondents to the 2011 survey also indicated that community assessments have been completed in 28 counties (see Figure 13, right). Thus, of the 45 counties represented in the survey that currently have an active Suicide Prevention Coalition, 62.2% have completed a community assessment. Likewise, of the 40 counties represented in the survey that have an active suicide prevention plan or a suicide prevention plan

currently under development, 70% have completed a community assessment as a part of the development of that plan.

Figure 13. Counties where community assessments have been completed



Based upon coalition planning best practices, this information should be of concern to state and local stakeholders. While planning can be a time consuming and costly endeavor, especially for local coalitions with a hodge-podge of limited (and frequently focused) resources, a plan of action that is not based upon (and, therefore, likely does not address) assessed community needs and gaps will most likely prove ineffective in adequately addressing genuine issues within the community. Among the survey respondents, it is especially surprising that several indicated that they did not see a need for community assessment. Given that several community based organizations in every community that are likely to participate in suicide prevention planning routinely complete community assessment activities (including the United Way, Community Mental Health, Substance Abuse Coordinating Agencies, and most Health Systems), much of the coalitions' work has already been completed and may require only

some limited analysis. *It is recommended that the Michigan Association for Suicide Prevention develop (or adopt) a resource guide or method to provide technical assistance that will help coalitions systematically implement a community assessment as a part of suicide prevention planning which includes establishment of baseline information, quantifies the problem, identifies gaps and evaluates plan effectiveness.*

The survey process through which the evaluation team collected data for this strategic plan evaluation revealed another area of weakness where the Michigan Association for Suicide Prevention can have a significant, positive impact. The survey process made clear that in many areas of the state the lack of information sharing is a barrier to addressing suicide prevention in an effective, coordinated manner. Several counties in the state were represented by several survey respondents. There were several instances where respondents from the same county would provide opposing answers. For example, one respondent in County X would indicate that there was an active suicide prevention plan in place, while another respondent from that same county would indicate that no plan existed. In several of these instances it was clear that the active suicide plan addressed a single system (e.g. a public school system) or population group. It appears that suicide prevention plans may not be publicized and/or coordinated as broadly within a county as they should be. Even when plans are developed to address only a portion of a county's geography and/or population, persons who are sufficiently involved within the suicide prevention system to be invited to respond to the evaluation survey should minimally have knowledge of that plan's existence. *It is recommended that the Michigan Association for Suicide Prevention provide technical assistance to groups that have implemented a suicide prevention plan to assist them in marketing their plans to community leaders and social service organizations to encourage understanding and assistance with its success.*

In order to measure objective 2.4 (The OSP, in collaboration with local planning efforts, will utilize broad-based public-private support to seek additional funds for suicide prevention), the evaluation survey asked the question, *"What resources is your community currently using to support suicide prevention efforts?"* Figure 14, below, displays the count and percent of valid responses from across the state. It shows that the highest percentage of resources used by local coalitions and workgroups is in the form of in-kind donations (predominantly agency staff time and printed materials). This is followed by grants from local agencies and state departments (12.3% respectively).

Figure 14. Resources	Count of Responses	Percent of Responses
Private Donations	3	4.6%
Community Agencies (CMH, CA)	8	12.3%
In-Kind Donations	22	33.8%
Community Businesses	1	1.5%
Local Grant Making Organizations (United Way, Community Foundations)	5	7.7%
Grants from State Departments (DHS, MDCH [Excluding Garrett Lee Smith])	8	12.3%
Fundraising	5	7.7%

Figure 14. Resources	Count of Responses	Percent of Responses
SAMSHA (Free Materials)	2	3.1%
Garrett Lee Smith Youth Suicide Prevention Grant	3	4.6%
Lifeline partnership	2	3.1%
Survivors' Support Groups	1	1.5%
Suicide Prevention Resource Center	1	1.5%
Suicide Prevention Fund	2	3.1%
Training Registration fees	1	1.5%
Local Schools and Universities	1	1.5%

Because of the way this question was asked (and respondents answered), it is difficult to evaluate what effect any potential reduction in state grant funding might have on coalitions' sustainability. The scope of resources identified suggests, however, that most local coalitions have broad local community support.

Goal #3: Promote awareness and reduce the stigma.

Six objectives were organized under goal #3 of the Suicide Prevention Plan for Michigan, all addressing various facets of promoting awareness among the general public and public policy makers about issues related to suicide prevention. Among these objectives was a state-wide "campaign promoting awareness that suicide is a preventable public health problem that reaches all citizens in Michigan." A media campaign was implemented during Mental Health Awareness Week in September 2007. The campaign was initiated to "help young adults learn what to do when confronted with suicidality – refer those in need to trained crisis intervention professionals."[6] Figure 15, below, displays the reach of the ads aired. It shows that the paid radio spots and public service radio announcements (total = 5232) provided good (although time limited) coverage across most areas of the lower half of the lower peninsula. The radio spots were aired during the same week in September 2008.

Figure 15.

Market	Total Paid Spots	Total PSAs	Sponsor ships	Reach/ Frequency	Gross Rating Points	Net Impressions	Gross Impressions
Lansing	530	511	0	58.6%/11.0	761	43800	481800
Grand Rapids	438	320	0	67.3%/10.5	711.2	62200	653100
Kalamazoo	138	138	0	51.9%/11.7	713.4	19000	222300
Battle Creek	67	64	0	19.9%/14.4	327.3	3200	46080
Berrien County	80	80	0				

[6] Transforming Youth Suicide Prevention in Michigan – Campaign Evaluation.

Market	Total Paid Spots	Total PSAs	Sponsor ships	Reach/ Frequency	Gross Rating Points	Net Impressions	Gross Impressions
Detroit	428	155	41	51.6%/8.0	533.4	278800	22300400
Ann Arbor	44	30	0	12.0%/4.3	75.6	8700	37410
Flint	361	327	0	60.4%/10.3	750.3	31200	321360
Saginaw	262	234	0	58.7%/9.3	670.9	28500	265050
Northern Michigan	589	436	0	36%/18.5	894.4	9800	181300
Total	2937	2295	41		5437.5	485200	24508800

Although this media campaign was time limited and did not have the geographic reach apparently envisioned in the strategic plan, the goal was, in part, to advertise a crisis intervention hotline. Figure 16, displays the total number of calls to the crisis intervention hotline, the National Suicide Prevention Lifeline, per 1,000 Michigan residents. It shows significant growth in the number of calls from Michigan residents between 2006 and 2008, with continued annual increases through 2010. While there cannot be a direct correlation drawn between the media campaign and the growth in the use of Lifeline around the state, along with the promotion efforts of local coalitions, the goal to increase public awareness of the crisis intervention hotline among Michigan residents was clearly achieved.

Figure 16. Lifeline Calls per 1,000 residents in Michigan, trended over time

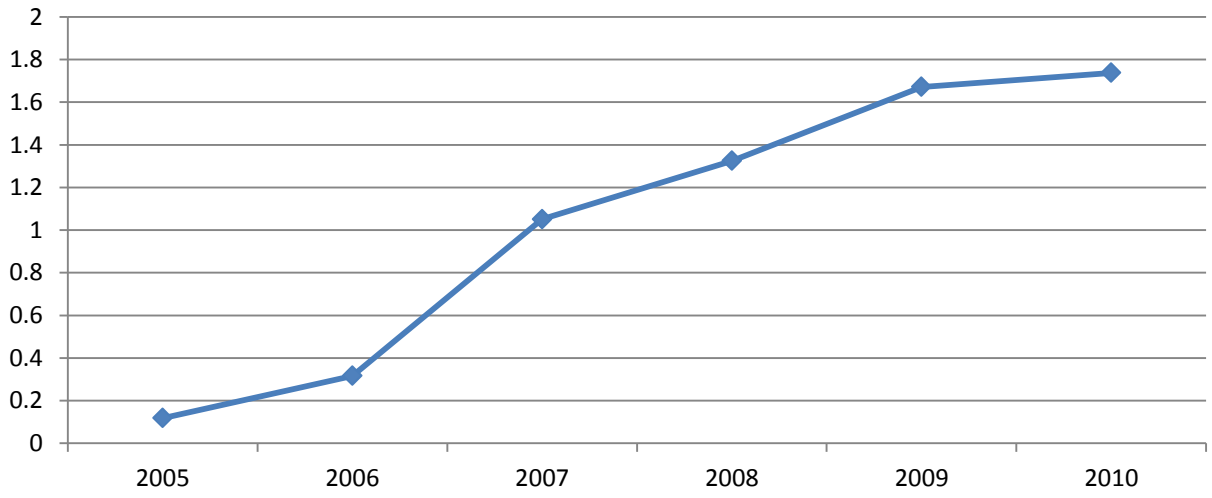
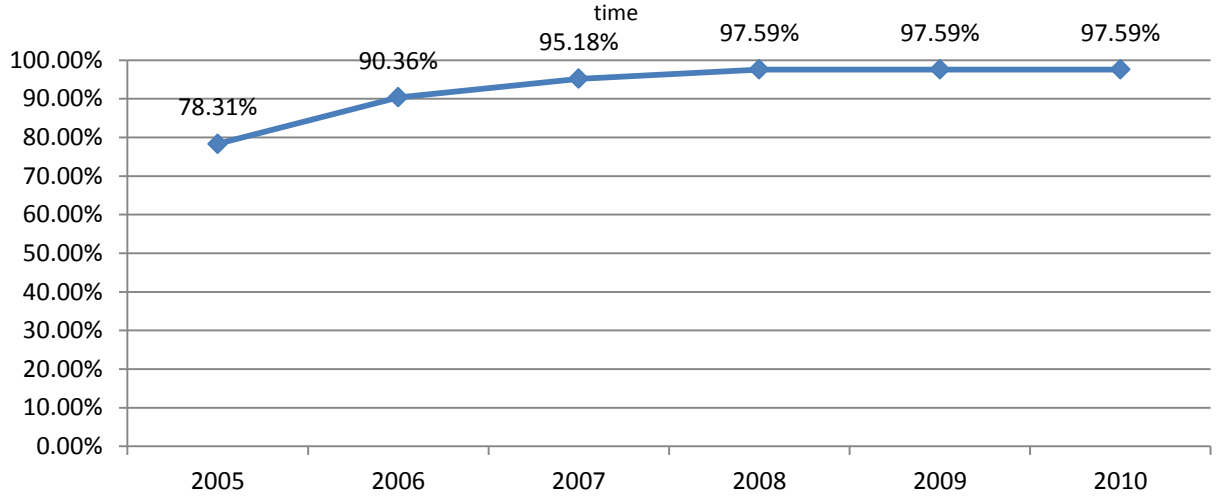


Figure 17 displays the percent of Michigan counties from which at least one Lifeline call was originated by year since 2005. It shows the same positive increase between 2006 and 2008 that was noted above. By 2008, at least one lifeline call was generated from nearly 98% of Michigan counties. (See Attachment C for Lifeline call data by Michigan County.)

Figure 17. Percent of Michigan Counties where at least one Lifeline call originated, trended over time



Figures 18 and 19, below, display Lifeline call data on calls from Michigan veterans, trended over time. Like calls from Michigan residents in general, calls from veterans have increased significantly since July 2007. Figure 19 shows that more than 20% of Lifeline calls from Michigan were from veterans during 2011.

Figure 18. Lifeline Calls from Veterans

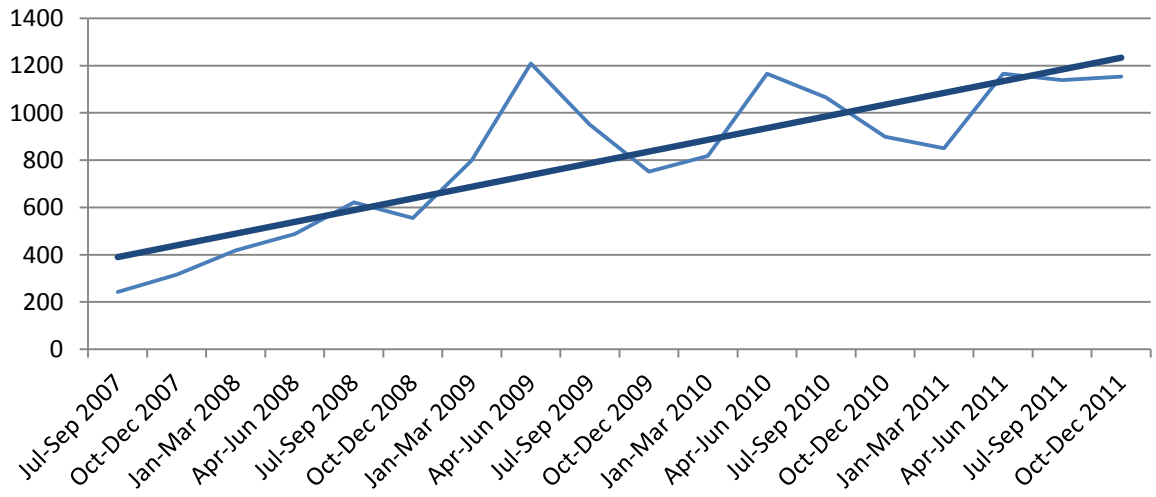
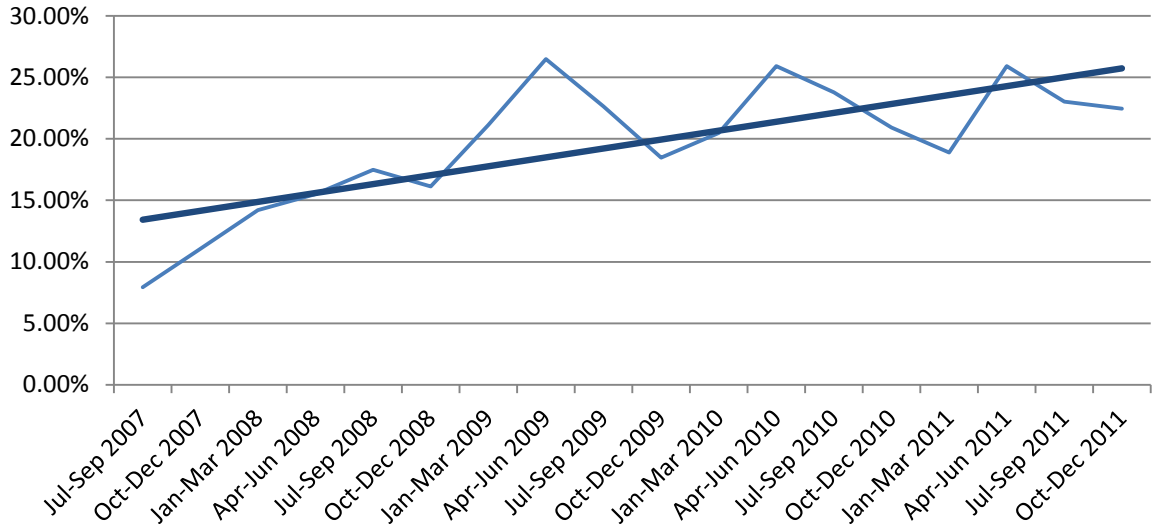


Figure 19. Percent of Michigan Lifeline calls that are from Veterans



These data suggest that Veterans may be an emerging area of focus for local suicide prevention coalitions. *It is recommended that the Suicide Prevention Plan for Michigan be revised to include a focus on soldiers returning from active combat as well as veterans in general.*

As a part of the evaluation survey, respondents were asked, "what, if any, public awareness activities related to suicide prevention have been conducted in your community in the last 12 months?" Figure 20, below, displays an analysis of the answers to that question based upon the current status of coalitions' Suicide Prevention Plans. Two points are noteworthy based upon this information. First, the largest percentage of public awareness activities among respondents was through the use of individual speakers (22.7% of all activities reported), followed by newspaper articles (21.1%) and suicide prevention week activities (12.4%). More passive public awareness activities, such as distribution of brochures, and purchase of billboard space were reported less often than these more active and time intensive methods.

Figure 20.

	Active Plan	Inactive Plan	Plan Under Development	Plan Not Stated	Status of Plan Not Indicated	Totals	Percent of Activities
Count of Respondents	33	3	13	12	9	70	
Public service announcements on TV and/or radio	11	1	0	2	2	16	8.6%
Billboards	5	0	3	0	0	8	4.3%
Newspaper Articles	22	1	9	3	4	39	21.1%
Individual Speaker(s)	27	2	7	5	1	42	22.7%
Suicide Prevention Week activities	16	2	3	2	0	23	12.4%
Suicide Prevention Conference/Symposium	9	1	6	1	0	17	9.2%

	Active Plan	Inactive Plan	Plan Under Development	Plan Not Stated	Status of Plan Not Indicated	Totals	Percent of Activities
Provide education for local elected officials (and/or other policy makers) on the impact of suicide, mental illness and substance abuse	13	1	2	2	1	19	10.3%
Distributed brochures or information handouts	5	0	1	0	0	6	3.2%
Training Events	4	0	3	1	0	8	4.3%
Awareness Events	3	1	1	1	0	6	3.2%
Email & other forms of communication	0	0	0	0	1	1	0.5%
Average Count of Promotional Activities	3.5	3.0	2.7	1.4	1.0	2.6	

Second, the focus provided by a Suicide Prevention Plan is clearly noted. Coalitions that have an active Suicide Prevention Plan engage in public awareness activities nearly three times more often than coalitions that do not have a plan. Even coalitions that are in the process of developing their Suicide Prevention Plan or had a plan previously engage in public awareness activities twice as often as coalitions that have not begun plan development.

Goal #4: Develop and implement community-based suicide prevention programs

Goal #6: Improve the recognition of and response to high risk individuals within communities.

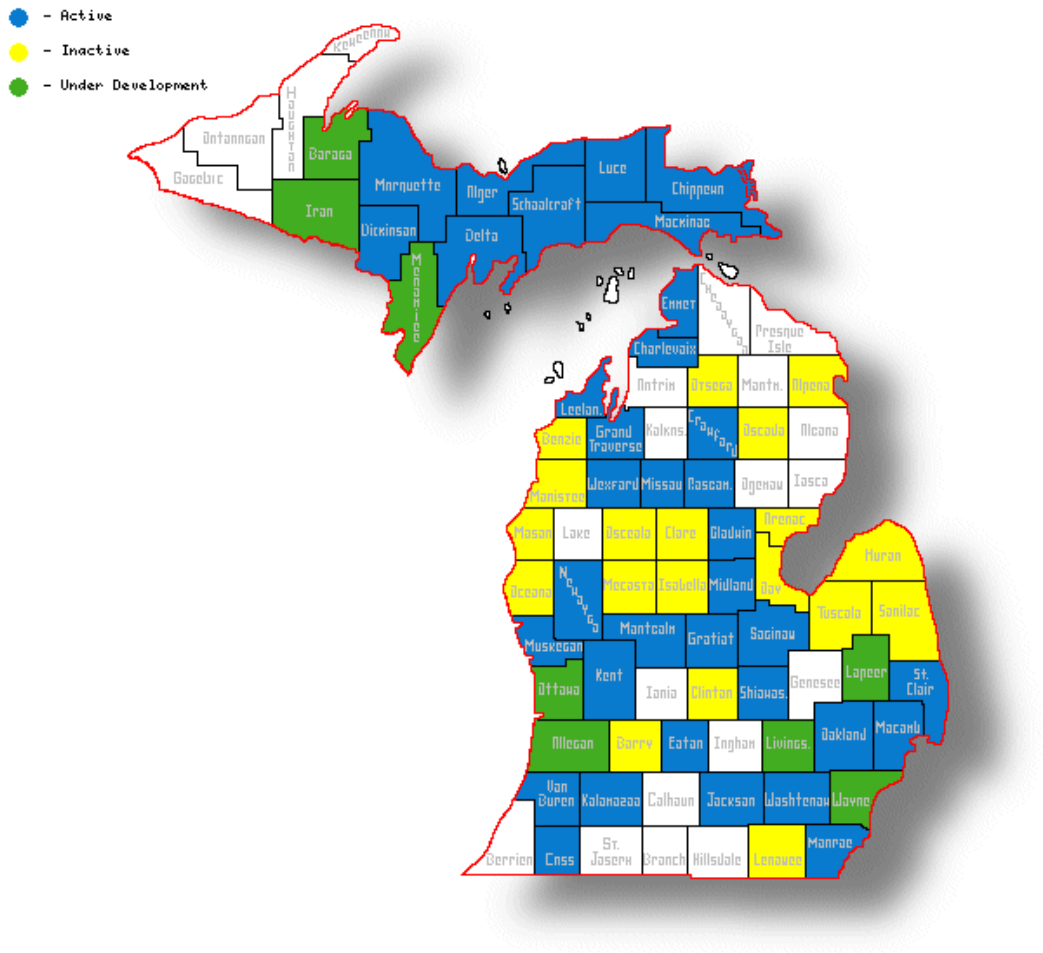
Goal #7: Expand and encourage utilization of evidence-based approaches to treatment.

Goal #10: Support and promote research on suicide and suicide prevention.

This section of the evaluation addresses three goals in the Suicide Prevention Plan for Michigan. Five objectives are organized under goal #4 of the plan. These objectives address methods for supporting the expansion and strengthening of suicide prevention activity in communities across the state. Primary among the activities the plan seeks to expand are early intervention strategies for children, services to survivors of suicide, development of state policies that support schools in implementing and expanding suicide prevention policies and programs, and collaboration of school health partnerships. Goal #6 includes six objectives, addressing identification of and increasing the number of gatekeepers, capacity assessment, suicide risk screening in primary care settings, suicide prevention policies development and suicide prevention training for community mental health direct service personnel. Goal #7 includes three objectives addressing the identification and distribution of evidenced based approaches to treatment. Goal #10 includes four objectives addressing supporting use of the National Suicide

Prevention Resource Center's national registry of evidence based suicide prevention programs and clinical practices and support for suicide prevention research within the State of Michigan.

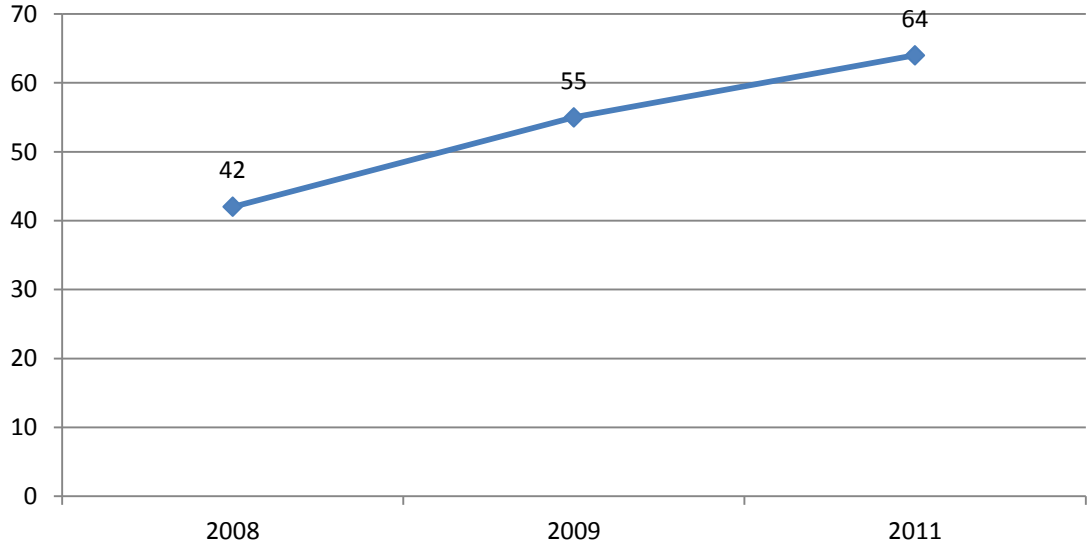
Figure 21.



Since the publication of the Suicide Prevention Plan for Michigan in 2005, the number of communities that have implemented suicide prevention programs has steadily grown. Figure 21, shows the current status of suicide prevention plans, by county. This map was developed through comparison of Michigan Association for Suicide Prevention surveys administered in 2008, 2009, and 2011. It shows that at least 74.7% (N=62) of Michigan counties have had or are developing a suicide prevention plan since 2008. Nearly fifty-seven percent (56.5%) of these counties have a currently active plan. Nearly thirteen percent (12.9%) have plans under development and nearly thirty-one percent (30.6%) had plans that are not actively being pursued (as of the 2011 survey administration). Among 2011 survey responses, all but one respondent giving a reason for their plan no longer being active cited a lack of funding. One respondent noted the lack of community incentive or political will to invest in suicide prevention since there had not been any youth suicides in that county for several years.

Figure 22, below, displays the growth in suicide prevention activity across the three survey administrations. It shows that over the three year period between 2008 and 2011 the percent of counties known to have suicide prevention activities increased from 50.6% in 2008 to 77.1% in 2011.

Figure 22. Count of Counties With Suicide Prevention Activity



To gain a deeper understanding of the types of suicide prevention activities occurring across the state, survey respondents were asked the question *"what services does your community have available specifically for survivors of suicide?"* Survey respondents of 36 out of 54 counties (66.7%) represented in the cohort identified at least one service available in their county for survivors of suicide. Figures 23 and 24, below, display responses to that question.

Figure 23 Answer Key Description:
Support Groups Only – the only service identified by the respondent was support groups
Sup Groups/Outreach – respondent identified support groups as well as Individual and Group Outreach programs (such as CISM)
Sup Groups/Emerg Rsp – respondent identified support groups as well as individuals/groups going with police when responding to potential suicide
Emergency Response – Individual/groups going with police when responding to potential suicide
Sup Groups/Resp Plan – respondent identified support groups as well as a school district response plans
Outreach/Emerg Resp – respondent identified individual and group outreach programs (such as CISM) as well as individuals/groups going with police when responding to potential suicide

Figure 23.

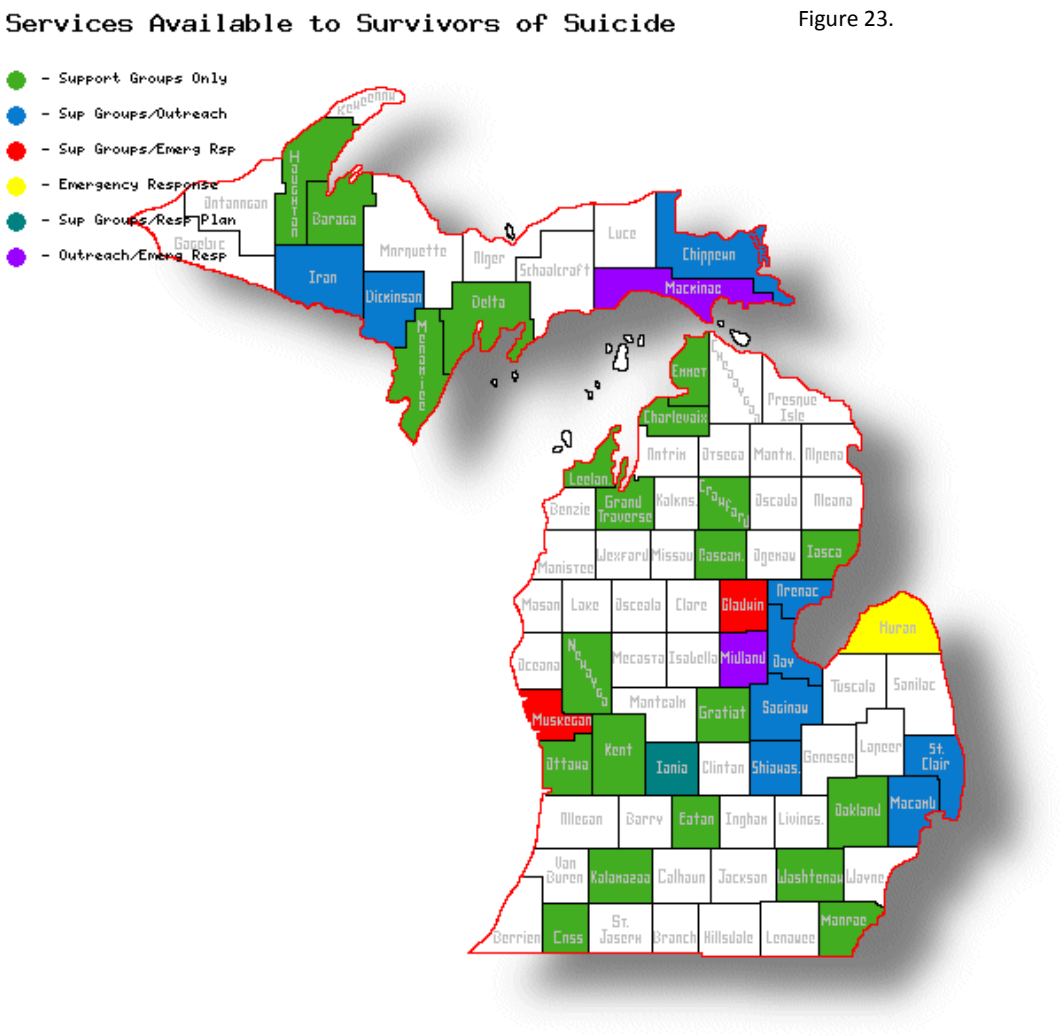
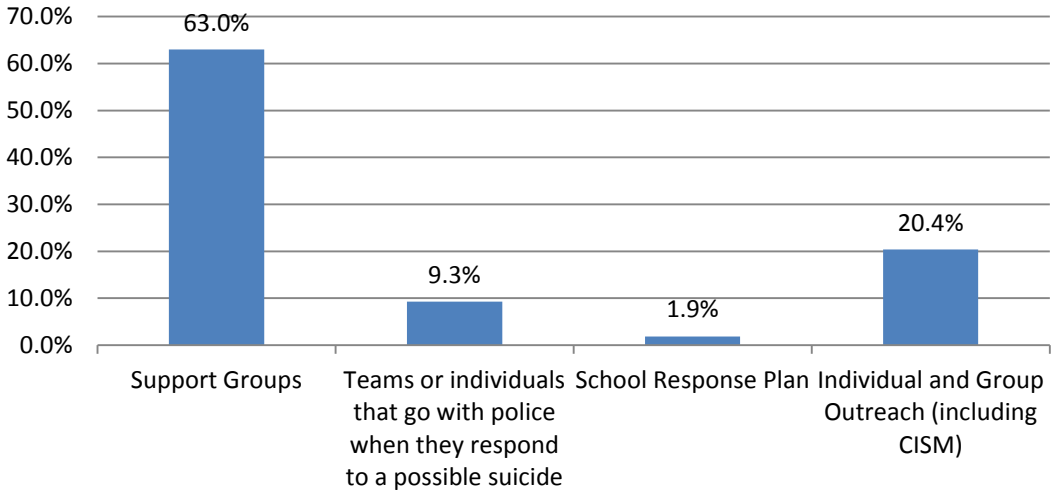


Figure 24. Percent of Counties with Survivor Services, by type



Sixty-three percent of counties represented by a survey respondent reported that support groups were available within their county. The second most common service to survivors of suicide identified was individual or group outreach programs such as CISM (Critical Incident Stress Management).

As a part of the suicide prevention coalition survey, respondents were asked to indicate the number of persons served in the past twelve months using evidence-based practices. Evidence-based practices were taken from the registry published by the Suicide Prevention Resource Center.[7] This registry is an online resource that fulfills the intent of objective 7.1. Figure 25, below, displays the best practices that have been implemented around the state (among counties represented by respondents), including the name of the best practice, an estimate of the number of persons trained or materials distributed, and the number (and percent) of counties where the best practice is being implemented. These data should be used with caution. The counts of persons trained/materials distributed are presented as estimates for several reasons. First, because multiple survey respondents may have represented the same coalition, some counts may be duplicates. The evaluation team was careful to evaluate and clean duplication from the data set and it occurs minimally, if at all. However, it is important to note that duplication may still exist. Second, most respondents reported "ballpark" figures rather than actual counts of persons trained/materials distributed. Third, the survey did not proscribe a methodology for counting persons and materials and, therefore, it is likely that the various respondents used different methods to establish the counts reported. For example, it is possible with reporting materials distributed to schools that some respondents reported the number of students that received the materials while other respondents reported the number of schools. Therefore, this information is best used to, first, evaluate the breadth of best practices being implemented across the State of Michigan and, second, to evaluate those best practices which are most commonly being implemented. Finally, it should be noted that the counts reported by survey respondents are not representative of all suicide prevention activities which have occurred in the state over the last twelve months. For example, according to statistics reported by the Suicide Prevention Resource Center, 417 persons received Assessing and Managing Suicide Risk: Core Competencies (AMSR) training in Michigan in the twelve month period for which the survey requested data. Survey respondents identified a total of 254 persons trained.[8]

Based upon this analysis, nearly forty-three percent of counties represented among survey respondents have used the ASIST program in the last twelve months, with an estimated count of 629 persons receiving the training. While used in just under fifteen percent (14.8%) of counties reporting, the Ask 4 Help program has been received by more than twelve thousand persons in eight counties.

[7] www.sprc.org/bpr

[8] According to the Suicide Prevention Resource Center, 1733 persons have received AMSR Training in Michigan between September 30, 2008 and July 23, 2012. Likewise, 144 ASIST workshops have occurred since 2004, having reached 3024 persons in Michigan.

Figure 25. Evidence-Based Practice	Estimate Number of Persons Receiving/ Materials Distributed in most recent 12 months	Number of Counties Reporting Use/Distribution in most recent 12 months	% of Michigan Counties
After a Suicide: A Toolkit for Schools	113	14	25.9%
After an Attempt: A Guide for Medical Providers in the Emergency Department Taking Care of Suicide Attempt Survivors	383	10	18.5%
After an Attempt: A Guide for Taking Care of Your Family Member After Treatment in the Emergency Department	460	11	20.4%
After an Attempt: A Guide for Taking Care of Yourself After Your Treatment in the Emergency Department	445	10	18.5%
American Indian Life Skills Development/ Zuni Life Skills Development	23	9	16.7%
Applied Suicide Intervention Skills Training (ASIST)	629	23	42.6%
Ask 4 Help Suicide Prevention for Youth	12,214	8	14.8%
Assessing and Managing Suicide Risk: Core Competencies (AMSR)	254	10	18.5%
At-Risk for High School Educators	70	4	7.4%
At-Risk for University and College Faculty: Identifying and Referring Students in Mental Distress	28	1	1.9%
At-Risk for University and College Students	250	4	7.4%
Be A Link Suicide Prevention Gatekeeper Training	430	4	7.4%
Gryphon Place Gatekeeper Suicide Prevention Program-A Middle School Curriculum	2393	1	1.9%
High School Gatekeeper Curriculum	2560	2	3.7%
How Not To Keep A Secret	*	1	1.9%
Late Life Suicide Prevention Toolkit	24	1	1.9%
LifeSavers Training	80	1	1.9%
More Than Sad: Suicide Prevention Education for Teachers and Other School Personnel	32	2	3.7%
More Than Sad: Teen Depression	247*	5	9.3%
Preventing Transgender Suicide: An Introduction for Providers	90	1	1.9%
QPRT Suicide Risk Assessment and Management Training	12	1	1.9%

Figure 25. Evidence-Based Practice	Estimate Number of Persons Receiving/ Materials Distributed in most recent 12 months	Number of Counties Reporting Use/Distribution in most recent 12 months	% of Michigan Counties
Question, Persuade, Refer (QPR) Gatekeeper Training for Suicide Prevention	1207	8	14.8%
School Suicide Prevention Accreditation	8	2	3.7%
SOS: Signs of Suicide	324	9	16.7%
SOS Signs of Suicide Middle School Program	47	4	7.4%
Suicide Alertness for Everyone (safeTALK)	375*	7	13.0%
Suicide Assessment Five-Step Evaluation and Triage (SAFE-T)	50	1	1.9%
Supporting Survivors of Suicide Loss: A Guide for Funeral Directors	42	4	7.4%
What Is Depression? How to Treat It and What to Do--A Suicide Prevention Guide for Young People	*	1	1.9%
Working Minds: Suicide Prevention in the Workplace	*	2	3.7%
Youth Suicide Prevention School-based Guide Checklists	39	1	1.9%
Youth Suicide Prevention, Intervention, and Postvention Guidelines: A Resource for School Personnel	39	1	1.9%

**Indicates that one or more respondent did not indicate a number but wrote the word "many" or some other non-quantifiable indicator.*

Utilizing these data helps to evaluate progress under plan goal #6: Improve the recognition of and response to high risk individuals within communities. Based on the counts reported through this survey process, 6590 persons received training to be gatekeepers during the past twelve months. The Question, Persuade, Refer (QPR) gatekeeper training program was the curriculum reported as being used most broadly across the state (1207 persons trained in eight counties). However, the highest number of gatekeepers was trained using the Gryphon Place Gatekeeper curriculum (4953 persons trained in two counties). While this information cannot be extrapolated across the six year life of the Suicide Prevention Plan, it can provide a one year snap-shot.

While not an exhaustive list, figure 26, below, displays additional activities that respondents reported that were not included on the best practices list.

Figure 26. Other Programs Implemented (not included on best practices list)	Estimate Number of Persons Receiving/ Materials Distributed in most recent 12 months	Number of Counties Reporting Use/ Distribution in most recent 12 months	% of Michigan Counties
Survivor Support Group		4	7.4%
Minds Program	60	1	1.9%
Suicide Awareness Presentations		3	5.6%
Yellow Ribbon Clubs/Campaigns	800*	6	11.1%
Military Family Support Outreach		1	1.9%
Educational programs/forums	1000	8	14.8%
Out of Darkness/Suicide Awareness Walk	1200	2	3.7%
TeenScreen	60	2	3.7%
Means Restriction Education	4	1	1.9%
Local Outreach to Suicide Survivors (LOSS)	6	1	1.9%
Suicide Prevention Among LGBT Youth: A Workshop for Professional Who Serve Youth	90	1	1.9%

**Indicates that one or more respondent did not indicate a number but wrote the word "many" or some other non-quantifiable indicator.*

Goal #5: Promote efforts to reduce access to lethal means and methods of suicide.

Two objectives are organized under goal #5 of the Suicide Prevention Plan for Michigan. These objectives address primary and other healthcare providers routinely assessing the presence of lethal means and exposing households across the state to public information campaigns designed to reduce accessibility of lethal means. Evaluation survey respondents were asked the question, *"what, if anything, has your community done to reduce access by suicidal individuals to lethal means?"* Respondents representing thirty-five counties (64.8% of counties represented among survey respondents) indicated that they were engaging in at least one activity to reduce access to lethal means of suicide. Figure 27, right, displays the distribution of counties across the state where these activities are taking place. Among the thirty-five counties reporting activities to reduce access to lethal means, sixty percent (N=21) reported engaging in two or more activities.

Figure 27. Counties addressing access to lethal means

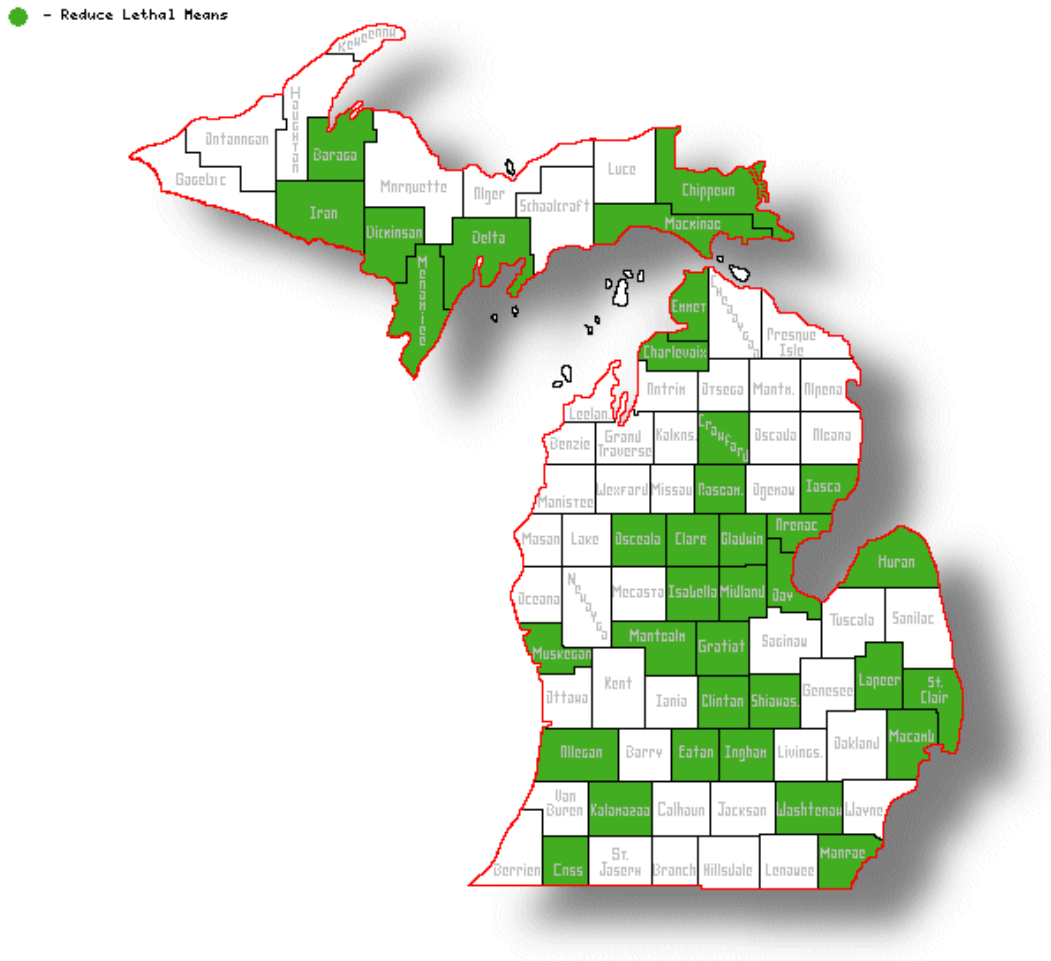
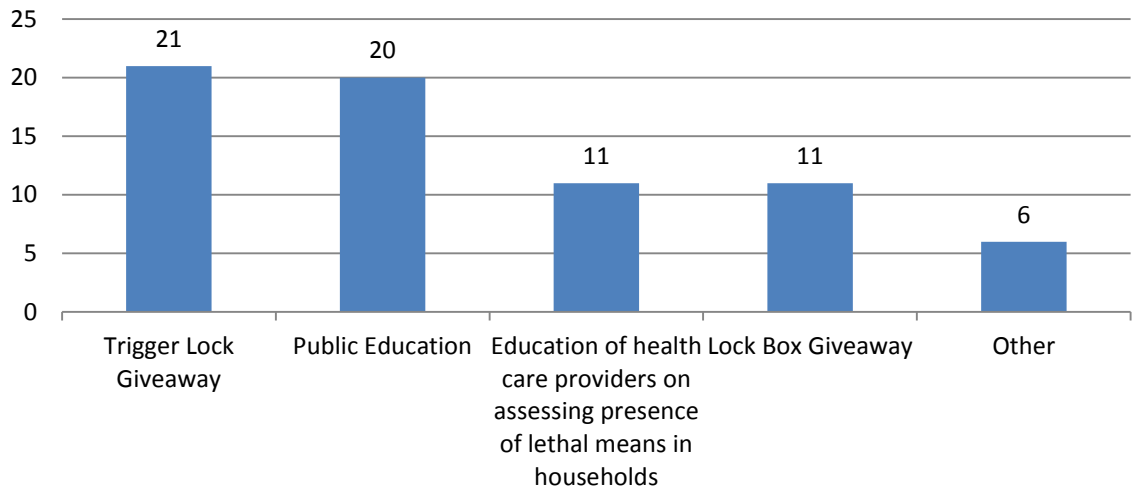


Figure 28, below, shows the number of counties where activities are taking place, by activity type. It shows that the most common activities are trigger lock giveaway programs and public education campaigns. Respondents from six counties identified activities other than those specifically identified on the survey. Respondents from two of those counties identified linking their efforts to limit access to lethal means to efforts to reduce access to prescription medications. Respondents representing four counties identified planning to address access to lethal means as the activity they have engaged in to date.

Figure 28. Count of Counties Acting to Reduce Access to Lethal Means, by activity



Goal #8: Improve access to and community linkages with mental health and substance abuse services.

Goal #8 includes three objectives addressing linkages with mental health and substance abuse services. Those objectives address the identification and dissemination of model programs that address co-occurring disorders, mental health and substance abuse treatment parity, and increasing the number of communities promoting the awareness and utilization of 24-hour crisis intervention services. Related to increasing utilization of 24-hour crisis intervention services, the plan established annual, cumulative goal increases that established the goal of a sixty percent increase over the baseline number of communities where 24-hour crisis intervention services are promoted and utilized. As was discussed earlier in this evaluation document, at least one call to the Lifeline crisis hotline was made in 2010 from nearly ninety-nine percent (98.8%) of Michigan counties. No calls originated from just one county (Keweenaw). In addition to the state wide promotion of the Lifeline crisis hotline, several coalitions promote locally based crisis intervention hotline programs. Call volume to the various local hotline programs was not included as a part of this evaluation; thus Lifeline call data is not indicative of all crisis line calls made in the state.

Evaluation survey respondents were asked the question, *"Do people living in your community have access to 24-hour crisis intervention services?"* Of the sixty-eight respondents that answered that question, more than eighty-eight percent (88.2%, N=60) responded in the affirmative. Seven of the counties represented by respondents answering this question "no" or "I don't know" were identified by other respondents as having 24-hour crisis intervention services and all of them are counties where Lifeline calls originated in 2010. Thus, while the baseline does not appear to have been established when the Suicide Prevention Plan for Michigan was written, this plan objective has clearly been met.

Although the objective was met, this analysis as well as 2010 Lifeline data suggests that there is still work to be done in this area. First, as has been noted earlier in this evaluation, respondents from the same counties are not always aware of the activities of their coalition or other coalitions operating within that county. Perhaps more importantly, however, twelve counties originated less than ten calls to Lifeline in 2010, which may suggest the need for additional public awareness activities. Several of these counties are sparsely populated and the number of calls per 1,000 residents is within the average range for Michigan as a whole. Figure 29, below, shows the counties where less than ten calls to Lifeline were originated in 2010 and the number of calls per 1,000 residents is well below the average for Michigan as a whole. Two items are noteworthy here. First, just two of these counties have an active Suicide Prevention Coalition or workgroup; three more had a Suicide Prevention Coalition or workgroup that is now inactive. Second, all of the counties identified in Figure 29 are rural, relatively sparsely populated counties. *It is recommended that the Michigan Association for Suicide Prevention market or support local or state-level marketing efforts of the Lifeline system to rural areas of the state.*

Figure 29.

County	Population	Lifeline Calls 2010	Lifeline Calls per 1,000 residents 2010
Arenac	15899	6	0.377
Keweenaw	2156	0	0.000
Leelanau	21708	1	0.046
Missaukee	14849	4	0.269
Montmorency	9765	2	0.205
Oceana	26570	7	0.263
Oscoda	8640	2	0.231

Goal #9: Improve and expand surveillance systems.

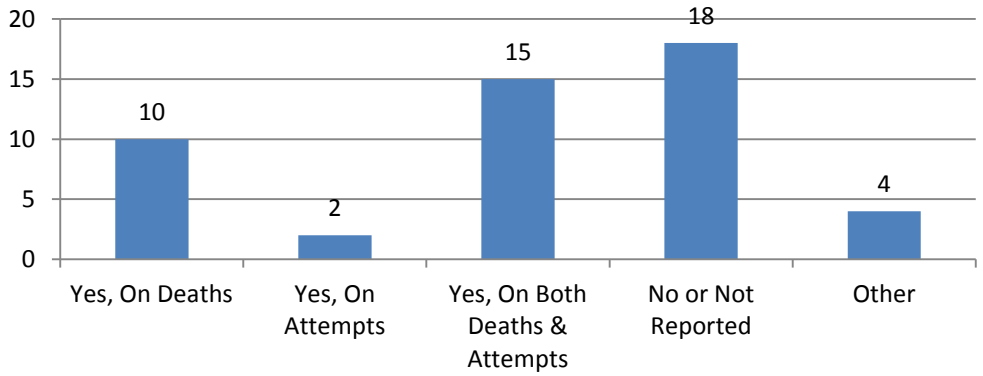
Four objectives are organized under goal #9. These objectives address annual reporting regarding suicides and suicide attempts by the Michigan Department of Community Health, standardized protocols for death scene investigations, surveillance of youth risk behavior, and use of surveillance data in future planning efforts.

The Michigan Department of Community Health has implemented the statewide collection of data regarding violent deaths, including suicides. The Michigan Violent Death Reporting System has reportedly collected a full dataset for 2010. *It is recommended that these data be published in a timely manner and technical assistance provided to local coalitions regarding its interpretation and use at the local level.*

Figure 30, below, displays an analysis of 2011 evaluation survey responses to the question asking whether local coalitions are collecting surveillance data. It shows that at least one respondent from

more than fifty-five percent (55.1%) of local coalitions indicated that their workgroup was collecting surveillance data regarding suicides, attempts, or both. Again, it is interesting to note that respondents from within the same counties did not always answer the same way. This may indicate one of two issues. First, surveillance data collected may not be shared as broadly as it should be and, thus, some members of a coalition may not be aware that surveillance data is being collected. Second, in counties where more than one coalition may be active, surveillance efforts might not be shared between coalitions. This may cause duplication of efforts and may limit the efficacy of both coalitions' efforts.

Figure 30. Coalitions' Local Surveillance Data Collection



Between January 1, 2008 and December 31, 2009 the Center for Disease Control and Prevention conducted a study of *Suicidal Thoughts and Behaviors Among Adults Aged >+18 Years*[9]. This study surveyed a representative sample of the civilian, non-institutionalized U.S. population aged 12 and older. Figure 31, below, displays the results of that study for the United States in general and Michigan specifically (N=118). It shows that, among survey respondents, the percent of Michigan residents that thought about, planned, and/or attempted suicide during the study period was greater than the percent of U.S. residents that thought about, planned and/or attempted suicide. However, the sample gathered in Michigan is small and cannot be considered representative of Michigan.

Figure 31.

Thought	Total	Male	Female	White, Non-Hispanic	Black, non-Hispanic	Hispanic	Asian, non-Hispanic
U.S.	3.7%	3.5%	3.9%	3.9%	3.5%	3.0%	2.1%
MI	4.4%	4.3%	4.6%	4.8%	3.0%	2.5%	3.8%

[9] Centers for Disease Control and Prevention Morbidity and Mortality Weekly Report, Vol. 60, No. 13. October 21, 2011.

Plan	Total	Male	Female	White, Non-Hispanic	Black, non-Hispanic	Hispanic	Asian, non-Hispanic
U.S.	1.0%	1.0%	1.0%	1.0%	1.0%	0.9%	0.4%
MI	1.6%	1.4%	1.7%	1.6%	1.5%	0.7%	--
Attempt	Total	Male	Female	White, Non-Hispanic	Black, non-Hispanic	Hispanic	Asian, non-Hispanic
U.S.	0.5%	0.4%	0.5%	0.4%	0.7%	0.5%	0.2%
MI	0.8%	0.9%	0.7%	0.8%	1.0%	0.5%	0.3%

Recommendation: While the MiPHY survey collects self-reported data from Middle and High School students regarding suicide ideation and attempts, this system is limited by its voluntary nature. The breadth of administration allows a snapshot at the state level, but due to the fact that it is not a randomized sample, it cannot be interpreted as representative of Michigan youth in general. In addition, there is no system to collect information about suicidal ideation or attempts among Michigan adults. As the county survey data reported above shows, several suicide prevention coalitions across the state are collecting data regarding attempts, but methods vary from coalition to coalition (based on local design) and are not broad enough to provide state-level information. MASP should work with local coalitions and the MDCH to establish a standardized data collection methodology that coalitions may utilize as a first step to gathering ideation and attempt data.

Additional Considerations: The Suicide Prevention Plan for Michigan does an excellent job identifying and constructing a framework for organizing the state's priorities when addressing suicide prevention efforts. It provides initial, supporting data and presents an excellent argument for why suicide prevention is important. Additionally, real or potential data sources are identified under each objective throughout the plan for future measurement of success. The plan, however, has some limitations that, if addressed, may produce greater results. First, while goals and objectives are clearly stated, they are not supported by specific, measurable action steps that will produce the desired results. For example, objective 1.1 states, "*reduce the number of suicide attempts among Michigan youth, a population for which we have baseline data."* In order for the plan to effectively lead prevention efforts for Michigan youth, it should provide methods to be employed to achieve the desired reduction. Further, it would be beneficial for the baseline data mentioned in the objective to be specifically stated. Second, while data sources are suggested under each objective, the Michigan Association for Suicide Prevention would have served itself well to periodically obtain data updates from those sources or, when the potential sources proved fruitless or non-existent, seek alternative data sources that could be used to measure progress. When action plans are written in a measurable manner, data collection can generally occur with little effort and cost, enabling ongoing measurement to occur. Third, *it is recommended that the Michigan Association for Suicide Prevention develop a revised plan, addressing the limitations noted above as well as revising the direction of several goals that have not been addressed in the manner intended.*

Conclusion: The Suicide Prevention Plan for Michigan was implemented six years ago and has provided a framework for local and state suicide prevention efforts. Each of the areas measured as a part of this evaluation has demonstrated positive results, although it is difficult to draw a direct correlation between the plan and the results. Local suicide prevention activity has expanded across the state, with most metropolitan areas in the state and many rural areas covered by a suicide prevention plan, and some communities have more than one plan (addressing specific populations such as youth, school districts, and Tribal entities). There is some concern that coalitions that have implemented plans and have been successful in addressing suicide prevention issues in the communities they were designed to serve are no longer active, predominantly due to funding issues. *It is recommended that the Michigan Association for Suicide Prevention support local coalitions with methods for post-grant funding sustainability planning that begins in the first year of grant funding and builds throughout the life of the grant.* Additionally, efficiencies could be realized, and efforts better sustained if coalitions with plans addressing populations within the same county—or even in neighboring counties—were to share resources and build upon one another's strengths.

Appendix A: County-level MiPHY data 2007

County	Population	2007: MS # MiPHY Respondents	2007: HS # MiPHY Respondents	2007: Percent of MS students who ever seriously considered attempting suicide	2007: Percent of MS students who ever made a plan about how they would attempt suicide	2007: Percent of MS students who ever tried to kill themselves	2007: Percent of HS students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months	2007: Percent of HS students who seriously considered attempting suicide during the past 12 months	2007: HS % of students who made a plan about how they would attempt suicide during the past 12 months	2007: HS % of students who actually attempted suicide one or more times during the past 12 months	2007: HS % of students whose suicide attempt resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse during the past 12 months.
Antrim	23580	181	279	22.30%	12.60%	8.20%	31.40%	17.70%	17.00%	9.40%	3.00%
Arenac	15899		359	-	-	-	30.10%	17.90%	16.30%	16.20%	6.90%
Baraga	8860	92	194	20.70%	7.60%	2.20%	28.40%	16.20%	16.20%	8.10%	1.40%
Bay	107771	867	1491	36.70%	13.30%	17.20%	40.00%	30.00%	10.00%	20.80%	23.30%
Berrien	156813	124	230	25.00%	16.70%	6.00%	33.00%	20.20%	15.60%	9.10%	4.20%
Branch	45248										
Calhoun	136146	408	774	22.50%	13.90%	7.90%	27.20%	14.10%	11.30%	9.50%	3.60%
Cass	52293										
Charlevoix	25949	183	215	17.10%	14.30%	6.90%	22.50%	14.70%	11.40%	8.40%	3.80%
Cheboygan	26152	0	162				31.00%	14.70%	17.10%	8.60%	0.70%
Clinton	75382	709	672	17.00%	11.90%	5.40%	28.40%	14.60%	13.00%	12.10%	5.10%
Eaton	107759	927	1155	22.20%	14.50%	6.90%	28.90%	14.30%	13.40%	8.50%	14.10%
Gogebic	16427	124	291	15.90%	6.20%	1.80%	30.50%	16.10%	13.60%	7.60%	3.20%
Grand Traverse	86986	125	224	26.40%	14.10%	8.80%	30.40%	15.70%	13.40%	10.30%	2.60%
Gratiot	42476	52	0	38.50%	21.20%	7.70%					
Hillsdale	46688	203	483	27.70%	16.10%	9.10%	25.40%	12.00%	12.60%	8.30%	4.40%
Houghton	36628		535				16.00%	4.00%	4.00%	4.50%	0.00%
Huron	33118	329	680	16.80%	9.20%	5.30%	23.90%	12.10%	10.40%	6.70%	2.50%
Ingham	280895	561	699	17.70%	11.50%	5.80%	32.30%	15.60%	15.50%	9.60%	2.20%
Iosco	25887	384	667	29.80%	18.50%	13.70%	29.70%	15.40%	16.70%	10.50%	3.30%
Isabella	70311		205				26.10%	13.40%	9.90%	6.60%	2.50%
Jackson	160248	1612	2864	24.80%	14.90%	9.00%	31.70%	16.80%	15.10%	10.60%	3.70%

County	Population	2007: MS # MiPHY Respondents	2007: HS # MiPHY Respondents	2007: Percent of MS students who ever seriously considered attempting suicide	2007: Percent of MS students who ever made a plan about how they would attempt suicide	2007: Percent of MS students who ever tried to kill themselves	2007: Percent of HS students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months	2007: Percent of HS students who seriously considered attempting suicide during the past 12 months	2007: HS % of students who made a plan about how they would attempt suicide during the past 12 months	2007: HS % of students who actually attempted suicide one or more times during the past 12 months	2007: HS % of students whose suicide attempt resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse during the past 12 months.
Kalkaska	17153		208				30.50%	16.70%	13.40%	10.30%	2.00%
Kent	602622	669	1433	17.90%	10.50%	5.50%	28.10%	14.10%	11.20%	8.90%	4.40%
Leelanau	21708		185				24.50%	14.40%	10.80%	13.70%	4.40%
Macomb	840978	2599	3882	19.50%	13.30%	6.90%	28.50%	13.60%	13.10%	10.30%	4.30%
Midland	83629		951				27.60%	13.70%	14.10%	8.00%	3.10%
Montcalm	63342	380	1511	23.40%	15.50%	11.30%	29.60%	14.20%	12.70%	7.70%	2.70%
Muskegon	172188	445	1090	17.20%	6.90%	4.80%	26.40%	15.40%	12.40%	7.90%	2.90%
Oakland	1202362	3533	6156	19.60%	10.40%	5.30%	27.80%	12.20%	10.90%	6.60%	2.70%
Ontonagon	6780		103				17.50%	7.50%	10.00%	0.00%	0.00%
Saginaw	200169	830	1849	20.00%	12.90%	6.30%	30.20%	14.70%	12.80%	7.90%	3.00%
Sanilac	43114		292				35.40%	20.30%	14.20%	11.80%	5.00%
Tuscola	55729	470	1007	29.00%	18.60%	10.20%	29.40%	15.90%	14.00%	8.60%	3.70%
Wayne	1820584	3126	4065	24.20%	15.60%	10.40%	31.10%	15.50%	13.60%	10.70%	3.60%

Appendix B: County-level MiPHY data 2009

County	Suicide Prevention Plan Active 2009	Suicide Prevention Plan Previously Active	2009: MS # MiPHY Respondents	2009: HS # MiPHY Respondents	2009: MS % of students who ever seriously considered attempting suicide	2009: MS % of students who ever made a plan about how they would attempt suicide	2009: MS % of students who ever tried to kill themselves	2009: HS % of students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months	2009: HS % of students who seriously considered attempting suicide during the past 12 months	2009: HS % of students who made a plan about how they would attempt suicide during the past 12 months	2009: HS % of students who actually attempted suicide one or more times during the past 12 months	2009: HS % of students whose suicide attempt resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse during the past 12 months.
Alpena, Montmorency, Alcona			443	661	20.70%	12.70%	6.90%	36.00%	14.10%	8.00%	6.00%	0.00%
Allegan	Y		379	459	17.60%	11.90%	5.20%	32.80%	15.00%	12.70%	9.40%	4.10%
Antrim			225	218	25.50%	17.10%	8.60%	31.70%	14.30%	10.70%	5.60%	2.30%
Arenac	Y		151	311	11.60%	4.70%	4.90%	32.20%	17.30%	12.50%	12.70%	6.00%
Baraga	Y		92	172	23.10%	14.30%	6.60%	25.00%	12.60%	9.00%	5.00%	1.20%
Barry			498	875	12.80%	7.30%	3.90%	28.60%	14.90%	9.40%	7.00%	2.80%
Bay	Y		950	1443	18.40%	8.90%	5.90%	33.60%	18.10%	13.10%	8.90%	2.60%
Berrien				401				30.70%	14.30%	9.90%	8.00%	3.60%
Branch			348	597	21.20%	10.80%	5.00%	31.60%	15.50%	12.30%	9.50%	4.50%
Calhoun			1315	1934	22.30%	14.30%	8.80%	34.20%	16.50%	14.00%	11.20%	4.50%
Charlevoix	Y		255	340	19.20%	14.90%	6.10%	34.10%	20.10%	15.60%	9.20%	6.10%
Chippewa, Luce & Mackinac	Y		314	585	16.70%	9.90%	4.60%	30.30%	15.70%	11.50%	8.50%	3.60%
Clinton		Y	467	684	13.50%	8.70%	5.00%	29.40%	16.20%	13.40%	12.50%	5.80%
Crawford, Ogemaw, Oscoda, Roscommon	Y		262	446	23.20%	13.80%	8.70%	36.80%	19.10%	14.50%	9.90%	4.20%
Eaton	Y		779	1832	25.30%	13.90%	8.60%	33.00%	15.50%	12.80%	9.10%	5.20%
Emmet	Y		328	662	21.60%	13.70%	8.00%	25.30%	15.80%	17.60%	9.50%	0.00%
Genesee				578				30.20%	14.10%	10.60%	7.40%	3.60%

County	Suicide Prevention Plan Active 2009	Suicide Prevention Plan Previously Active	2009: MS # MiPHY Respondents	2009: HS # MiPHY Respondents	2009: MS % of students who ever seriously considered attempting suicide	2009: MS % of students who ever made a plan about how they would attempt suicide	2009: MS % of students who ever tried to kill themselves	2009: HS % of students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months	2009: HS % of students who seriously considered attempting suicide during the past 12 months	2009: HS % of students who made a plan about how they would attempt suicide during the past 12 months	2009: HS % of students who actually attempted suicide one or more times during the past 12 months	2009: HS % of students whose suicide attempt resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse during the past 12 months.
Gogebic			69	116	27.80%	16.70%	11.10%	38.90%	16.70%	11.80%	25.00%	5.90%
Grand Traverse	Y		629	1233				29.80%	13.50%	10.00%	8.50%	3.70%
Hillsdale			262	480	24.20%	16.30%	8.80%	36.30%	17.90%	13.60%	7.80%	4.20%
Houghton	Y		272	343				29.90%	16.50%	5.70%	7.00%	3.20%
Huron	Y		293	707	21.20%	12.30%	8.00%	29.10%	15.20%	13.10%	7.10%	2.60%
Ingham	Y		1198	1922	25.70%	17.80%	12.70%	34.20%	16.30%	13.90%	11.50%	5.10%
Iosco		Y	295	522	21.20%	6.10%	3.10%	34.60%	19.50%	5.60%	10.70%	5.00%
Jackson			1610	2945	21.80%	13.00%	7.90%	33.40%	17.30%	13.20%	10.10%	4.00%
Kalamazoo	Y		1602	3624	17.60%	11.20%	5.40%	28.90%	14.40%	10.40%	8.80%	4.00%
Kent	Y		1509	2952	19.40%	12.30%	4.70%	31.80%	15.60%	10.50%	7.80%	3.70%
Leelanau	Y		92	287				25.40%	10.50%	8.80%	6.30%	2.20%
Lenawee			308	218	15.40%	8.60%	2.70%	30.80%	18.60%	12.20%	9.60%	3.90%
Macomb	Y		3949	6671	21.20%	12.90%	8.30%	32.70%	17.20%	10.70%	9.60%	3.30%
Mason & Lake			107	71	29.10%	24.30%	12.60%	22.20%	7.90%	7.90%	7.30%	3.20%
Midland	Y		842	1732				37.60%	17.10%	21.10%	7.20%	70.00%
Missaukee			145	309	39.20%	25.70%	14.90%	34.40%	22.20%	16.00%	11.80%	3.90%
Newaygo	Y		357	789	32.20%	19.20%	9.60%	33.00%	17.10%	12.70%	10.20%	3.60%
Oakland	Y		5000	8307	19.00%	12.70%	7.50%	32.00%	16.20%	12.00%	9.00%	3.70%
Oceana			129	120	14.80%	9.30%	3.90%	24.50%	10.80%	6.40%	7.30%	1.90%
Ontonagon			46	114	21.40%	7.70%	7.10%	40.50%	18.90%	16.20%	5.90%	0.00%
Osceola			189		28.30%	20.80%	8.40%					
Saginaw	Y		928	1637	21.00%	11.10%	7.20%	32.80%	15.40%	12.40%	8.30%	2.70%
St. Joseph			581	1008	23.10%	13.70%	9.00%	30.10%	13.20%	10.10%	6.30%	2.70%
Sanilac			102	217	14.30%	10.70%	3.60%	39.60%	19.80%	14.30%	10.80%	7.20%

County	Suicide Prevention Plan Active 2009	Suicide Prevention Plan Previously Active	2009: MS # MiPHY Respondents	2009: HS # MiPHY Respondents	2009: MS % of students who ever seriously considered attempting suicide	2009: MS % of students who ever made a plan about how they would attempt suicide	2009: MS % of students who ever tried to kill themselves	2009: HS % of students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months	2009: HS % of students who seriously considered attempting suicide during the past 12 months	2009: HS % of students who made a plan about how they would attempt suicide during the past 12 months	2009: HS % of students who actually attempted suicide one or more times during the past 12 months	2009: HS % of students whose suicide attempt resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse during the past 12 months.
Tuscola			431	1008	19.40%	11.70%	5.80%	35.70%	20.80%	13.90%	8.00%	4.20%
Washtenaw	Y		549	1026	16.20%	10.40%	4.60%	25.30%	11.20%	9.50%	4.80%	1.90%
Wayne	Y		5840	10036	24.10%	15.40%	10.20%	35.30%	17.50%	13.20%	11.90%	4.40%
Wexford			289	639	22.90%	17.80%	7.10%	36.90%	22.80%	19.00%	11.10%	3.70%

Attachment C: Lifeline calls by Michigan county

County	Population	Lifeline Calls 2005	Lifeline Calls per 1,000 residents 2005	Lifeline Calls 2006	Lifeline Calls per 1,000 residents 2006	Lifeline Calls 2007	Lifeline Calls per 1,000 residents 2007	Lifeline Calls 2008	Lifeline Calls per 1,000 residents 2008	Lifeline Calls 2009	Lifeline Calls per 1,000 residents 2009	Lifeline Calls 2010	Lifeline Calls per 1,000 residents 2010
Alcona	10942	0	0.000	1	0.091	5	0.457	3	0.274	3	0.274	7	0.640
Alger	9601	0	0.000	5	0.521	2	0.208	2	0.208	6	0.625	20	2.083
Allegan	111408	5	0.045	25	0.224	44	0.395	57	0.512	60	0.539	64	0.574
Alpena	29598	4	0.135	10	0.338	46	1.554	66	2.230	52	1.757	332	11.217
Antrim	23580	2	0.085	2	0.085	23	0.975	19	0.806	32	1.357	23	0.975
Arenac	15899	1	0.063	1	0.063	16	1.006	19	1.195	22	1.384	6	0.377
Baraga	8860	0	0.000	1	0.113	3	0.339	9	1.016	24	2.709	14	1.580
Barry	59173	1	0.017	13	0.220	34	0.575	36	0.608	67	1.132	31	0.524
Bay	107771	11	0.102	29	0.269	147	1.364	220	2.041	214	1.986	156	1.448
Benzie	17525	2	0.114	8	0.456	13	0.742	13	0.742	20	1.141	15	0.856
Berrien	156813	17	0.108	78	0.497	158	1.008	200	1.275	211	1.346	301	1.919
Branch	45248	2	0.044	9	0.199	40	0.884	28	0.619	73	1.613	46	1.017
Calhoun	136146	15	0.110	25	0.184	129	0.948	211	1.550	341	2.505	365	2.681
Cass	52293	3	0.057	11	0.210	21	0.402	54	1.033	32	0.612	19	0.363
Charlevoix	25949	1	0.039	3	0.116	17	0.655	16	0.617	10	0.385	16	0.617
Cheboygan	26152	0	0.000	5	0.191	38	1.453	24	0.918	31	1.185	43	1.644
Chippewa	38520	6	0.156	9	0.234	38	0.987	68	1.765	58	1.506	79	2.051
Clare	30926	1	0.032	8	0.259	29	0.938	24	0.776	43	1.390	26	0.841
Clinton	75382	1	0.013	6	0.080	29	0.385	21	0.279	22	0.292	29	0.385
Crawford	14074	0	0.000	0	0.000	22	1.563	32	2.274	33	2.345	32	2.274
Delta	37069	10	0.270	16	0.432	44	1.187	38	1.025	42	1.133	45	1.214
Dickinson	26168	3	0.115	5	0.191	29	1.108	51	1.949	69	2.637	52	1.987
Eaton	107759	10	0.093	10	0.093	78	0.724	76	0.705	65	0.603	65	0.603
Emmet	32694	1	0.031	11	0.336	25	0.765	85	2.600	50	1.529	50	1.529

County	Population	Lifeline Calls 2005	Lifeline Calls per 1,000 residents 2005	Lifeline Calls 2006	Lifeline Calls per 1,000 residents 2006	Lifeline Calls 2007	Lifeline Calls per 1,000 residents 2007	Lifeline Calls 2008	Lifeline Calls per 1,000 residents 2008	Lifeline Calls 2009	Lifeline Calls per 1,000 residents 2009	Lifeline Calls 2010	Lifeline Calls per 1,000 residents 2010
Genesee	425790	40	0.094	162	0.380	507	1.191	659	1.548	721	1.693	921	2.163
Gladwin	25692	2	0.078	0	0.000	12	0.467	14	0.545	25	0.973	24	0.934
Gogebic	16427	3	0.183	5	0.304	12	0.731	10	0.609	29	1.765	20	1.218
Grand Traverse	86986	10	0.115	54	0.621	65	0.747	165	1.897	184	2.115	157	1.805
Gratiot	42476	0	0.000	7	0.165	25	0.589	49	1.154	35	0.824	49	1.154
Hillsdale	46688	3	0.064	3	0.064	46	0.985	47	1.007	47	1.007	52	1.114
Houghton	36628	4	0.109	20	0.546	22	0.601	64	1.747	46	1.256	44	1.201
Huron	33118	5	0.151	0	0.000	13	0.393	33	0.996	33	0.996	35	1.057
Ingham	280895	53	0.189	119	0.424	387	1.378	478	1.702	807	2.873	726	2.585
Ionia	63905	0	0.000	4	0.063	27	0.423	15	0.235	51	0.798	51	0.798
Iosco	25887	1	0.039	5	0.193	15	0.579	52	2.009	61	2.356	92	3.554
Iron	11817	2	0.169	1	0.085	5	0.423	3	0.254	16	1.354	14	1.185
Isabella	70311	0	0.000	16	0.228	38	0.540	37	0.526	28	0.398	45	0.640
Jackson	160248	8	0.050	33	0.206	219	1.367	217	1.354	164	1.023	255	1.591
Kalamazoo	250331	34	0.136	79	0.316	233	0.931	196	0.783	322	1.286	370	1.478
Kalkaska	17153	1	0.058	1	0.058	16	0.933	19	1.108	17	0.991	17	0.991
Kent	602622	31	0.051	66	0.110	399	0.662	629	1.044	763	1.266	981	1.628
Keweenaw	2156	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000
Lake	11539	0	0.000	3	0.260	2	0.173	5	0.433	6	0.520	9	0.780
Lapeer	88319	4	0.045	14	0.159	34	0.385	84	0.951	59	0.668	84	0.951
Leelanau	21708	1	0.046	2	0.092	5	0.230	12	0.553	8	0.369	1	0.046
Lenawee	99892	5	0.050	11	0.110	87	0.871	86	0.861	134	1.341	185	1.852
Livingston	180967	10	0.055	44	0.243	120	0.663	181	1.000	181	1.000	188	1.039
Luce	6631	0	0.000	0	0.000	0	0.000	4	0.603	6	0.905	8	1.206
Mackinac	11113	0	0.000	5	0.450	8	0.720	10	0.900	7	0.630	25	2.250
Macomb	840978	110	0.131	282	0.335	1017	1.209	1199	1.426	1937	2.303	1398	1.662

County	Population	Lifeline Calls 2005	Lifeline Calls per 1,000 residents 2005	Lifeline Calls 2006	Lifeline Calls per 1,000 residents 2006	Lifeline Calls 2007	Lifeline Calls per 1,000 residents 2007	Lifeline Calls 2008	Lifeline Calls per 1,000 residents 2008	Lifeline Calls 2009	Lifeline Calls per 1,000 residents 2009	Lifeline Calls 2010	Lifeline Calls per 1,000 residents 2010
Manistee	24733	0	0.000	21	0.849	41	1.658	30	1.213	20	0.809	15	0.606
Marquette	67077	3	0.045	21	0.313	35	0.522	88	1.312	152	2.266	166	2.475
Mason	28705	1	0.035	5	0.174	24	0.836	51	1.777	41	1.428	80	2.787
Macosta	42798	3	0.070	13	0.304	35	0.818	40	0.935	29	0.678	85	1.986
Menominee	24029	1	0.042	5	0.208	17	0.707	48	1.998	53	2.206	49	2.039
Midland	83629	8	0.096	16	0.191	56	0.670	92	1.100	90	1.076	96	1.148
Missaukee	14849	2	0.135	3	0.202	2	0.135	7	0.471	7	0.471	4	0.269
Monroe	152021	11	0.072	20	0.132	162	1.066	269	1.769	424	2.789	267	1.756
Montcalm	63342	2	0.032	15	0.237	59	0.931	45	0.710	45	0.710	86	1.358
Montmorency	9765	0	0.000	1	0.102	6	0.614	8	0.819	9	0.922	2	0.205
Muskegon	172188	18	0.105	42	0.244	111	0.645	173	1.005	162	0.941	249	1.446
Newaygo	48460	6	0.124	13	0.268	47	0.970	45	0.929	30	0.619	26	0.537
Oakland	1202362	148	0.123	317	0.264	1344	1.118	1642	1.366	2293	1.907	2168	1.803
Oceana	26570	4	0.151	6	0.226	8	0.301	9	0.339	13	0.489	7	0.263
Ogemaw	21699	8	0.369	10	0.461	14	0.645	24	1.106	17	0.783	24	1.106
Ontonagon	6780	0	0.000	1	0.147	0	0.000	3	0.442	6	0.885	8	1.180
Osceola	23528	3	0.128	6	0.255	21	0.893	14	0.595	18	0.765	26	1.105
Oscoda	8640	0	0.000	0	0.000	5	0.579	5	0.579	10	1.157	2	0.231
Otsego	24164	1	0.041	1	0.041	25	1.035	41	1.697	32	1.324	26	1.076
Ottawa	263801	104	0.394	332	1.259	296	1.122	185	0.701	214	0.811	334	1.266
Presque Isle	13376	0	0.000	1	0.075	16	1.196	10	0.748	5	0.374	7	0.523
Roscommon	24449	1	0.041	6	0.245	20	0.818	39	1.595	29	1.186	35	1.432
Saginaw	200169	27	0.135	36	0.180	228	1.139	268	1.339	273	1.364	333	1.664
St. Clair	163040	29	0.178	41	0.251	142	0.871	197	1.208	145	0.889	218	1.337
St. Joseph	61295	0	0.000	10	0.163	60	0.979	128	2.088	80	1.305	164	2.676
Sanilac	43114	2	0.046	11	0.255	36	0.835	21	0.487	61	1.415	87	2.018

County	Population	Lifeline Calls 2005	Lifeline Calls per 1,000 residents 2005	Lifeline Calls 2006	Lifeline Calls per 1,000 residents 2006	Lifeline Calls 2007	Lifeline Calls per 1,000 residents 2007	Lifeline Calls 2008	Lifeline Calls per 1,000 residents 2008	Lifeline Calls 2009	Lifeline Calls per 1,000 residents 2009	Lifeline Calls 2010	Lifeline Calls per 1,000 residents 2010
Schoolcraft	8485	2	0.236	0	0.000	9	1.061	11	1.296	13	1.532	28	3.300
Shiawassee	70648	4	0.057	14	0.198	111	1.571	113	1.599	104	1.472	102	1.444
Tuscola	55729	2	0.036	11	0.197	45	0.807	54	0.969	44	0.790	40	0.718
Van Buren	76258	2	0.026	17	0.223	102	1.338	62	0.813	82	1.075	76	0.997
Washtenaw	344791	27	0.078	105	0.305	499	1.447	609	1.766	639	1.853	708	2.053
Wayne	1820584	322	0.177	778	0.427	2430	1.335	3076	1.690	4082	2.242	4024	2.210
Wexford	32735	1	0.031	19	0.580	36	1.100	48	1.466	40	1.222	47	1.436
Michigan	9883640	1165	0.118	3124	0.316	10386	1.051	13095	1.325	16529	1.672	17176	1.738