HHS Public Access

Author manuscript

Am J Prev Med. Author manuscript; available in PMC 2024 September 01.

Published in final edited form as:

Am J Prev Med. 2023 September ; 65(3): 385–394. doi:10.1016/j.amepre.2023.03.011.

Precipitating circumstances associated with intimate partner problems related suicides

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Abstract

Introduction: In 2020, suicide was the 12th leading cause of death among adults in the United States. Prior research has shown that one common precipitating circumstance among adult suicide decedents is experiencing intimate partner problems (IPP), such as divorce, separation, romantic break-ups, arguments, conflicts, and intimate partner violence. This study examines how precipitating factors differ between IPP and non-IPP-related suicides.

Methods: In 2022, this study analyzed National Violent Death Reporting System (NVDRS) data from adult suicide decedents in 48 states and two territories between 2003 and 2020. Multivariable logistic regression models were used to compare precipitating circumstances between IPP and non-IPP-related suicides, controlling for socio-demographic characteristics.

Results: Of the 402,391 suicides, 20% (n = 80,717) were known to be IPP-related. Circumstances that significantly increased the odds of IPP-related suicides included history of suicidal thoughts and attempts and mental health problems (depressed mood, alcohol problem, mental health diagnosis); life stressors (interpersonal violence perpetration and victimization, arguments, financial problems, job problems, family problems); and recent legal problems. Non-IPP-related suicides were more likely to occur among older individuals and to be precipitated by a physical health problem or crime.

Conclusions: The findings can inform prevention strategies that build resiliency and problem-solving skills, strengthen economic support, and identify and assist people at risk for IPP-related

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Credit Author Statement

Ayana Stanley: Conceptualization, Methodology, Software, Formal analysis, Writing-original draft, Writing-review &edits, Visualization. **Tatiana Aguilar:** Formal analysis, Writing-Original Draft. Writing-Review & Editing. **Kristin Holland:** Conceptualization, Writing-review &edits. **Pamela Orpinas:** Conceptualization, Writing-original draft, Writing-review &edits, Supervision

suicides. The Centers for Disease Control and Prevention's Suicide Resource for Action and Intimate Partner Violence Prevention resource packages highlight the best available evidence for policies, programs, and practices related to preventing suicides and intimate partner problems.

INTRODUCTION

Suicide is a major public health problem that can have devastating effects on families, friends, and communities. Bereavement among family and friends of suicide decedents has been associated with mental and physical health problems, such as depression and hypertension.[1–3] Furthermore, exposure to suicide can lead to psychiatric and psychosocial morbidities for anyone who knows or identifies with the suicide decedent.[4] The impact of suicide extends beyond close kin and friends, with possibly tragic consequences on the well-being of community members.[4] Given the detrimental effects of suicide and its significant increase in the past decades,[5] there is an urgent need to identify factors influencing suicidal behavior. Understanding co-occurring precipitating factors can help identify issues that may contribute to suicidal ideation prior to the progression to suicide attempt or death.[6,7]

Several factors can increase the risk of suicide.[7] Mental health problems (which is the most commonly reported precipitating factor of suicides), physical health problems, job and financial challenges, severe injury or assault, bereavement, substance abuse, legal problems, and intimate partner problems are among the most frequent precipitating factors of suicides.[8–12] Suicide risk varies by socio-demographic characteristics, such as sex, age, race/ethnicity, education, and marital and military status.[13] The suicide rate for males is four times that of females; suicide rates among non-Hispanic White persons is twice that of Black and Asian Americans.[14] Suicide rates among veterans and other military personnel have been estimated to be almost twice that of civilians.[12,15,16] A 2015 study using NVDRS data of circumstances preceding suicide in 27 states found that intimate partner problems (IPP) contributed to over one-quarter of suicides. It was more common among suicide decedents with no known mental health problem than those with known mental health difficulties.[17] Further, a study of Kentucky Violent Death Reporting System suicides between 2005 and 2015 identified IPP as a precipitating circumstance in 26% of all suicide cases.[18] Research also suggests that divorce, separation, child custody conflicts, and anticipated IPP-related crises are common contributors to suicide.[17]

The prevalence of IPP as a contributing factor to suicide seems to be related to the specific sample studied. For instance, IPP appears to be more common among active-duty military personnel who die by suicide and suicide decedents who perpetrate homicide before dying by suicide than among the general population.[19–22] Additionally, much IPP-related suicide research focuses primarily on one component of IPP – Intimate Partner Violence (IPV).[23–28] While IPV can be a severe result of relationship discord, more studies need to investigate partner problems beyond partner violence to understand the complex association between suicide and IPP. Although the association between IPP and suicide is well established,[29–31] few studies have explicitly examined differences in circumstances that preceded suicide between suicide decedents who reportedly experienced IPP versus those who did not. Current studies are typically narrow in terms of the geographic distribution of their sample[9] or the population examined,[19–22] thus limiting their generalizability. Because there is a need

to further elucidate the circumstances of IPP-related suicides among a broader population, the purpose of this study is to use national data to identify the differences in precipitating circumstances associated with IPP-related suicides and non-IPP-related suicides.

METHODS

Study Sample

Data for this study were derived from the National Violent Death Reporting System (NVDRS), which the Centers for Disease Control and Prevention (CDC) initiated in 2003.[13] This state-based surveillance system provides information on violent deaths, including suicides. Over the years, the number of reporting states and territories has grown from 7 in 2003 to 48 in 2020 (Table 1). CDC IRB review was not required for NVDRS because it received a non-research determination.

NVDRS data are pooled together from coroner/medical examiner reports (which may include toxicology reports), law enforcement reports, and death certificates, providing rich and detailed context about the circumstances surrounding violent deaths.[32] Optional sources from which data can be abstracted include supplementary homicide reports, child fatality reviews, intimate partner violence expanded records, crime lab data, hospital statistics, and other law enforcement documents. To determine factors that contributed to death, law enforcement and coroner/medical examiner investigators gather information on precipitating circumstances of violent deaths (including suicides) by conducting interviews with family members, friends, and other associates of the decedents as well as witnesses to the death.[33] Investigators corroborate statements, identify commonalities, and compare testimonies to physical evidence (e.g., a suicide note) to enhance their understanding of the motive of death before determining the cause and contributing factors.[13,32] Although the events that precipitate suicide can be multifactorial, NVDRS investigators use these numerous sources of information to decide whether the suicide was related to IPP. Thus, “IPP-related suicide” is one NVDRS variable in addition to other precipitating factors.

Because this study focuses on understanding circumstances surrounding IPP-related suicides from a broad population, the study sample is limited to adult suicide decedents 18 years and older for whom circumstances were known from the 48 states and territories participating in NVDRS from 2003 to 2020 (Table 1).

Measures

Table 2 provides the NVDRS definitions of each possible precipitating factor, coded as *No* (i.e., not present/unknown; 0) or *Yes* (i.e., present; 1). IPP-related suicide, the outcome measure for this study, refers to suicides in which the decedent experienced problems with current or former intimate partners that appear to be related to the suicide.[18,34] IPP refers to divorce, separation, romantic break-ups, arguments with a partner, jealousy, conflicts, and IPV.[9] Several factors distinguish IPP from IPV. IPV refers to physical, sexual, or psychological harm or threats of physical or sexual harm, or stalking by a current or former partner or spouse.[32] IPP includes IPV, but it is not limited to abuse; it involves a wide range of problems with a romantic partner. This study examined the odds of having experienced

18 possible precipitating factors for suicide, organized into three broad categories: health-related (mental health, depressed mood, history of suicidal thoughts, history of suicide attempts, alcohol problem, substance abuse, and physical health problems); life stressors (problems with family members, problems with friends or associates, arguments, suicide of family or friend, other deaths, financial or job problems, and interpersonal violence victimization or perpetration); and suicide precipitated by a serious crime (e.g., suicide decedent involved with drug dealing, robbery) or recent legal problems that appeared to contribute to the suicide.

Statistical Analysis

Chi-square test of independence was used to conduct bivariate analyses to estimate significant differences in demographic characteristics and precipitating circumstances among IPP and non-IPP related suicides. Multivariable logistic regression models were used to assess the odds of experiencing the precipitating circumstances listed in Table 2 among IPP compared to non-IPP-related suicides. The authors estimated the odd ratios (OR) and adjusted odds ratios (aORs) and 95% confidence intervals (CI) for each possible precipitating factor, controlling for age in years, race/ethnicity, sex, education, marital status, education, and military status. A p-value of <.05 and 95% confidence intervals were used to determine statistical significance. Data were analyzed using SAS version 9.3.

RESULTS

From 2003 to 2020, there were 402,391 suicide deaths of adults (18 years +) from the 48 participating states in NVDRS; of them, 20% were IPP-related suicides. Among the IPP-related suicides, 25- to 44-year-old persons comprised almost half (49.0%) of decedents, and a majority were White (80.2%), male (78.7%), and had at least a high school education (85.3%). Additionally, there were proportionally more veterans among the IPP suicide decedents than non-IPP suicide decedents (14.4% vs. 13.8%) (Table 3).

A few demographic differences emerged between IPP-related suicide decedents and those without a documented history of IPP. Non-IPP suicide decedents were more likely to be older, with an average age of 45.4 (SD=18.0) years compared to 40.9 (SD=13.9) years for IPP decedents. Further, significantly more non-IPP suicide decedents were 65 years or older (15.6%) than IPP decedents (5.6%). Significantly more non-IPP than IPP suicide decedents were Black (19.7% vs. 7.0%), female (23.6% vs. 21.3%), with less than high school education (15.4% vs. 11.6%), and unmarried (51.2% vs. 31.7%) (Table 3).

After controlling for socio-demographic variables, mental health problems emerged as a significant difference, with a significantly higher proportion of IPP-related suicides than non-IPP suicides involving mental health problems (Table 4). Other precipitating factors commonly identified among IPP-related suicides included depressed mood, history of suicidal thoughts, history of suicide attempts, and alcohol problems (Table 4). The strongest significant differences between the two groups were a history of suicidal thoughts (aOR=2.7) and depressed mood (aOR=2.1). With an aOR=0.8, there was not a significant difference between the two groups regarding problematic substance use. More non-IPP

suicide decedents (18.1%) than IPP decedents (10.1%) experienced a physical health problem.

After controlling for socio-demographic variables, suicide decedents who experienced IPP were at greater odds than their non-IPP counterparts for experiencing most life stressors examined, including problems with family, friends or associates, suicide of a family member or friend, other deaths of family and friends, financial and job-related problems, and interpersonal violence perpetration and victimization. The most pronounced differences in life stressors experienced by IPP decedents were perpetration of interpersonal violence (aOR = 6.5), arguments (aOR = 4.1), interpersonal violence victimization (aOR = 2.2), and financial problems (aOR = 2.0).

After controlling for socio-demographic variables, the odds of recent legal problems were significantly higher among IPP decedents (aOR = 1.6) than non-IPP-related suicides. Another significant difference was whether the suicide was precipitated by a crime, with more non-IPP suicide decedents (10.7%) than IPP decedents (5.5%) experiencing criminal problems.

DISCUSSION

The purpose of this study was to advance the scientific understanding of common precipitating factors of IPP-related suicides and to examine how they differ from non-IPP-related suicides. Of the 402,391 suicides reported to NVDRS from 48 states and two territories from 2003 to 2020, one in five suicides was IPP-related. All examined precipitating factors were observed in both IPP and non-IPP-related suicides; however, the groups differed in the frequency with which these factors contributed to suicides. This study advances the scientific understanding of suicides involving IPP and informs possible prevention strategies in several ways.

Regarding health problems, IPP-related suicides were strongly associated with a history of suicidal thoughts and mental health problems (depressed mood, alcohol problem, mental health diagnosis, mental health problems, and depressed mood). While mental health problems increase suicide risk,[11,35] the present study underlines the increased association of mental health problems among suicide decedents specifically experiencing IPP compared to those who did not.[36] A partner relationship marked by interpersonal conflict and violence may contribute to or exacerbate mental health problems. Conversely, mental health problems may also contribute to difficulties experienced within an intimate partner relationship.[37,38]

Problematic alcohol use was also a more commonly experienced precipitating factor for IPP-related suicides than non-IPP, but problematic substance use (apart from alcohol) did not differ between the two groups. Still, substance use was a contributing factor among one-fifth of both IPP and non-IPP-related suicides. Researchers have found associations between suicide attempts and drug and/or alcohol use among battered women.[27,28,39,40] However, those studies included only women in violent relationships and did not differentiate between drug and alcohol use. Problematic alcohol and substance use is related to unstable mood, mental health problems, poor problem-solving and coping skills, and a number of other

factors that can exacerbate the risk for suicide as well as the likelihood of experiencing intimate partner problems.[41,42]

Not surprisingly, multiple life stressors were associated with IPP-related suicides. Perpetrating interpersonal violence, being the victim of such violence, and having arguments were particularly strong. Suicide can be the culmination of these stressors.[36] Additionally, experiencing an acute adverse life event (like deciding to divorce or experiencing intimate partner violence) could contribute to an impulsive suicide attempt among individuals who did not previously have a suicide plan.[36] Thus, monitoring by clinicians, mental health providers, and the helpful connectedness of family and friends of non-suicidal individuals encountering severe adverse life events is paramount.[36]

Multiple forms of violence tend to be interrelated.[43] For instance, one study suggested IPV perpetration increases the risk of suicide. Kafka and colleagues, in a qualitative review of NVDRS abstracts, concluded that suicide was often an impulsive response to acute strain or conflict in an already abusive relationship.[37] Further, IPP-related homicide-suicides tend to occur among those with violent outbreaks, a history of intimate partner violence, and homicidal threats to victims. In addition, some intimate partner homicide-suicide perpetrators had previous interactions with the courts.[44] These court encounters provide an opportunity for the criminal justice system to intervene in potentially harmful scenarios following arrests and adjudication. While arrests for IPV alone may help protect women from violence,[45] stronger mandates to enter mental health treatment or IPV prevention programs following arrests may also be useful.[44] Also, using more holistic and trauma-informed approaches for IPV intervention programs that integrate suicide prevention efforts could help improve the effectiveness of these interventions while also engaging IPV perpetrators in services.[37]

Problems with family members or friends, as well as the recent suicide of a family member or a friend, could be indicators of thwarted belongingness and social isolation.[46,47] Social isolation is a risk factor for IPV and suicide, which aligns with the findings from the current study.[35,48] Promoting social connectedness can reduce social isolation and suicide. Gatekeepers can help identify people experiencing suicidal ideation and IPP and help individuals find social groups where they can become an integral part and enhance connectedness.[46,49]

IPP suicide decedents also had greater odds of having financial, job-related, and recent legal problems, possibly related to divorce, separation of assets, and child custody or mental health problems. Unemployment—one indicator of job problems—is a predictor of IPP-related suicides.[23,50] Programs that strengthen economic support can potentially reduce the risk of IPP-related suicides. Strengthening household financial security by providing unemployment benefits, temporary assistance, livable wages, medical benefits, and retirement and disability insurance to help cover the cost of necessities or to offset expenses in the event of disability could both reduce tension in an intimate partner relationship and buffer the risk of suicide.[12] Additionally, housing stabilization policies aim to keep people in their homes and provide housing options during financial insecurity, which could reduce suicide risk.[12]

Three factors were salient in non-IPP-related suicides compared to IPP suicides: the sample was more likely to be older, have more physical health conditions, and have more criminal problems. Research exploring the association between criminal problems and IPP-related suicides is scarce. Comiford et al. concluded that IPP-related suicides were four times more likely to be precipitated by a crime than non-IPP-related suicides.[9] Because this study was conducted in one state, cultural or geographical factors may explain the differences in outcomes between studies. This study found that non-IPP-related suicide decedents were older than IPP suicide decedents. A possible explanation is that violence towards older adults might be labeled as elder abuse, not IPV.[51] Also, older adult deaths associated with intimate partners might result from homicide, not suicide. One study that included seven US states found 31% of homicides among women 65 years and older were IPV related.[51]

Results from prior studies on the impact of physical health problems on suicide are inconsistent. For instance, Kaplan and colleagues[52] concluded that individuals with functional limitations were at higher risk for suicide than those without such constraints; however, chronic conditions did not predict death by suicide. In contrast, other studies have found an association between chronic disease and suicide attempts. For instance, Cavanaugh et al. found that female IPV victims who reported having a chronic disease were more likely to attempt suicide during their lifetime.[50] Physical health problems can, in some cases, potentially bring couples together. In a study of breast cancer patients and their partners, some couples indicated that the cancer diagnosis brought them closer together. Patients reported more affection from their spouses 3 months post-diagnosis.[53] Perhaps, physical health problems can decrease the risk of IPP-related suicides because the disease can lead to more empathy, stronger appreciation, and fewer intimate partner problems.

Limitations

This study has some limitations. First, this study is limited by the confines of the NVDRS. While NVDRS has a significant amount of information about violent deaths, it does not contain all possible precipitating factors. In addition, while this surveillance system currently includes 48 states, it is not nationally representative; thus, it does not capture all IPP-related suicides in the United States. Second, factors that lead to suicide are numerous, complex, and sometimes unknown; NVDRS data consist only of “known” circumstances —typically information obtained through next-of-kin and other key informant interviews, suicide notes, and death scene investigations. Thus, factors unknown to interviewees may lead to misclassifications of whether the suicide was IPP-related. Even though NDVRS reviewers use multiple sources of information to determine whether the suicide was related to IPP, they may underestimate the complexity of the decision to take one’s life. Third, some categories are very broad, such as “job problems,” which could refer to unemployment, sexual harassment in the workplace, or performance issues, among a number of other possibilities. Since the specific type of problem experienced is frequently unknown, it can be difficult to understand whether there are nuances related to the overarching problem that may have contributed to IPP.

Although this study controlled for various demographic characteristics, space limitations did not allow for a more extensive examination of these characteristics. More research is needed

to examine how precipitating circumstances differ between IPP-related and non-IPP-related suicides between and within genders, age groups, race/ethnicity, veteran status, mechanism of suicide, and education. Further, future research should examine the characteristics of homicide-suicides, the interrelation of precipitating factors, and trends over time. These more nuanced results could help policymakers and health workers improve prevention strategies.

CONCLUSIONS

The present study adds to the limited literature on precipitating factors associated with IPP-related suicides. To the authors' knowledge, this is the first study to use data from this large multistate surveillance system to identify differences in precipitating factors associated with IPP-related suicides compared to suicides that did not involve IPP. Prior studies have used state-level data and or focused on intimate partner violence.[9,18,37] Understanding the precipitating factors associated with IPP-related suicides is essential for suicide prevention efforts. CDC has a compilation of resources that provide best practices for preventing suicide and intimate partner violence: *Suicide Prevention Resource for Action*[12] and *Preventing Intimate Partner Violence Across the Lifespan: A Technical Package of Programs, Policies, and Practices*.[54] Both resources describe the best available evidence supporting policies, programs, and practices that can reduce the risk for both IPP and suicide at multiple levels of the social ecology.

Acknowledgments

The findings and conclusions in this article are those of the author(s) and do not necessarily represent the official position of the Centers for Disease Control and Prevention. No financial disclosures have been reported by the authors of this paper.

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TABLE 1.

States and territories providing NVDRS data by initial year of reporting and cumulative number of states

Year of available data	Cumulative # of States/territories	States providing NVDRS data by year of initial reporting
2003	7	Alaska • Maryland • Massachusetts • New Jersey • Oregon • South Carolina • Virginia
2004	13	Colorado • Georgia • North Carolina • Oklahoma • Rhode Island • Wisconsin
2005	16	Kentucky • New Mexico • Utah
2011	17	Ohio
2018	18	Michigan
2015	27	Arizona • Connecticut • Hawaii[a] • Kansas • Maine • Minnesota • New Hampshire • New York[d] • Vermont
2016	32	Illinois[b] • Indiana • Iowa • Pennsylvania[b] • Washington[b]
2017	38	California[c] • Delaware • District of Columbia • Nevada• Puerto Rico • West Virginia
2018	43	Alabama •Louisiana •Maine • Missouri • Nebraska
2019	46	Montana• North Dakota• Wyoming
2020	50	Arkansas• Idaho • South Dakota • Tennessee

[a]NVDRS excluded data from Hawaii in 2017, 2018, and 2020 due to incomplete reporting

[b]Collected data on >80% of violent deaths

[c]California collected data on 4 counties in 2017 (27.8% of violent deaths), 21 counties in 2018 (55.1% of violent deaths), 30 counties in 2019 (55.5% of violent deaths), and 35 counties in 2020 (68.1% of violent deaths)

[e]NVDRS excluded data from New York in 2019 due to incomplete reporting

TABLE 2.

Definitions of circumstances coded in the NVDRS

Precipitating Factors	Definition
Partner Violence	
Intimate Partner Problems (IPP)	The decedent experienced problems with current or former intimate partner, such as divorce, separation, romantic break-ups, arguments with significant other, jealousy, conflicts, and intimate partner violence
Health	
Mental health problem	Current diagnosis of mental health and/or history of mental illness
Depressed mood	Decedent perceived by self or others to be depressed at time of suicide
History of suicidal thoughts	Victim has a history of suicidal thoughts, plans to die by suicide within the last month prior to death. Disclosure of suicidal thoughts or plan can be verbal, written, or electronic.
History of suicide attempts	Victim has a history of attempting suicide before the fatal incident
Alcohol problem	A person with alcohol dependence or alcohol problem
Substance abuse	A person has a non-alcohol related substance abuse problem
Physical health problem	Victim physical health problem(s) appeared to have contributed to the suicide (e.g., they were experiencing a terminal disease, debilitating condition, or chronic pain).
Life Stressor	
Family problem	Victim had relationship problems with a family member (other than an intimate partner) that appeared to have contributed to the suicide (e.g., a victim could be despondent over an argument with their parents and dies by suicide)
Friend, associate problem	Problems with a friend or associate (other than an intimate partner or family member) appear to have contributed to suicide
Arguments	Conflict or arguments that led to the victim's suicide
Suicide of family, friend	Suicide of family member or friend appears to have contributed to suicide
Other deaths	Death of a family or friend due to something other than suicide appears to have contributed to the suicide
Financial problem	Any financial problems that might have contributed to death (e.g., overwhelming debt)
Job problem	Job problem(s) that appear to have contributed to the death
Victim of interpersonal violence[a]	Victim experienced violence in the past month that was distinct and occurred before the violence that killed the victim
Perpetrator of interpersonal violence[a]	Victim was a perpetrator of violence within the past month that was distinct and occurred before the violence that killed the victim
Criminal or Legal Problems	
Precipitated by a crime	Death precipitated by a serious crime (e.g., drug dealing, robbery)
Recent legal problem	Criminal or legal problems that appear to have contributed to the suicide

[a]These incidents are not limited to involving intimate partners

TABLE 3.

Demographic characteristics for suicide decedents with and without documented intimate partner problems (IPP), NVDRS 2003–2020

Demogr aphic Characteristics	Total[a] (n=402,391)		Non-IPP-related suicide (n=321,674)		IPP-related suicide (n=80,717)		Unadjusted Odds Ratio (OR)
	N %		N		N		(95 %CI)
Age group, years							
18–24	54,752	13.6	44,524	3.8	10,228	2.7	**0.9 (0.9, 0.9)**
25–44	1 56,894	39.0	1 17,343	6.5	39,551	9.0	**1.7 (1.6, 1.7)**
45–64	136,235	33.9	109,797	4.1	26,438	2.8	**0.9 (0.9, .9)**
>−65	54,509	13.5	50,009	5.6	4,500	.6	**0.3 (0.3, 0.3)**
Race/Ethnicity							
White	282,126	70.1	217,373	7.6	64,753	0.2	**1.9 (1.9, 2.0)**
Black	68,917	17.1	63,242	9.7	5,675	.0	**0.3 (0.3, 0.3)**
Hispanic	32,535	8.1	26,227	8.2	6,308	.8	**1.0 (0.9, 1.0)**
Other	14,149	3.5	11,304	3.5	2,845	.5	1.0 (1.0,1.0)
Sex							
Male	309,163	76.8	245,646	6.4	63,517	8.7	**1.1 (1.1, 1.2)**
Female	93,223	23.2	76,026	3.6	17,197	1.3	**0.9 (0.9,0.9)**
Education status							
<High school	59,044	14.7	49,660	9.2	9,384	1.6	**0.7 (0.7, 0.7)**
High school	142,992	35.5	114,628	4.4	28,364	4.3	1.0 (1.0, 1.0)
>High school	120,118	29.9	93,965	6.4	26,223	1.0	**1.2 (1.2, 1.2)**
Marital status							
Married	117,592	29.2	83,587	6.0	34,005	2.1	**2.1 (2.0, 2.1)**
Separated or divorced	89,416	22.2	68,676	1.4	20,740	5.7	**1.3 (1.3, 1.3)**
Unmar ried[b]	190,155	47.3	164,591	1.2	25,564	1.7	**0.4 (0.4, 0.5)**
Military Status [c]							
Militar y, veteran	55,896	13.9	44,314	3.8	11,582	4.4	**1.0 (1.0, 1.1)**

Note: Boldface indicates statistical significance (p<.0001)

[a]Data are from the National Violent Death Reporting System. Unknown values are not presented; therefore, variables might not total 100%

[b] Unmarried= never married, widowed, single not otherwise specified

[c] Military status= persons who served in the armed forces (current or ever)

TABLE 4.

Precipitating factors for decedents with and without intimate partner problems (IPP) related suicides, NVDRS 2003–2020

Precipitating factors	Total[a] (n=402, 391)		Non-IPP-related suicide (n=321,674)		IPP-related suicide (n=80,717)		OR (95% CI)	Adjusted OR[b] (95% CI)
	N		N		N			
Health								
Mental health problem	145,992	6.3	1 12,234	4.9	3 3,758	1.8	**1.3 (1.3, 1.4)** *	**1.2 (1.2, 1.2)** *
Depressed mood	103,866	5.8	72,251	2.5	3 1,615	9.2	**2.(2.2, 2.3)** *	**2.1 (2.1, 2.2)** *
History of suicidal thoughts	69,735	7.3	44,182	3.7	2 5,553	1.7	**2.9 (2.9, 3.0)** *	**2.7 (2.6, 2.7)** *
History of suicide attempts	56,644	4.1	39,873	2.4	1 6,771	0.8	**1.8 (1.8, 1.9)** *	**1.6 (1.6, 1.7)** *
Alcohol problem	64,656	6.1	44,903	4.0	1 9,753	4.5	**2.0 (2.0, 2.0)** *	**2.0 (1.9, 2.0)** *
Substance abuse	82,206	0.4	65,972	0.5	1 6,234	0.1	**1.0 (1.0, 1.0)** **	**0.8 (0.8, 0.9)** *
Physical health problem	66,279	6.5	58,097	8.1	8,182	0.1	**0.5 (0.5, 0.5)** *	**0.6 (0.6, 0.6)** *
Life Stressor								
Family problem	24,176	6.0	17,364	5.4	6,812	8.4	**1.6 (1.6, 1.7)** *	**1.4 (1.4, 1.5)** *
Friend, associate problem	16,296	4.1	12,415	3.9	3,881	4.8	**1.3 (1.2, 1.3)** *	1.0 (1.0, 1.1)
Suicide of family, friend	5,817	1.5	4,126	1.3	1,691	2.1	**1.6 (1.6, 1.7)** *	**1.5 (1.4, 1.6)** *
Other death	18,221	4.5	14,754	4.6	3,467	4.3	**0.9 (0.9, 1.0)** **	**1.2 (1.2, 1.3)** *
Arguments	69,971	7.4	43,898	3.7	2 6,073	2.3	**3.0 (3.0, 3.1)**	**4.1 (4.0, 4.2)** *
Financial problem	27,202	6.8	17,775	5.5	9,427	1.7	**2.3 (2.2, 2.3)** *	**2.0 (1.9, 2.0)** *
Job problem	30,452	7.6	20,474	6.4	9.978	2.4	**2.1 (2.0, 2.1)** *	**1.6 (1.5, 1.6)** *
Interpersonal violence perpetration	10,116	2.5	3,724	1.2	6,392	7.9	**7.3 (7.0, 7.7)** *	**6.5 (6.1, 6.8)** *
Victim of interpersonal violence	3,110	0.8	1,948	0.6	1,162	1.4	**2.4 (2.2, 2.6)** *	**2.2 (2.0, 2.4)** *
Criminal or Legal Problems								
Precipitated by a crime	38,938	.7	34,523	0.7	4,415	.5	**0.5 (0.5, 0.5)** *	**0.6 (0.6, 0.6)** *
Recent legal problem	24,556	.1	16,447	.1	8,109	0.1	**2.1 (2.0, 2.1)** *	**1.6 (1.6, 1.7)** *

Note: Boldface indicates statistical significance

*(p<.0001

**p<.01)

[a]Data provided by the National Violent Death Reporting System. Unknown and missing values are not presented; therefore, variables might not total 100%

[b]Adjusted ORs controlled for age, race/ethnicity, sex, marital status, education, and military status.