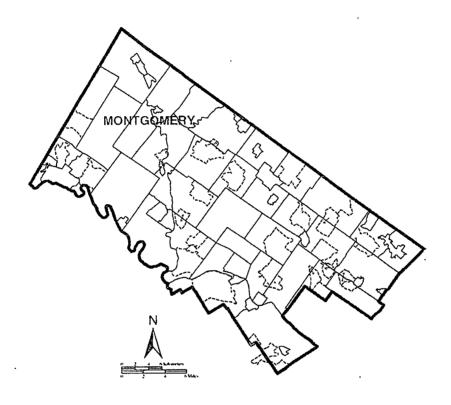
Montgomery County Suicide Prevention Needs Assessment



Tony Salvatore, MA



Montgomery County Emergency Service

> .. Norristown, PA June 2018



EXECUTIVE SUMMARY

This report looks at the need for suicide prevention in Montgomery County. Suicide is a serious but preventable community health problem that claims more than 100 lives on average in the county each year. MCES has been actively involved in suicide prevention for almost 20 years and will use the findings of this study to guide its suicide prevention efforts. This report will also be shared with the Montgomery County Suicide Prevention Task Force for use in fashioning a comprehensive county suicide prevention strategy.

MCES consulted an array of individuals knowledgeable in the areas of study design and suicide prevention. The study used available data on suicides and related behavior, internal data on MCES suicide-related admissions, a survey of suicide prevention stakeholders in the county, and an inventory of services available to meet the needs of individuals affected by suicide or suicidality in the county.

Key conclusions of the study are:

- Suicide prevention programming must target adults, and adult males in particular, if the number of suicides in the county are to be reduced. Women must also get attention as they are incrementally making up a greater proportion of suicide victims in the county.
- Suicide attempt survivors are the group recognized in the suicide prevention field as at highest risk of suicide but there is no readily available data on this population or any postvention or support resources available to such individuals in the county.
- Suicide prevention stakeholders ranked these groups for preventative action in order of priority: suicide attempt survivors, persons with behavioral health conditions, adult and older men, members of the military and Veterans, and individuals who self-harm or engage in nonsuicidal self-injury.
- Over 75% of individuals referred to MCES for involuntary ("302") psychiatric evaluations because of significant suicide risk or suicidal behavior are admitted for inpatient care.
- Montgomery County residents have access to a wide range of behavioral health services
 that can potentially lessen suicide risk and enhance buffers to suicidal behavior but
 there are no services except crisis intervention explicitly targeting suicidal behavior.

Data for 2016-2017 from the Coroner's Office tabulated by the Office of Mental Health indicates that the number of suicides yearly continued to exceed 100; one-third of suicide occur in the three month period of July, August and September; Pottstown, Abington, Norristown, Lansdale and Collegeville collectively account for 30% of county suicides; each year over 20 communities experience one or more suicides; firearms are the means used in over 41% of county suicides and over 46% of male suicides; drugs were the most common means of suicide (46.1%) in females and the third most common means overall; hanging was the second most frequently used means.

CONTENTS

- INTRODUCTION
- MCES SUICIDE PREVENTION BACKGROUND
- MONTGOMERY COUNTY, PA: OVERVIEW
- UNDERSTANDING SUICIDE PREVENTION
- STUDY DESIGN AND PROCESS
- INDIVIDUAL AND ORGANIZTIONS CONSULTED IN STUDY PLANNING
- MONTGOMERY COUNTY SUICIDES, 2012-2016
- SELF-INFLICTED INJURY DATA
- SUICIDE PREVENTION STAKEHOLDER SURVEY
- MCES INTAKE DATA
- SUICIDE PREVENTION RESOURCES
- DEVELOPMENT OF SUICIDE PREVENTION IN MONTGOMERY COUNTY
- SUICIDE PREVENTION IN MONTGOMERY COUNTY
- CONCLUDING COMMENTS
- APPENDIX
 - a 2016-2017 COUNTY DATA REVIEW
 - MCES IMPLEMENTATION STRATEGY
 - GLOSSARY OF TERMS

TABLES

Data Table 1. Montgomery County Suicides and Rates, 2012-2016

Data Table 2. Montgomery County Suicides by Gender, 2012-2016

Data Table 3. Montgomery County Suicides by Gender and Race, 2012-2016

Data Table 4. Montgomery County Age-adjusted Suicide Rates, 2012-2016

Data Table 5. Montgomery County Suicides, Age 19 and Under, 2012-2016

Data Table 6. Montgomery County Suicides, Ages 20-44, 2012-2016

Data Table 7. Montgomery County Suicides, Ages 45-64, 2012-2016

Data Table 8. Montgomery County Suicides, Age 65 and Over, 2012-2016

Hospital Data Table 1. Inpatient Discharges for Self-inflicted Injury, 2012, 2013, 2014

Hospital Data Table 2. Inpatient Discharges for Self-inflicted Injury by Gender, 2012-2014

Hospital Data Table 3. Inpatient Discharges for Self-inflicted Injury by Age, 2012-2014

Hospital Data Table 4. Inpatient Discharges for Self-inflicted Injury by Race, 2012-2014

EMR Table 1. Suicide-related Involuntary Referrals to MCES by Legal Status by Year

EMR Table 2. Suicide-related Involuntary Referrals to MCES by Disposition by Year

EMR Table 3. Suicide-related Involuntary Referrals to MCES by Gender by Year

EMR Table 4. Suicide-related Involuntary Referrals to MCES by Referral Source by Year

Survey Table 1. Target Groups for Suicide Prevention in Order of Priority

Survey Table 2. Features of a Comprehensive Approach to Suicide Prevention

Survey Table 3. Availability of Selected Approaches to Suicide prevention

CHARTS

Chart 1. SPRC Comprehensive Approach to Suicide Prevention

Chart 2. Inventory of Montgomery County Resources Relevant to Suicide Prevention

Chart 3. Suicide Prevention Resources and the IMV Model of Suicide

Chart 4. Suicide Prevention Readiness Stages to Date and Projected in Montgomery County

INTRODUCTION:

This report attempts to assess the need for suicide prevention in Montgomery County. The rationale for looking at the need for suicide prevention is:

- MCES serves individuals who may be at imminent risk of potentially injurious suicidal behavior or a fatal suicide attempt.
- Montgomery County experiences an average of 100 suicides yearly.

The objectives of the study are:

- 1. Provide a basis for an Implementation Strategy for MCES to be done by the suicide prevention program.
- 2. Provide a basis for development of a comprehensive suicide prevention strategy by the Montgomery County Suicide Prevention Task Force (MCSPTF)

This report includes:

- A description of the primary community served (i.e., Montgomery County).
- A description of the process used to conduct the assessment, including the sources and dates of the data and other information used to identify community health needs.
- A description of how input was drawn from persons who represent the interests of the community.
- A prioritized description of all of the resource needs identified.
- A description of the resources available to meet the needs identified.

This study examines the availability of resources in Montgomery County to:

- 1. Reduce suicide mortality
- 2. Reduce the incidence of suicidal ideation, suicide attempts, and related behaviors
- 3. Reduce the trauma and risk associated with being a suicide attempt survivor and a suicide loss survivor
- 4. Enhance buffers against the emergence or worsening of suicidality

It will look at the availability and accessibility of programs and services intended to keep suicides from occurring, keep thoughts of suicide from arising and progressing, support those who have made a suicide attempt and those who have experienced a suicide, and build or strengthen suicide protective factors.

Montgomery County Emergency Service thanks the Montgomery County Office of Mental Health and the Montgomery County Suicide Prevention Task Force for their support and assistance with this project. MCES also appreciates the cooperation of the individuals and agencies who participated in the suicide prevention needs assessment survey.

MCES SUICIDE PREVENTION BACKGROUND:

MCES has deep roots in suicide prevention. It was founded in 1974, partly because of two suicides by persons with serious mental illness that occurred in the county prison. MCES is a nonprofit multi-service emergency mental health provider offering a crisis/suicide hot line, a walk-in crisis center, a psychiatric emergency medical service (EMS), an inpatient psychiatric unit, and a crisis residential program (CRP). MCES's primary mission is to help individuals experiencing a psychiatric emergency or serious mental health crisis.

MCES has been involved in suicide crisis intervention since its inception. Beginning in the mid-1970s, suicide prevention became part of the curriculum of MCES's crisis intervention training for municipal police officers now known as the Crisis Intervention Specialist (CIS) Program. In 2001, MCES launched a Suicide Prevention Program to provide education, technical assistance, and other resources to other providers and the community. Selected program accomplishments include:

- Co-founding the Montgomery County Suicide Prevention Task Force
- Issuing "Suicide as a Community Health Problem in Montgomery County: An Agenda for Action" in 2006
- "MontcoCares" a web site offering suicide prevention information
- The MCES crisis center is part of the National Suicide Prevention Lifeline Network (1-800-273-TALK)
- Emergency Responders Suicide Prevention Forum in 2016 attended by over 200 police officers, emergency medical technicians, paramedics, and fire fighters
- Working with the Southeastern Pennsylvania Transportation Authority (SEPTA) in placing over 1000 signs with the National Suicide Prevention Lifeline at almost 300 commuter rail locations throughout the region
- Suicide prevention handbooks for mental consumers and family members, behavioral health providers, peer specialists, and criminal justice professionals
- Pocket-size suicide prevention kits for high school counselors, emergency responders, and family members
- Postvention resources for emergency responders who have experienced the suicide of a colleague

The American Foundation for Suicide Prevention recognized MCES's suicide prevention activities with a Community Impact Award in 2015.

MONTGOMERY COUNTY, PA: OVERVIEW

MCES is part of the regional behavioral health system in southeastern Pennsylvania and it maintains referral relationships with hospitals, crisis centers, payers, and other entities in several counties. However, Montgomery County is MCES's primary service area.

Montgomery County is the third most populous county in the Commonwealth of Pennsylvania. As of the 2010 census, the county population was 799,874. In July, 2017, the county population was estimated to be 826,075. The county population grew 3.3% from 2010 to 2017. One-third of the population is age 50 or over.

The racial/ethnic make-up of the county is 76.4% white, 9.9% Afro-American, 7.7% Asian, and 5.0% Hispanic/Latino. The county hosts growing African American, Korean American, Puerto-Rican American, Mexican American, and Indian American populations. It has the second-largest foreign-born population in the region. Over 56,000 Veterans reside in the county.

Montgomery County is a northwestern suburb of Philadelphia. It is part of the Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metropolitan Statistical Area. The county is divided into 62 municipalities including 14 First Class Townships, 24 Second Class Townships, and 24 Boroughs.

Montgomery County is served by 49 municipal police departments, including one that serves 3 municipalities. The Pennsylvania State Police serve 11 municipalities in the county. A number of special police agencies (transit, railroad, park, and university) also operate in the county. 28 Emergency Medical Service (EMS) units serve the county (including Station 305 at MCES).

There are 23 school districts in the county, some of which straddle county boundaries. There are 20 public high schools, 28 private high schools, and 22 colleges and universities. The Montgomery County Department of Public Safety trains emergency medical technicians (EMTs), firefighters and police officers. There is also a university-based municipal police academy.

There are 10 medical hospitals, of which 3 offer inpatient psychiatric care. There are 5 freestanding behavioral hospitals, 3 psychiatric hospitals and 2 addiction facilities. The Montgomery County Department of Human Services administers a wide range of community-based mental health services through 6 Community Behavioral Health Centers and several outpatient providers. There are 60 skilled nursing facilities (SNFs) in the county, the second highest concentration in PA

4.6% of county residents lack health insurance. 6.2% of residents live below the poverty level, about half the state rate. 8% of children under 18 and 5% of those ages 65 and over live in poverty. Per capita income in the county is \$43,842 and the median household income is \$84,113, both about 1.5 time that of the state and the US. There were almost 77,000 Medicare enrollees in the county in 2014; about 8000 are dual eligible for Medicaid. Almost 50,000 residents qualify for the Supplemental Nutrition Assistance Program (SNAP). Less than 10% of county residents are covered by Medicaid (Medical Assistance).

UNDERSTANDING SUICIDE PREVENTION:

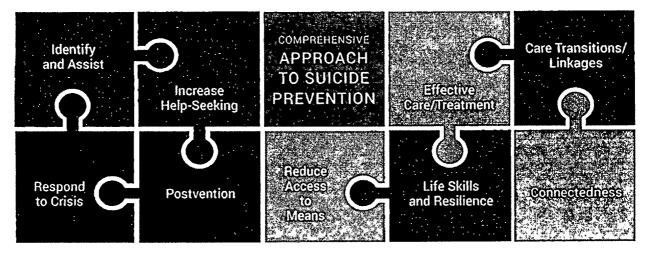
Working Definition: An assessment of suicide prevention needs should start with an explanation of what this activity entails. The operative term in the phrase suicide prevention is *prevention*. This involves actions in the form of information, education, and services directed at individuals and populations to deter the onset of suicide risk, minimize the progression of suicidal behavior, and ameliorate the consequences of attempting or experiencing a suicide.

Suicide Prevention Objectives: The aims of suicide prevention stated in the National Strategy for Suicide Prevention: Goals and Objectives for Action¹ provide a framework for this study:

- Prevent premature deaths due to suicide across the life span
- Reduce the rates of other suicidal behaviors
- Reduce the harmful after-effects associated with suicidal behavior and the traumatic impact of suicide on family and friends
- Promote opportunities and settings to enhance resiliency, resourcefulness, respect, and interconnectedness for individuals, families, and communities.

Conceptual Model of Suicide Prevention: The Suicide Prevention Resource Center (SPRC) offers this model illustrating the inter-relationship and interaction of programmatic efforts constituting a comprehensive approach to suicide prevention²:

Chart 1. SPRC Comprehensive Approach to Suicide Prevention



Insofar as is possible and practical this study will examine suicide prevention in Montgomery County in terms of the components of this model. Available data on county suicides, survey responses of suicide prevention stakeholders, and an inventory of current suicide prevention resources will be considered in terms of the elements of this model.

¹ US Dept. of Health & Human Services and National Action Alliance for Suicide Prevention, Washington, DC, 2012.

² www.sprc.org/effective-prevention/comprehensive-approach.

The kinds of activities and services making up the nine elements of the SPRC's comprehensive suicide prevention strategy are as follows:

- 1. Identify and Assist Persons at Risk Examples of activities in this strategy include gatekeeper training, suicide screening, and teaching warning signs
- 2. Increase Help-seeking Self-help tools and outreach campaigns are examples of ways to lower an individual's barriers to obtaining help, such as not knowing what services exist or believing that help won't be effective.
- 3. Ensure Access to Effective Mental Health and Suicide Care and Treatment This would include safety planning and evidence-based treatments and therapies delivered by trained providers and reducing financial, cultural, and logistical barriers to care to ensure access to effective mental health and suicide care treatment.
- 4. Support Safe Care Transitions and Create Organizational Linkages Practices that support continuity of care such as formal referral protocols, interagency agreements, cross-training, follow-up contacts, rapid referrals, and patient and family education.
- 5. Respond Effectively to Individuals in Crisis Hotlines and helplines but also mobile crisis teams, walk-in crisis clinics, hospital-based psychiatric emergency services, and peersupport programs.
- 6. Provide for Immediate and Long-term Postvention Supports for people bereaved by suicide.
- 7. Reduce Access to the Means of Suicide Educating the families of those in crisis about safely storing medications and firearms, distributing gun safety locks, changing medication packaging, and installing barriers on bridges.
- 8. Enhance Life Skills and Resilience Helping people build life skills, such as critical thinking, stress management, and coping.
- Promote Social Connectedness and Support Social programs for specific population groups (such as older adults or LGBT youth) and through other activities that reduce isolation, promote a sense of belonging, and foster emotionally supportive relationships.

Going forward these elements can be used to build a strategy for implementing suicide prevention programs in Montgomery County.

STUDY DESIGN AND PROCESS

In terms of approach, the study attempted to systematically determine and address "needs" or "gaps" between (i) current suicide prevention activities and programs in Montgomery County and an optimal set of suicide prevention activities and programs; and (ii) current suicide prevention efforts targeted at specific groups with high suicide risk in the county.

A set of resources should be prescribed by a suicide prevention strategy for the county. No statement of widely accepted planned or desired suicide prevention objectives or outcomes is as yet available. This report is intended to be at least part of the basis for developing a county suicide prevention strategy that will offer such a set of goals and objectives.

In lieu of any available formal baseline of desired suicide prevention conditions, this study undertook to assess the discrepancy between the prevailing suicide prevention efforts in the county and the elements of a comprehensive suicide prevention strategy offered by the SPRC (see preceding section). For purposes of the study, these elements constitute basic suicide prevention "needs."

In addition to attempting to assess gaps in suicide prevention resources in the county this study also looked at the availability of activities directed at nine groups at increased risk of suicide in the county population. These subgroups are presented in the *National Strategy for Suicide Prevention: Goals and Objectives for Action*³. They are as follows:

- 1. Individuals bereaved by suicide
- 2. Individuals in jails, prisons, other correctional settings
- 3. Individuals who self-harm or engage in non-suicidal self-injury (NSSI)
- 4. Individuals who have attempted suicide
- 5. Individuals with chronic medical conditions
- 6. Individuals with psychiatric disorders and/or substance use disorders
- 7. Lesbian, gay, bisexual, transgender, and questioning individuals
- 8. Members of the armed forces and Veterans
- 9. Adult and older men

The study attempted to identify any disparity between suicide prevention activities in the county and prevailing programs and groups targeted for prevention using data from:

- Available statistical data on suicides in the county
- A survey of suicide prevention stakeholders in the county
- Request for emergency psychiatric evaluations of suicidal individuals
- An inventory of available suicide prevention, intervention and postvention resources

The study also looks at the progression of suicide prevention as a community health effort in Montgomery County since it was initiated in 2002, where it stands at present, and where it must proceed going forward.

³ US Dept. of Health & Human Services and National Action Alliance for Suicide Prevention, Washington, DC, 2012.

INDIVIDUAL AND ORGANIZATIONS CONSULTED IN STUDY PLANNING

MCES sought input on this study from both internal and outside sources. MCES sources were contacted in person; outside sources mostly provided input by e-mail and telephone conversation on issues such as study scope, data sources, and survey questionnaire design. The following individuals provided assistance, information, suggestions or advice on the scope and methodology of the study.

Individual	Affiliation
Marina Cooney, MD	Montgomery County Emergency Service
Ruth Deming, MGPGP	New Directions Support Group
Paul De Marco	Montgomery County Commitment Office
Terri Erbacher, PhD	Philadelphia College of Osteopathic Medicine
Linda Falasco, LCSW	Survivors of Suicide, Inc.
Tim Golightly	PA Dept. of Health Division of Health Informatics
Abby Grasso	NAMI-Montgomery County
Judith Green, MSS	NAMI-Main Line
Erin Hewitt	Montgomery Co. Dept. of Health and Human Services
Adam Hoffberg, PhD	Rocky Mountain MIRECC/Veterans Administration
Govan Martin	Prevent Suicide PA
Anthony Matteo. PhD	Montgomery County Emergency Service
Melissa McHarg	Rocky Mountain MIRECC/ Veterans Administration
David McKeighan	Delaware/Chester County Medical Societies
Fred McLaren, CPS	Montgomery County Emergency Service
Frank Mielke	Audubon Management Consultants
Michelle Monzo	Montgomery County Emergency Service
JoAnne Nelson	PA Health Care Cost Containment Council
Priyankar Sarkar, MD	Einstein Health Care Network
Moira Tumelty, MS, NCC	Access Services
Anna Trout, MSW, CPRP	Montgomery Co. Dept. of Health and Human Services
Ingrid Waldron, PhD	NAMI-Main Line
Michael Zosa	Montgomery County Emergency Service

MCES appreciates the cooperation that these individuals provided in planning or carrying out the study. MCES is solely responsible for the content of this report.

MONTGOMERY COUNTY SUICIDES, 2012-2016

Suicide is a serious community health problem in Montgomery County. According to the Pennsylvania Department of Health, suicide was among the top five leading causes of death in Montgomery County in 2014 for three age groups. Suicide was the second leading cause of death in the ages 5-24 years, the third leading cause of death in the ages 25-44 years, and the fourth leading cause of death in ages 45-64 years. In a statistical report issued by the Montgomery County Department of Health, in 2011 suicide was the eleventh leading cause of death for the county population as a whole. This section reviews the most recently available statistics on suicide for the county from the Pennsylvania Department of Health⁴.

As indicated in Data Table 1, there were 507 deaths classified as suicides in the county in the five-year period 2012-2016, an average of 101 per year. During that period the county suicide rate (deaths per 100,000 population) rose from 10.0 in 2012 to 14.3 in 2016.

Data Table 2 shows that the incidence of suicides in the county by gender from 2012-2016 was just over 72% for males of all ages and almost 28% for all females. By way of comparison, in the period 2002-2004, the corresponding distribution of suicide by gender in the county was 79% for males and 21% for females. The increase in female suicides in the county in recent years was also documented by a Montgomery County Suicide Prevention Task Force report showing that for the years 2008-2014 male suicides were just over 73% and female suicides were just under 27%.⁵

Data Table 3 indicates that whites in general and white males in particular make up the greatest number of suicides with over 300 (63.1%), in the five-year period. This sad and tragic reality has been well-known to both suicide prevention stakeholders and the spouse, parents, siblings, children, partners, and friends who experienced their loss. Other groups have considerably less exposure to suicide, possibly because of a stronger presence of protective factors (e.g., family supports, religiosity). However, these buffers against suicide may change in the Asian and Latino population as they become more assimilated.

Data Table 4 breaks out the male suicide rates for the county by race or ethnicity. It clearly shows that white males drive the suicide rate for the county as a whole. The only way to drive down this rate would be target adult males in any suicide prevention strategy.

Data Table 5 shows that suicides among youths under age 20 are concentrated in the older teen (ages 15-19) group. This may be partly due to some in this population losing the support afforded by ready access to by high school resources. It may also show the onset of risk factors such as substance abuse, victimization, and family and interpersonal stressors. The data also

⁴ http://www.statistics.health.pa.gov/StatisticalResources/EDDIE/Pages/EDDIE.aspx#.Wwye5u4vyM8

⁵ Suicide: Data and Trends available at https://www.montcopa.org/DocumentCenter/View/9344/Suicide-Stats-Presentation-6-28-2016

indicate that so far the county has eluded the rising rate of suicide among pre-adolescents, particularly Afro-American children noted at the national level.

Data Table 6 is interesting in that it shows that at least for the five-year period suicides for the ages 20-44 population are distributed fairly evenly across each age grouping. Collectively, one-third (175) of all county suicides are in this young adult population, which makes them a viable target for suicide prevention.

Data Table 7 shows that the population that mainly makes up the county's "middle age" group produced over two-fifths (226) of the suicides in the five-year period. Dying by suicide is a greater risk in the two decades after age 45 that in the younger adult population. This suggests greater risk may be carried forward as this population, a significant number of whom are high risk Baby younger Boomers, grows older.

Data Table 8 indicates that elder suicides make up just over one-sixth of county suicides. Elder suicides make up a similar share of county suicides (17%) as at the national level (18%). This may change as this cohort grows in coming decades. Elders have not figured prominently in suicide prevention efforts in the county despite their vulnerability to a range of serious risk factors such as social isolation and chronic illness and disability. Some consideration should be given to embedding suicide risk screening into services for elderly adults. Risk screening should also occur during elders' contacts with primary care, inpatient, home care, and long-term care providers.

Data Table 1. Montgomery County Suicide and Rates, 2012-2016

Year	Count	Age-adjusted Rate
2012	88 .	10.0
2013	89	10.4
2014	111	12.5
2015	94	10.6
2016	125	14.3
Total	507	

Data Table 2. Montgomery County Suicide by Gender, 2012-2016

Gender	Count	Percent
Male	366	72.2
Female	141	27.8
Total	506 ·	100.0

Data Table 3. Montgomery County Suicides by Gender and Race/Ethnicity, 2012-2016

Race/ Ethnicity	Male	Percent	Female	Percent	Total	Percent
White	320	63.1	126	24.8	446	88.0
Black	21	4.1	7	1.4	28	5.5
Asian	16	3.1	6	1.2	22	4.3
Hispanic	9	1.8	2	0.4	11	2.2
Total	366	72.2	141	27.8	507	100.0

Data Table 4. Montgomery County Suicide Age-adjusted Rates by Gender and Race/Ethnicity, 2012-2016

Race/Ethnicity	Male
White	18.3
Black	10.8
Asian	10.6
Hispanic	*

^{*} Rate too small to be reliable

Data Table 5. Montgomery County Suicides Age 19 and Under, 2012-2016

Age Range	Count	Percent
4 Years/Under	-	-
5 – 9 Years	-	-
10 14 Years	2	0.4
15 – 19 Years	20	3.9
Total	22	4.3

Data Table 6. Montgomery County Suicides Age 20-44, 2012-2016

Age Range	Count	Percent
20 - 24 ,	37	7.3
25 - 29	32	6.3
30 - 34	36	7.1
35 - 39	39	7.7
40 - 44	31	6.1
Total	175	34.5

Data Table 7. Montgomery County Suicides Ages 45 - 64, 2012-2016

Age Range	Count	Percent
45 - 49	45	8.9
50 - 54	71	14.0
55 - 59	67	13.2
60 - 64	43	8.5
Total	226	44.6

Data Table 8. Montgomery County Suicides Age 65 and Over, 2012-2016

Age Range	Count	Percent
65 – 69	24	4.7
70 - 74	21	4.1
75 - 79	9	1.8
80 - 84	12	2.4
85 and Older	18	3.5
Total	84	16.6

SELF-INFLICTED INJURY DATA

A tenet of Joiner's Interpersonal Psychological Theory of Suicide⁶ is that any behavior or experience that lowers one's resistance to self-harm raises the risk of making a potentially lethal suicide attempt. Intentional self-injury is therefore a strong risk factor for suicide. Medically serious deliberate self-harm is a common reason for hospitalization. It includes intentional, non-fatal self-poisoning (e.g., prescription medication overdoses) and self-injury (e.g., cutting). While such behaviors may be common, the only publically available data in Pennsylvania is for inpatient admissions resulting from such acts. Some self-inflicted injuries may be motivated by intent to die and constitute suicide attempts. However, the published data is based only on ICD-9 CM coding which does not capture the nature of the intent behind the act.

Hospital Data Tables 1-4 present hospitalization and discharge data for Montgomery County for self-inflicted injuries for the years 2010-2014 and 2012-2014⁷. Hospital Data Table 1 presents self-injury data by year by age. It indicates that there are fewer admissions for self-injury in youths, young adults, and elders than in adults and middle-aged individuals. In the younger age groups this may suggest that the hospitalizations resulted from nonsuicidal self-injury (NSSI) (i.e., cutting, burning, scraping, scratching, etc.) requiring medical attention. The PDOH reports that over 90% of self-inflicted injury hospitalizations involve self-poisoning in the form of medication overdoses and cutting. These two behaviors may be engaged in with greater lethality in older age groups producing more hospitalizations.

Hospital Data Table 2 Breaks down inpatient discharges for stays related to self-injury by gender. Females of all ages have a greater number of hospitalizations for self-injury than males. Hospital Data Table 3 breaks out self-injury hospitalization in the county for a 5-year period in terms of age. Individuals under age 20 account for almost one-quarter of self-injury admissions; those ages 20-29 produce over one-half; and adults over age 50 generate one-fifth of the self-injury hospitalizations in the county.

Hospital Data Table 4 gives five years of county self-injury hospitalization data by race. Whites make up almost 84% of such admissions while Afro-Americans and other racial and ethnic groups comprise close to 9% and 8% respectively. These percentages roughly approximate the each group's share of the Montgomery County population but this does not necessarily mean that the incidence of medically serious self-injury in the county is population-driven.

Generally, individuals presenting to an emergency department (ED) with serious self-inflicted injuries are assessed for the risk of suicide. Many are referred to inpatient psychiatric care on a voluntary or involuntary basis. Others are directed to outpatient mental health care. Such treatment lessens the likelihood of future incidents of serious self-injury and the attendant suicide risk. The hospital encounters for such cases may entail lengthy ED stays and one or more days on a medical floor. This presents an opportunity to educate both patients and family

⁶ See Joiner, Thomas, Why People Die by Suicide. Cambridge, MA: Harvard University Press, 2005.

⁷ http://www.statistics.health.pa.gov/HealthStatistics/BehavioralStatistics/InjuryStatistics/Pages/ InjuryStatistics.aspx#.Ww1OaLenFdg

members to the suicide risk carried by self-injurers and to provide them with resources to deal with suicidality should it arise.

Suicide risk surveillance is part of suicide prevention but is often difficult to effectuate. Data on intentional self-injury is captured by these ICD 10 Codes:

Intentional self-harm X71-X83

Applicable To

- Purposely self-inflicted injury
- Suicide (attempted)

Codes

- X71 Intentional self-harm by drowning and submersion
- X72 Intentional self-harm by handgun discharge
- X73 Intentional self-harm by rifle, shotgun and larger firearm discharge
- X74 Intentional self-harm by other and unspecified firearm and gun discharge
- X75 Intentional self-harm by explosive material
- X76 Intentional self-harm by smoke, fire and flames
- X77 Intentional self-harm by steam, hot vapors and hot objects
- X78 Intentional self-harm by sharp object
- X79 Intentional self-harm by blunt object
- X80 Intentional self-harm by jumping from a high place
- X81 Intentional self-harm by jumping or lying in front of moving object
- X82 Intentional self-harm by crashing of motor vehicle
- X83 Intentional self-harm by other specified means

While it is important to track suicide deaths by these means it is equally important to track what may be non-fatal attempts. Suicide is a planned behavior and most of these deliberate acts of self-harm presage suicide plans that may be acted on in the absence of intervention. Also such data would strengthen lethal means restriction efforts.

Hospital Data Table 1. Inpatient Discharges for Self-inflicted-injury by Age, 2012, 2013, 2014

Year	0-14	15-24	.25-44	45-64	65-74	75/Over	Total
2012	5	97	175	147	17	13	. 454
2013	11	90	119	161	17	19	417
2014	18	102	123	146	22	26	437
Total	34	289	417	454	56	58	1308

Source: PA Dept. of Health, Injuries in PA Report

Hospital Data Table 2. Inpatient Discharges for Self-inflicted-injury by Gender, 2012-2014

Gender	Count	Rate	Percent
Male	889	. 45.3	40.6
. Female	1298	62.4	59.4

Source: PA Dept. of Health, Injuries in PA Report

Hospital Data Table 3. Hospitalizations for Self-injury by Age, 2010-2014

Age	0-19		35-49	50-64	65/Over	Total
Count	524	559	646	316	142	2187
Rate	52.4	77.8	77.6	37.1	22.3	<u>-</u>
Percent	23.9	25.6	29.5	14.5	6.5	100.0

Source: PA Dept. of Health, Injuries in PA Report

Hospital Data Table 4. Hospitalizations for Self-injury by Race, 2010-2014

Race	Black	White	Other	Total
Count	189	1828	170	2187
Rate	50.6	56.4	-	-
Percent	8.6	83.6	7.8	100.0

Source: PA Dept. of Health, Injuries in PA Report

SUICIDE PREVENTION STAKEHOLDER SURVEY

This reports the result of a survey conducted among selected groups of suicide prevention stakeholders in Montgomery County in April and May 2018. These were individuals who had a demonstrated interest in suicide prevention or who had received suicide prevention training and regularly made referrals on behalf of suicidal persons. These groups included:

- ACCESS Adult Mobile Crisis Intervention Service staff
- MCES Crisis Department staff
- Members of the Montgomery County Suicide Prevention Task Force
- Montgomery County Office of Mental Health staff

This represented a purposeful sample of potential respondents who were readily accessible and manageable with the limited resources available. It is estimated that 125 surveys were distributed to stakeholder sample. MCES received 65 completed surveys, a return rate of 52%. The survey was anonymous except for e-mail addresses provided by a small number of respondents who requested a copy of the final report.

Survey Table 1 gives the priority assigned to nine target groups for suicide prevention in the county. Individuals who survived a suicide attempt were accorded the highest priority (26.1%) by the stakeholders. This may reflect the education on suicide prevention that the stakeholders received which likely identified attempt survivors as being at highest risk of suicide. It may also be due in part to the discussions of the need for suicide attempt survivor support resources at a number of MCSPTF meetings and the negative experience of those stakeholders working in crisis services in locating such resources who behalf of attempt survivors with support needs.

The stakeholders assigned the second highest priority (18.5%) for suicide prevention action in the county to individuals with psychiatric and/or substance abuse disorders. The majority of individuals in the survey sample work for providers which are part of the behavioral health system in the county and have frequent contact with suicidal persons with behavioral health issues. Certainly most of the suicide crisis intervention in the county is delivered to persons with mental illness or substance use disorders. Focusing more suicide prevention on them might reduce their presentations to 911, crisis services, and EDs because of suicidality.

Adult and older men were accorded the third highest priority (15.4%) by the responding stakeholders. In terms of demographics this population collectively accounts for the greatest number of suicides in the county in any given year. However, with the exception of suicide prevention programs in the military, the Veterans Administration, and the correctional system, little suicide prevention targets men in general. Older men fare no better than their younger brothers despite higher suicide rates.

The incidence of suicide among active military members and Veterans is known to those in the stakeholder sample who designated this population the fourth highest priority (10.8%) for suicide prevention in the county. The county does not have a significant number of active military based here but the Center for Workforce Information and Analysis reported that there were almost 18,000 employment age Veterans between ages 18-64 residing in the county in

2016. The Pennsylvania State Data Center placed the number of total Veterans in the county at almost 56,000 based on the 2006-2008 American Community Survey. These men and women have access to a number of services in the county and region with suicide prevention programs but may not use these resources. Veteran resource education for families and providers might help remedy this. The sizeable number of older Veterans, most probably Vietnam era, warrants attention.

Individuals who self-harm or engage in nonsuicidal self-injury received the fifth highest priority (9.2%) for suicide prevention in the survey. A previous section of this report looked at the available data for hospitals admissions in the county because of self-inflicted injuries. Self-injury is often thought of as a youth problem but the most medically serious non-fatal self-harm occurs among adults and elders in the county. These are the same groups with the highest suicide rates.

Survey Table 2 shows that the stakeholders found the greatest gaps in the county's suicide prevention approach to be a lack of follow-up for individuals at risk of suicide (50.8%) and insufficient lethal means reduction (38.5%). The survey respondents noted the general availability of hot lines and warm lines (81.5%), accessible psychiatric evaluations and referrals to mental health care for suicidal persons (78.5%), and suicide prevention gatekeeper training for providers (53.8%), in the county. Almost 80% of respondents felt that suicide prevention awareness raising was underway to some degree in the county. However, just under a quarter stated that they did not know of such measures.

Survey Table 3 further affirms the stakeholder recognition of need for treatment and support in the county to prevent repeated suicide attempts (58.5%). A roughly comparable number (53.8%) cited the unavailability of treatment and support for persons at risk of suicide in the county. These responses demonstrate the respondents' perception that the county lacks resources explicitly designed to serve suicide attempt survivors and persons beset with some level of suicidality. This is not to say that there are not services in the county with some capacity to impact these problems just that there are no services specifically addressing them.

The stakeholders highlighted the availability of suicide prevention gatekeeper training (75.4%) and programs promoting connectedness and community integration (50.8%). Most of the respondents felt that community-based programs to reduce excessive alcohol use (70.8%) and programs imparting social-emotional, coping and problem-solving skills (53.8%) were at least partially available in the county.

Survey Table 1. Target Groups for Suicide Prevention in Order of Priority

Group	Endorsements	Percent
Individuals who have attempted suicide	17	26.1
2. Individuals with psychiatric disorders and/or substance abuse disorders	12	18.5
3. Adult and older men	10	15.4
4. Members of the armed forces and Veterans	7	10.8
5. Individuals who self-harm or engage in non-suicidal self-injury	6	9.2
6. Individuals in jails, prisons, other correctional settings	5	· 7.7
7. Lesbian, gay, bisexual, transgender, questioning individuals	4	6.1
8. Individuals with chronic medical conditions	2	3.1
9. Other (Teens and adolescents)	2	3.1

Survey Table 2. Features of a Comprehensive Approach to Suicide Prevention

Feature	Available	Partially Available	Unavailable	Don't Know
A public awareness campaign on suicide signs and risk factors and of where help is available locally	10 15.4%	40 61.5%	-	15 23.1%
Training for health and behavioral health providers on identifying risk and making appropriate referrals	35 53.8%	25 38.5%	3 4.6%	3 4.6%
Reducing access to lethal means such as firearms or unused prescription medications	4 6.2%	31 47.7%	25 38.5%	5 7.7%
Easy access to psychiatric evaluations and mental health care referrals for individuals with suicide risk.	51 78.5%	5 7.7%	6 9.2%	3 4.6%
Continuous care, monitoring and follow-up for individuals with suicide risk.	3 4.6%	8 12.3%	33 50.8%	21 32.3%
Hot lines and warm lines available 24/7 for persons troubled by thoughts of suicide or self-harm	53 81.5%	8 12.3%	4 6.2%	-

Survey Table 3. Availability of Selected Approaches to Suicide Prevention

Feature	Available	Partially Available	Unavailable	Don't Know
Community-based resources to reduce excessive alcohol use	16 24.6%	46 70.8%	3 4.6%	-
Programs to promote connectedness and community integration	33 50.8%	23 35.4%	5 7.7%	4 6.1%
Social-emotional, coping and problem-solving skills learning programs	22 33.8%	35 53.8%	6 9.2%	2 3.1%
Gatekeeper suicide prevention training (e.g., QPR, ASIST) for community members	49 75.4%	9 13.8%	4 6.1%	3 4.6%
Treatment and support for people at risk of suicide	9 13.8%	12 18.5%	35 53.8%	9
Treatment and support to prevent repeated suicide attempts	8 12.3%	8 12.3%	38 58.5%	11 16.9% -

MCES INTAKE DATA

In 2016, MCES added a "General Reason for Referral" field to its electronic medical record (EMR) for which one reason was "Suicide/Self-injurious." The following table gives the legal status of involuntary referrals to MCES related to suicide.

EMR Table 1. Suicide-related Involuntary Referrals to MCES by Legal Status by Year

Status	2016 Count	Percent	2017 Count	Percent
302A	200	44.5	235	_. 45.3
302B	249	55.5	284	54.7
Totals	449	100.0	519	100.0

What this data indirectly shows is that police officers and emergency department physicians file a greater share of petitions (302B) for involuntary psychiatric evaluations because of suicidal behavior than family members and others (302A). The increase between the two years is more a result of an increase in MCES bed capacity. Note that data in this section only relates to MCES involuntary cases and does not present all involuntary cases in the county.

The next table tallies suicide-related involuntary referrals to MCES by disposition in terms of inpatient admissions to MCES and discharges to community-based care.

EMR Table 2. Suicide-related Involuntary Referrals to MCES by Disposition by Year

Disposition	2016 Count	Percent	2017 Count	Percent
Admission	310	69.0	394	75.9
Discharge	139	31.0	125	24.1
Totals	449	100.0	519	100.0

This table indicates a significantly higher number of suicide-related involuntary referrals to MCES result in inpatient admissions and commitment because of imminent dangerousness. However, for both years the proportion of suicide-related admissions was the same as that for all involuntary admissions at MCES. The year-to-year increase in suicide-related admissions is very likely due to MCES accepting a greater number of high acuity cases.

EMR Table 3. Suicide-related Involuntary Referrals to MCES by Gender by Year

Gender	2016	2017	Total	Percent
Male	262	285	547	56.5
Female	185	232	417	43.1
Transgender	2	2	4	0.4
Totals	449	519	968	100.0

MCES only accepts individuals age 18 or over for evaluation and conducts evaluations on few individuals near age 70 or older. EMR Table 3 indicates that men make up almost three-fifths of involuntary referrals to MCES involving some level of suicidal behavior. This is consistent with higher proportion of men among suicide victims in Montgomery County. It is not consistent with the data presented above on hospitalizations associated with serious self-injury that showed three admissions for females to every two for males. Of course, not all cases of serious self-injury lead to an involuntary psychiatric evaluation and perhaps more females than males opt for voluntary evaluation possible with an involuntary evaluation petition as back-up should they change their mind. Also several facilities accept Montgomery County involuntary patients and MCES may receive a disproportionate share of male referrals.

EMR Table 4 shows the sources of the referrals to MCES on behalf of an individual felt to be at risk of suicide. In most cases the referral source is also the source of the petition for an involuntary psychiatric evaluation. Police may be dispatched to the home of a potentially suicidal individual by the MCES crisis center or another crisis service. Police are first responders and are the first on the scene of a 911 call that may involve suicidality. They may "302" a person felt to be at risk who refuses voluntary help or because they feel the risk is very high. Police may also seek an involuntary psychiatric evaluation on an offender in their custody or in a municipal jail who threatens suicide, voices a plan, makes an attempt. Overall this data show

that police officers and state troopers play an important and essential role in suicide crisis intervention.

Most hospital involuntary referrals to MCES originate with ED physicians filing in regard to an individual manifesting high suicide risk or who has incurred harm as a result of suicidal behavior. Involuntary self-referrals typically occur when a person who seeks help voluntarily declines help after being found to be a significant risk. Family members are often the first to confront suicidality in a spouse, sibling, child, or other close relative. County prison inmates of both genders, but especially men, are at high risk of suicide. Cases that are felt to need inpatient psychiatric treatment may be the subject of a "302" and taken to MCES for evaluation.

EMR Table 4. Suicide-related Involuntary Referrals to MCES by Referral Source by Year

Source	2016	2017	Total	Percent
Police	179	190	369	38.1
Hospitals	83	130	213	22.0
Self	11	14	25	2.6
Family	108	94	202	20.9
Corrections	12	. 22	34	3.5
Other	56	69	125	12.9
Totals	449	519	968	100.0

The involuntary commitment process is a valuable resource in assuring the safety of an individual an imminent risk of suicide, securing emergency psychiatric care, and arranging aftercare in the community or other setting. While it should be the last resort whenever possible, it is often the only option for suicidal individuals unable or unwilling to get help.

SUICIDE PREVENTION RESOURCES

This section outlines at least partially the services available in and around Montgomery County that support suicide prevention, intervention, and postvention. This listing is not meant to be exclusive or exhaustive and any omissions are the result of oversight.

While many of these services stand to benefit a suicidal person, with the exception of crisis services, none are designed to meet that need. Many of the services listed may be of assistance to individuals recovering from a suicide attempt, but, as has been pointed out elsewhere in this report, there are no services operating to specifically fulfill this mission in the county or the region. The following listing focuses almost exclusively on resources in the behavioral health system. Resources in other sectors (e.g., schools) were not researched as part of this study.

Chart 2. Inventory of Montgomery County Resources Relevant to Suicide Prevention

Prevention Component Identify and Assist Persons at Risk	 Resources ASIST (Applied Suicide Intervention Skills Training) Mental Health First Aid QPR (Question, Persuade, Refer) MCES Crisis Intervention Specialist (CIS) Program
Increase Help-seeking	 Case Management Peer Support Services Psychiatric Rehabilitation Services Recovery Coaching Wellness Recovery Acton Plan (WRAP) Training Community WRAP Support Groups NAMI Connection Support Group
Ensure Access to Effective Mental Health and Suicide Care and Treatment	 Administrative Case Managers Clinical Liaisons Montgomery County Office of Community Connections (Navicates) Community Behavioral Health Centers Montgomery County Behavioral Health Choices Network of Care

Support Safe Care Transitions and Create Organizational Linkages	 Student Assistance Program (SAP) Trail Guides Transitional Rehabilitative Residences Crisis Residential Programs
Respond Effectively to Individuals in Crisis Provide for Immediate and Long-term Postvention (Suicide Loss Survivors)	 MCES Crisis Hot Line MCES Emergency Medical Service (EMS) MCES National Suicide Lifeline Montgomery County Commitment Office Access Services Children, Adult, Family Mobile Crisis Intervention Service Children's Crisis Support Line Veteran's Crisis Line CONTACT Help Line Crisis Service – Abington Jefferson Crisis Service – Grandview Hospital/Penn Foundation Community Connections Survivors of Suicide, Inc. Center for Loss and Bereavement The Compassionate Friends Bereavement Support Group - Abington Jefferson Safe Harbor - Abington Jefferson (Children/Teens)
Provide for Immediate and Long-term Postvention (Suicide Attempt	 Grief Support Group – Tower Pottstown Peter's Place (Children)
Reduce Access to the Means of Suicide	 Montgomery County District Attorney's Prescription Drug Disposal Program Sheriff's Dept. Gun Locks Program Project Child Safe

•

.

Enhance Life Skills and Resilience	 Psychiatric Rehabilitation Services CBHC Recovery Coaches Community W.R.A.P. Support Groups NAMI Connection Support Group Hearing Voices Network
Promote Social Connectedness and Support	 Peer Support Talk Line Peer Support Services Peer Recovery and Education Resource Centers CONTACT Help Line Access services Teen Talk Line Access Services Teen Text Line

It might be helpful to relate the county resources to a model of suicide that demonstrates that suicidal behavior emerges in the course of a process. The Integrated Motivational-Volitional Model of Suicidal Behavior (IMV)⁸ lends itself to this purpose. It shows the interplay of factors promoting the development of ideation from pre-existing factors, the progression of thoughts of suicide from passive intermittent ideas to strong visions of self-harm, to potentially fatal suicidal behavior culminating in a suicide attempt based on a plan.

Chart 3. Suicide Prevention Resources and the IMV Model of Suicide

Pre-motivational Phase	Motivational Phase	Volitional Phase
 Adverse Life Events (e.g., Trauma, Loss) Pre-existing Conditions (e.g., Serious Mental Illness, Sub stance Abuse, History of Suicidal Behavior or Self-injury) Military Training Firearms Access 	 Humiliation and Defeat Blame Entrapment and Loss of Control Rumination Mild to Moderate Suicidal Ideation 	Behavioral Stage Persistent Ideation Making Threats Emergence of Suicidal Intent and Plan Seeking/Securing Lethal Means Making a Suicide Attempt

⁸ O'Connor, Rory (2011) The Integrated Motivational-Volitional Model of Suicidal Behavior. *Crisis.* 32(6) 295-298.

Prevention Components

- Increase Help-seeking
- Ensure Access to Mental Health Care
- Support Safe Care Transitions
- Suicide Loss/Suicide Attempt Postvention
- Means Restriction
- Enhancing Life Skills and Resilience
- Promote Social Connectedness

Prevention Components

- Identify and Assist Persons at Risk
- Respond Effectively to Individuals in Crisis
- Increase Help-seeking
- Ensure Access to Mental Health Care and Treatment
- Means Restriction

Prevention Components

- Identify and Assist Persons at Risk
- Respond Effectively to Individuals in Crisis
- Means Restriction
- Provide for Immediate Postvention (Suicide Attempt Survivors)

The "pre-motivational phase" is characterized by personal background factors and triggering life events. This phase is marked by suicidal latency and low level suicide risk. It is a "pre-crisis" level that includes relatively fixed vulnerabilities that may set a pathway to suicidality in motion as a result of increased stress. It includes a sizeable number of youths, adults and elders at any given time, most of whom will not develop suicidality. Suicide prevention here consists of measures to keep any suicidal tendencies in check. Montgomery County's various health and human services systems offer a broad array of resources that in large part support this outcome. The anticipated county suicide prevention strategy can the resource gaps affecting persons in this phase such as suicide attempt postvention and means restriction.

The "motivational phase" is brought on by experiences and beliefs or perceptions that facilitate or even lubricate the onset of suicidal thinking and intent. Persons at-risk at this phase are in situations or circumstances producing a sense of defeat, shame, or humiliation that make them feel trapped. Coping and problem-solving skills may have been inadequate or overwhelmed. Suicidal ideation may appear. It may be marginal and controllable but may intensify. Some may see themselves in crisis and recognize the need for help self-refer to warm lines and crisis lines. Others may be too caught up in their problems to do so or even be in denial. Gatekeeper suicide crisis intervention training can put an "early warning system" in place to identify such cases and assist in arranging help. Individuals with serious psychiatric disorders may have an illness-related response to this stress and have a mental health crisis which is not lifethreatening but may require sub-acute clinical intervention. The county's multi-provider crisis services system functions to keep risk contained at this point

The "volitional phase" is entered when thoughts of suicide have given way to behaviors or actions in furtherance of these thoughts. Parenthetically, it should be noted that "volitional' in

regard to this phase might be less thought of connoting a voluntary response than a response conditioned by persistent ideation and threats, repeatedly going over a suicide plan mentally, and even rehearsing the planned attempt by holding a weapon or visiting a bridge or railroad tracks. In this phase, an individual may be in imminent and increasing danger of self-harm and in a state of psychiatric emergency. A crisis response up to involuntary hospitalization may be necessary. Montgomery County has a strong, well-trained first responder capability composed of municipal police and EMS and an effective psychiatric emergency response system, both of which doubtlessly saves many lives. The challenge is to extend these services as well as non-emergency crisis and support services to the more than 100 individuals lost to suicide in the county every year. Most of these victims may not have sought or accepted help, were not known to the behavioral health system, and may not have told others of their suicidality or even shown warning signs.

DEVELOPMENT OF SUICIDE PREVENTION IN MONTGOMERY COUNTY

In this section an attempt will be made to outline the emergence of suicide prevention as a distinct community organization process in the county. Presently, suicide prevention efforts involve separate organizations contributing independently to an overall effort with the Montgomery County Suicide Prevention Task Force (MCSPTF) loosely coordinating these activities through information sharing.

The Community Readiness Model (CRM) will be used to put suicide prevention in the county into a developmental context. The CRM was developed by Tri-Ethnic Center for Prevention Research at Colorado State University⁹. It was originally developed for use in community alcohol and substance abuse prevention. It lends itself well as a framework for organizing a county suicide prevention effort.

The CRM consists of several stages. Below is modified version of the CRM adapted to provide a reading on the progress of suicide prevention in the county. This account is a general outline not a formal history. It may not include all activities that may have been underway at any point.

- 1. Low Awareness of Suicide as a Community Health Problem (Little knowledge of problem among community leaders and organizations in the county.)
 - Up to 1999: Suicide prevention was basically limited to crisis intervention with suicidal persons through local police, hospital emergency departments, and MCES's crisis services. Police officers received some suicide prevention training through MCES's Crisis Intervention Specialist (CIS) Program. There were one-time trainings and awareness raising events in response to suicides in the community. Suicide prevention had no "critical mass" as an ongoing concern. Survivors of Suicide started a peer-led suicide loss support group at Bryn Mawr Hospital (initially at Lankenau Hospital). The CONTACT Care Line staffed by part-time volunteers served the county's 215 and 610 area codes.
- 2. Low Recognition of Potential for Suicide Prevention (Little knowledge that it is possible to do something about the problem among community leaders and organizations in the county.)
 - 2000-2002: MCES initiated a suicide prevention program and participated in the recently formed Pennsylvania Adult Suicide Prevention Task Force. MCES also developed a series of brochures and factsheets on suicide prevention and offered workshops on this topic as part of its ongoing Community Education Series. The Montgomery County Department of Health (MCDOH) was awarded a small grant by the PA Department of Health to support part-time staff support in suicide prevention. Student Assistance Program (SAP) counselors received period suicide prevention trainings.

 $^{^9~}http://www.triethniccenter.colostate.edu/wp-content/uploads/sites/24/2018/04/CR_Handbook_8-3-15.pdf$

3. Increasing Recognition of Need for Suicide Prevention (Greater acceptance that something needs to be done about suicide in the county; coalition formed.)

2002-2013: The MCDOH and MCES organized the Montgomery County Suicide Prevention Task Force (MCSPTF). The MCSPTF's primary activities during this period were to increase suicide prevention awareness in schools, the mental health system, and in the community. It conducted walks, suicide prevention fairs, training programs for clergy, aging services, Veterans, and other groups, and other similar activities The Montgomery County Suicide Prevention Guide and an MCSPTF web site were launched.

During these years the Radnor-based Feeling Blue Suicide Prevention Council hosted a "Suicide Anonymous" 12-Step support group at the Human Services Center. MCES, Brooke Glen Behavioral Hospital, and Horsham Clinic initiated post-discharge suicide prevention measures. Access Services began operations of Children's Crisis Services.

4. Pre-planning (Consensus/commitment on the part of coalition to address problem.)

2014-Present: During these years the MCSPTF achieved its present momentum, structure, and level of broad representation and participation. The County agency now known as the Office of Mental Health/Developmental Disabilities/ Early Intervention took over leadership of the MCSPTF.

MCES joined the National Suicide Prevention Lifeline Network. Access Services began operations of Adult Mobile Crisis Intervention Services and warm line. Montgomery County became one of the first counties in the state to become part of the Centers for Disease Control and Prevention's (CDC) National Violent Death Reporting System (NVDRS), which now includes the majority of states and compiles uniform data on homicides and suicides.

5. Preparation (Active suicide prevention planning; focus on developing a plan for effecting suicide prevention)

2018-Ongoing: At this phase the MCSPTF it will prepare a comprehensive suicide prevention strategy. At this point, Montgomery County will have a blueprint to follow in coordinating and integrating existing resources and adding new ones to fill gaps.

6. Initiation and Operation (Implementation of formal suicide prevention programming in the county. Growing support in key community sectors.)

This stage would see the emergence of programs tasked and staffed to fulfill a suicide prevention mission.

7. Professionalization (Greater accountability and evaluation; more community involvement and support in the county.)

This stage would be marked by the presence of a county-level governmental or nonprofit entity charged with supporting suicide prevention in the county.

This section is not meant to be prescriptive or critical of suicide prevention development in the county. It is offered to provide a "fix" on where things stand and be suggestive as to where they may be going. The CRM schema shows how suicide prevention compares with other county-level systems functioning to prevent and treat other behavioral health problems in the community. For example, substance abuse passed through each of the CRM stages. Suicide prevention has a way to go. Here are some possible next steps:

- Define a vision of suicide prevention to be in the county.
- Formulate a suicide prevention strategy.
- Develop a county suicide prevention plan.
- Implement the preventative measures outlined in the county plan.

A suicide prevention vision for Montgomery County might look like this

- A broad-based shared understanding of suicide and suicide prevention.
- A community-wide suicide prevention strategic planning process.
- Buy-in by county and municipal government, providers, and the community.
- An array of prevention and postvention resources targeting high-risk populations

Hopefully this report can provide some impetus for framing a suicide prevention vison to guide the delineation of a suicide prevention strategy for Montgomery County.

Chart 4. Suicide Prevention Readiness Stages to Date and Projected in Montgomery County

Readiness Stage	Timeframe
Low Awareness of Suicide as a Community Health Problem	Up to 1999 - 2000
Low Recognition of Potential for Suicide Prevention	2000 - 2002
3. Increasing Recognition of Need for Suicide Prevention	2002 - 2013
4. Pre-planning for Suicide Prevention Programming	2014 - Present
5. Preparation for Suicide Prevention Implementation	2018 - 2019
6. Initiation and Operation of Suicide Prevention Programming	2020?
7. Professionalization (Suicide Prevention Management Agency)	2025?

CONCLUDING COMMENTS

The available data on suicides in Montgomery County mostly confirm much of what was already known about the demographics of suicide in the county. The most notable area of concern is that the number of women lost to suicide in the county is rising incrementally though women still account for far less suicides then men.

The proportion of county suicides of persons who are middle aged and older remains close to that of past years. However, this may change as residents in the Baby Boomer age range move into their sixties and later seventies and beyond. Elder suicide prevention should be part of a county strategy.

While the assessment did not exhaustively probe all sectors for possible suicide prevention programming it is evident from what was learned from examining behavioral health that programs and services intended to lessen risk and aid people in recovering from episodes of suicidality also remain an area to be addressed in a county strategy.

In terms of approach, the study broke new ground. Hospital data on the treatment of self-inflicted injuries should be mined further to try to determine the prevalence of non-suicidal self-injury as well as self-injury with intent to die that was not fatal. The use of data from MCES's EMR system suggests that much can be learned from similar data bases of other providers. The survey of stakeholders also can be broadened to include consumers of behavioral health services, emergency responders, hospital emergency department staff, and school counselors, among others.

Few non-crisis behavioral health services are introduced with their suicide prevention relevance in mind. However, given the incidence of suicide in the county some consideration should be given to asking prospective vendors bidding on county-funded programs for adults and elders to speak to how their proposed services relate to abating suicide risk among those to be served.

The retrospective and prospective look at the progress of suicide prevention was illustrative rather than evaluative. However, it points up that suicide prevention activities must be tracked overtime to see where they are going and what is being accomplished.

Hopefully, this report will be of some utility to the MCSPTF in developing a county suicide prevention strategy. It will be of use to MCES's suicide prevention program. The findings of this study were used in preparing an Implementation Strategy (see Appendix) that MCES with suicide prevention needs that we will work to meet in the coming years.

APPENDIX

Montgomery County Office of Mental Health Data Tables

REVIEW

The Montgomery County Office of the Coroner provided data for 2016 and 2017 that was analyzed by the Office of Mental Health/Developmental Disabilities/ Early Intervention. This data originated from files on deaths determined to be suicides. For technical reasons the statistics for 2016 may vary slightly or somewhat from data reported above from the PA DOH. (The latter data set was used in this study because it is publically available on line and can be re-tabulated by any user.)

Highlights:

- For the years 2016-2017 the number of suicides each year continued to exceed 100.
- For the years 2016-2017 just under one-third of suicides occurred in the three month period of July, August, and September.
- For the years 2016-2017 five municipalities accounted for 30% of all suicides for the period. The number of suicides for each community were:

Pottstown Borough	. 17	7.7%
Abington Township	16	7.3%
Norristown Borough	13	5.9%
Lansdale Borough	12	5.4%
Collegeville Borough	9	4.1%
	Abington Township Norristown Borough Lansdale Borough	Abington Township 16 Norristown Borough 13 Lansdale Borough 12

- In 2016, there were one or more suicides in 21 municipalities; in 2017, 23 municipalities had at least one suicide.
- For the years 2016-2017 firearms were the means used in 41.4% (91) of suicides
- Hanging was the means used in 31% (68) of all suicides for the two years
- Drugs were the means used in 28% (61) of all suicides for the two years
- For these years firearms were the most common means of suicide for males (78; 46.4%)
- Among females firearms were the means in 11 of the 52 total suicides (21.1%)
- For females drugs were the most common means of suicide (24; 46.1%)
- Among males drugs were the means in 37 (22%) of suicides
- For males hanging was the means in 26.4% (58) of suicides
- Among female's hanging was involved in 19.2% (10) suicides

2016 Montgomery County Suicides At-a-Glance

Total: 113

<u>Age</u>

Age Range	Number	% of Total
14-18	1	
19-24	9	8
25-34	19	17
35-44	21	19
45-54	15	13
55-64	30	27
65-74	6	5
75-84	7	6
85+	5	4

Time of Year

Time of rear		
Month:	Number 2	% of Total
Jan	7	6
Feb	12	11
Mar	11	10
April	9	8
May	5	4
June	8	7
July	16	14
Aug	15	13
Sept	6	5
Oct	8	7
Nov	9	8
Dec	7	6

<u>Gender</u>

Gender	Number	% of Total
Male	85	75
Female	28	25

Race

11400		and the second s
Race	Nümber	% of Total
Unknown	6	5
Asian	4	4
Black	7	6
White	96	85

Location (2 or more)

Abington	8
Norristown	7
Pottstown	7
Lansdale	6
Blue Bell	5
East Norriton	5
King of Prussia	5
North Wales	5
Collegeville	4
Conshohocken	4
Glenside	4
Harleysville	4
Plymouth	
Meeting	4
Elkins Park	3
Hatboro	3
Limerick	3
Graterford	2
Huntingdon	
Valley	2
Lafayette Hill	2
Phoenixville	2
Royersford	2
Schwenksville	2

Means

					Commence of the Commence of th	the same of the sa
Weans		‰of-Total - Female Suicides - (Total = 28)	% of Total Males Suicides (Total = 85)	‰öfiTjötal Suicides (White:≕96)	%of Total Suicides (Black= 7)	% of Total Suicides (Asian = 4)
Asphyxia	8%	11%	7%	7%	0	0
Drugs	17%	36%	11%	17%	14%	25%
Gun	47%	21%	55%	48%	29%	<u> </u>
Hanging	21%	14%	24%	21%	43%	25%
Jump	4%	14%	1%	5%	0	0
Stab/cut	2%	0	. 2%	2%	0	. 0

WOMEN: Means	14-24 (Total = 2)	25:34 (Total = - 7)	35-4 <u>4</u> (Totali= 6)	45:54 (Total = 5)	*55=64 (Total = *** 7)	65-74 75-84 85+
Asphyxia	100%	0	17%	0	0	
Drugs	0	5,7,%	33%	60%	14%	and the second s
Gun	0	14%	0	20%	57%	
Hanging	0	14%	33%	20%	0	The state of the s
Jump	0	14%	0	0	29%	The state of the s
Stab/cut	0	0	0	0	0.	

MEN: Means	1⁄2;24 (Total≔ 8)	25-34 (Total'= 12)	35-44 (Total= 15)	45-54 (Fotal = 10)	755 <u>-</u> 64 (Total≔ 23)	-65-74, (Total≒ غ).	7.5-84 (Total = 7)	85+ (Total = 5).
Asphyxia	0	8%	0	. 0	9%	40%	14%	0
Drugs	13%	. 17%	7%	20%	13%	0	0	0
Gun	7,5%	50%	67%	30%	43%	60%	71%	80%
Hanging	13%	25%	27%	50%	26%	0	14%	0
Jump	0	0	0	0	0	0	0	20%
Stab/cut	0	0	0	0	9%	0	0	0

· · ·

•

•

•

.

2017 Montgomery County Suicides At-a-Glance

Total: 107

<u>Age</u>

Age Range	Number Number	% of Total
14-18	8	7%
19-24	10	9%
25-34	11	10%
35-44	12	11%
45-54	24	22%
55-64	22	21%
65-74	11	10%
75-84	6	6%
85+	3	3%

Time of Year

Inte or rear		10 T 15 X 15
Jack Month Advisor		* % of Total * *
Jan	5	5%
Feb	5	5%
Mar	7	7%
April	12	11%
May	9	8%
June	8	7%
July	5	5%
Aug	12	11%
Sept	17	16%
Oct	13	12%
Nov	7	7%
Dec	7	7%

Gender

Ğ. K. S. Gender &	Number 2	'. '₂'% of Total ⊊
Male	83	78%
Female .	24	22%

Race

Race	Number :	% of Total
Unknown	0	0%
Asian	1	1%
Black	8	7%
White.	98	92%

Location (2 or more)

<u>C7</u>
8
6
10
6
3
5
4
2
2
2
2
3
2
2
. 2
5
3
2
2
5
3
4
5
2

Means

ivieans					a showing a supplementary page 2	many is selected or controlled in
Means	% of Total Suicides (Total = 107)	%of Total Female Suicides (Total ==24)	%of Total Males Suicides (Total:=83)	%ofTotal Suicides (White = 98)	% of Total Suïcides (Black = 8)	% of Total Suicides (Asian = 1)
Asphyxia	4%	13%	1%	4%	0	0
Drugs	17%	17%	17%	16%	25%	0
Gun	36%	29%	37%	37%	25%	0
Hanging	32%	25%	36%	32%	50%	0
Jump/vehicular	7%	13%	6%	8%	0	100%
Stab/cut	1%	0%	1%	1%	0	0
Other (Gas, Poison)	. 4%	4%	1%	2%	0	0

WOMEN: Means	14-24. (Total:= 3):	. 25:34 (Fotal ≡ . 0)	35-44 (Total ≔ 3)	45-54 (Total = 10)	(∓55-64 - (Total:= √ -(6)	65-74 75-84 85+ (Total= 1) (Total= 1)
Asphyxia	0	0	0	0	50%	0 100%
Drugs	0	0	33%	20%	0	0
Gun	0	0	67%	40%	0	0
Hanging	33%	0	0	30%	50%	0
Jump/vehicular	6.7.%	0	0	0	0	100%
Stab/cut	0	0	0	0	0	0
Other (Gas, Poison)	0	0	0	10%	0	0

MEN: Means	14-24 (Total ⇒ -15)	25-34 (Total = 11)	35-44 (Total = 9)	45-54 (Tetal≔ 14)	55-64 (Total = 16)	65.74 (Total = 10)	75-84 (Total = 6)	85+ (Total = 2).
Asphyxia	7%	0	0	0	0	0	0	0
Drugs	7%	9%	11%	7%	31%	30%	0	100%
Gun	27%	45%	33%	50%	6%	60%	83 <u>%</u>	0
Hanging	53%	27%	33%	43%	56%	10%	17%	0
Jump/vehicular	13%	9%	22%	0	0	0	0	0
Stab/cut	0	0	0	0	6%	0	0	0
Other (Gas, Poison)	0	9%	0	0	0	0	0	0

•

.

.

. .



SUICIDE PREVENTION NEEDS ASSESSMENT IMPLEMENTATION STRATEGY

Based on our assessment of suicide prevention needs in Montgomery County MCES will address the following unmet or underserved need:

- 1. Maintain engagement with the Montgomery County Suicide Prevention Task Force and the Montgomery County Department of Health and Human Services to assure that our suicide prevention activities complement and supplement their suicide prevention plans and programs.
- 2. Focus our suicide prevention as much as possible on adults between the ages of 18-64 who are at risk of suicide because of a serious mental health crisis or psychiatric emergency.
- 3. Lend our support, expertise, and professional resources to increasing the availability of aftercare and support for individuals in Montgomery County who have survived a suicide attempt.
- 4. Promote the development of postvention services and supports for individuals with serious mental illness who have experienced the suicide of a family member, peer, or other party whose loss they are grieving.
- 5. Conduct a continuing education program on post-discharge suicide prevention for licensed social workers (LSWs and LCSWs) who provide crisis intervention and/or case management services at hospital emergency departments in Montgomery County.
- 6. Continue to offer education programs and suicide prevention resources to police officers, EMS personnel, and other emergency responders to increase awareness of risk, identification of warning signs, and sources of help.
- 7. Develop and offer advanced suicide prevention education programs approved for police officer continuing education by the Municipal Police Officers' Education & Training Commission (MPOETC).
- 8. Assure that MCES clinical programs and services meet or exceed the Patient Safety Goals of The Joint Commission (TJC).
- 9. Work with the MCES Medical Staff, Allied Therapy Department, and the MCES Suicide Prevention Committee to resume inpatient psychoeducational groups on suicide prevention for MCES inpatients.
- 10. Introduce a suicide prevention education program for residents of the MCES Crisis Residential Program (CRP) , Carol's Place.

GLOSSARY OF TERMS

These are general definitions of terminology used in the narrative of this report.

NONSUICIDAL SELF INJURY (NSSI) – Deliberately inflicting harm of some degree of seriousness to one's self without intent to die.

SUICIDAL BEHAVIOR – Includes suicidal ideation, planning a suicide, seeking or acquiring lethal means, threatening to attempt suicide, making a suicide attempt, inflicting fatal self-harm.

SUICIDAL IDEATION — Thoughts of self-harm or dying by suicide that may vary by frequency, intensity, or the individual's ability to control the onset of the thoughts.

SUICIDALITY – Describes any level of suicidal behavior from ideation, to developing suicidal intent, having a suicide plan, to acting on the plan.

SUICIDE – A suicide attempt that results in death.

SUICIDE ATTEMPT — An act of deliberate self-harm involving lethal means intended to be fatal that does not result in death.

SUICIDE CRISIS – Situation in which an individual is at risk of suicide because of thoughts of or preparation to make a suicide attempt.

SUICIDE PLAN – A thought out process by an individual involving when, how (the lethal means), and where a suicide attempt will be made.

SUICIDE POSTVENTION – Care and or support provided to an individual who has made a suicide attempt or who has experienced the loss of a family member, friend, or

SUICIDE PROTECTIVE FACTORS - Behavioral, biological, cultural, environmental, psychological, or social features of an individual or population that are felt to deter suicide.

SUICIDE REHEARSAL – Act of practicing all or part of the suicide plan without intent to make a suicide attempt (e.g., holding weapon, standing on bridge or rooftop or by RR tracks, etc.).

SUICIDE RISK FACTORS — Behavioral, biological, cultural, environmental, psychological, or social features of an individual or population that have been found to correlate with suicide.