

Mortality from Intimate Partner Violence in Colorado, 2007-2017, Colorado Violent Death Reporting System

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Introduction

Intimate partner violence (IPV) is a serious form of abuse committed against a current or former boyfriend, girlfriend, spouse, or other romantic partner.¹ IPV is often not a single, isolated event; rather it is an ongoing, violent dynamic which may ebb and flow in dangerous cycles.² Unfortunately, IPV is pervasive in the United States; over 12 million people in the country experience IPV each year, and more than 80 million people are victimized at some point in their lifetime. These statistics likely present an underestimate, as there are known issues with under reporting of IPV experiences.³

IPV can include acts of physical violence, sexual violence, stalking, and/or psychological aggression.⁴ These acts have negative health consequences which can include acute physical injuries, unintended pregnancy, sexually transmitted infections, Post-Traumatic Stress Disorder (PTSD), anxiety, depression, and ongoing fear or concern for safety.⁵ Survivors can also experience long-term health problems, including chronic pain, headaches, gastrointestinal issues, respiratory problems, bone diseases, and memory loss.⁶ Taking into account these immediate and long-term health effects, researchers have estimated that IPV costs \$103,767 per female victim and \$23,414 per male victim over the course of a lifetime in the U.S.⁷ (cost to the victim). There are larger societal costs of IPV as well. The population economic burden is estimated at \$3.6 trillion.⁷ IPV response demands resources from law enforcement, the court system, and the medical system. Moreover, IPV and especially fatal IPV, can be devastating for families and communities.

Fatal IPV comes in many forms, including when an individual kills their current or former intimate partner (intimate partner homicide, IPH); when an abusive partner kills a family member, friend, or other person outside of the relationship (corollary victimization); when a partner commits homicide and then dies by suicide (homicide-suicide); or when a police officer uses lethal force against an individual during a dangerous, IPV-related conflict (legal intervention). Existing research primarily documents the burden of IPV on violent deaths by enumerating intimate partner homicide (IPH) events. Unfortunately, it is likely that there are many other IPV fatalities that are not counted when taking this approach.

This report aims to better describe fatal IPV in Colorado by presenting the incidence, risk factors, and circumstances for different types of IPV-related deaths, utilizing data from the Colorado Violent Death Reporting System.⁸ See addendum one for descriptions of the types of IPV deaths detailed in this report.

Methods

Data for this report were obtained from the Colorado Violent Death Reporting System (CoVDRS). The CoVDRS is part of the National Violent Death Reporting System (NVDRS), an enhanced public health surveillance system that is funded and maintained by the U.S. Center for Disease Control and Prevention.⁸ The CoVDRS records detailed information on all violent deaths that occur in the state. To compile this data, trained abstractors collect data from death certificates, coroner/medical examiner reports, toxicology reports, and law enforcement investigations.

CoVDRS data capture victim characteristics (i.e., age, race/ethnicity, sex), the manner of death (i.e., homicide, suicide), precipitating circumstances that led up to that particular death (i.e., decedent recently experienced IPV), and a multitude of other data elements. CoVDRS also includes incident-level information, such as whether the event included a single death or multiple deaths.

This report documents all IPV-related deaths (that is, mortality from IPV-related conflicts) among Colorado residents that occurred in the state between 2007-2017 where there was known circumstantial information. We excluded any CoVDRS deaths with unknown circumstances, or deaths of undetermined intent.

To identify our population, we used the IPV variable that is recorded in the CoVDRS. The IPV variable is used for only homicides and legal intervention deaths (see NVDRS coding manual). We verified the IPV variable by searching for any additional homicide deaths in the CoVDRS system where the primary victim-suspect relationship was that of a current or former intimate partner. Mercy killings (as defined in the NVDRS coding manual) between intimate partners were not included. To identify suicides that might have been connected to IPV-related homicides, we examined if any additional deaths shared an incident ID with an existing IPV-related death in the CoVDRS system. Multiple deaths may share an incident ID if the deaths occurred within 24 hours, occurred in a shared location, or involved the same people (i.e., victim was killed by the suspect who then died by suicide later that day).

In this report, we present IPV fatalities using frequencies (or counts of events), as well as age-adjusted and crude rates per 1,000,000 population. Age-adjusted rates are standardized using the 2000 US Population Standard, and population estimates come from the Colorado State Demography office. This report does not include any incidents of non-fatal IPV incidents. IPV-related deaths are stratified based on age, sex, health statistics region of residence, community-level poverty, race/ethnicity, marital status at the time of death, method of injury, and circumstances preceding death. Suspect information as captured in the CoVDRS is also presented by select demographics.

Sex is reported in CoVDRS based on what is documented on the death certificate. Sex is captured using two categories: female and male. The system has a variable for transgender individuals; however, data is often missing because it might not be recorded in the available sources. Given the incompleteness of the data, we are unable to report data on gender non-conforming or transgender decedents.

Area-based poverty status is measured by calculating the percent of the population in each decedent's census tract of residence that is living at or below the federal poverty level. These population data come from the 2013-2017 five-year American Community Survey estimates (and therefore are only reported for 2013-2017

deaths), made available by the U.S. Census Bureau.⁹ The poverty-level categories used in this report include 0-9.9% of the population in a decedent's community living at or below the federal poverty level, 10-19.9%, 20-29.9% and 30% or greater.

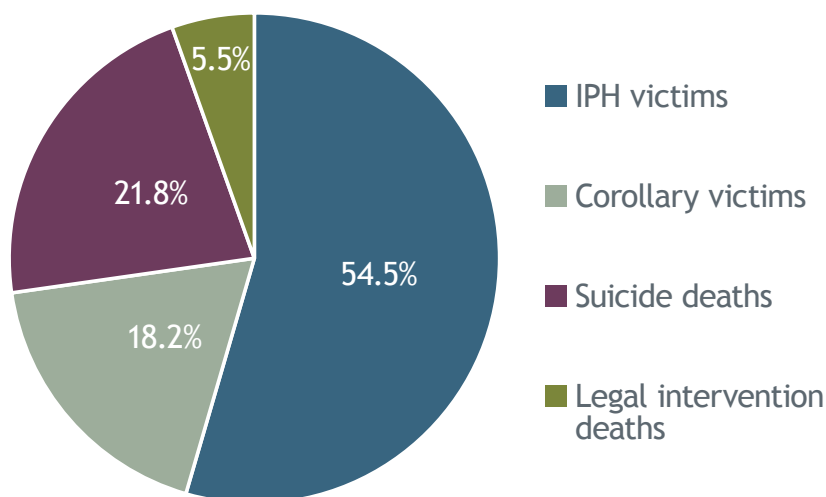
Race/ethnicity counts were calculated for one of four racial/ethnic categories; White Non-Hispanic, White Hispanic, Black/African American, or "other" (which includes Asian/Pacific Islander, American Indian, and those with unknown race/ethnicity). These data come from the death certificate and are confirmed from coroner/medical examiner and law enforcement reports. Data are presented geographically based on Health Statistics Regions, derived from the decedent's county of residence. The HSRs represent counties grouped together based on similar characteristics, to control for small population sizes, and to minimize data suppression.¹⁰ Frequencies less than three are suppressed (*).

Results

Types of IPV-Related Deaths

There were 477 IPV-related violent deaths that occurred in Colorado among residents between 2007 and 2017. Of these fatalities, 260 (54.5%) decedents were victims of intimate partner homicide (IPH), 104 (21.8%) were people who died by suicide in a homicide-suicide event, 87 (18.2%) were corollary victims; and 26 (5.5%) were legal intervention deaths (individual was killed by a law enforcement officer who was acting in their official capacity). See Figure 1 below.

Figure 1. IPV mortality types (n=477), Colorado residents (2007-2017).



Incident types

These 477 deaths arose from 345 separate incidents (average of 1.4 deaths per incident). About two thirds of these incidents (66.4%, n=229) involved only a single death while a third (33.6%, n=116) involved multiple deaths. Some incidents included two, three, or even four deaths. Figure 2 displays different types of incidents describing who was victimized and how many individuals died.

Of the incidents that involved multiple deaths, the majority (n=104 out of 116, 90.0%) included a suicide. Specifically, more than one out of four incidents with multiple victims included an IPH and a suicide (n=97, 28.1%), while only a few included a corollary death followed by a suicide (in the absence of IPH, n=7, 2.1%).

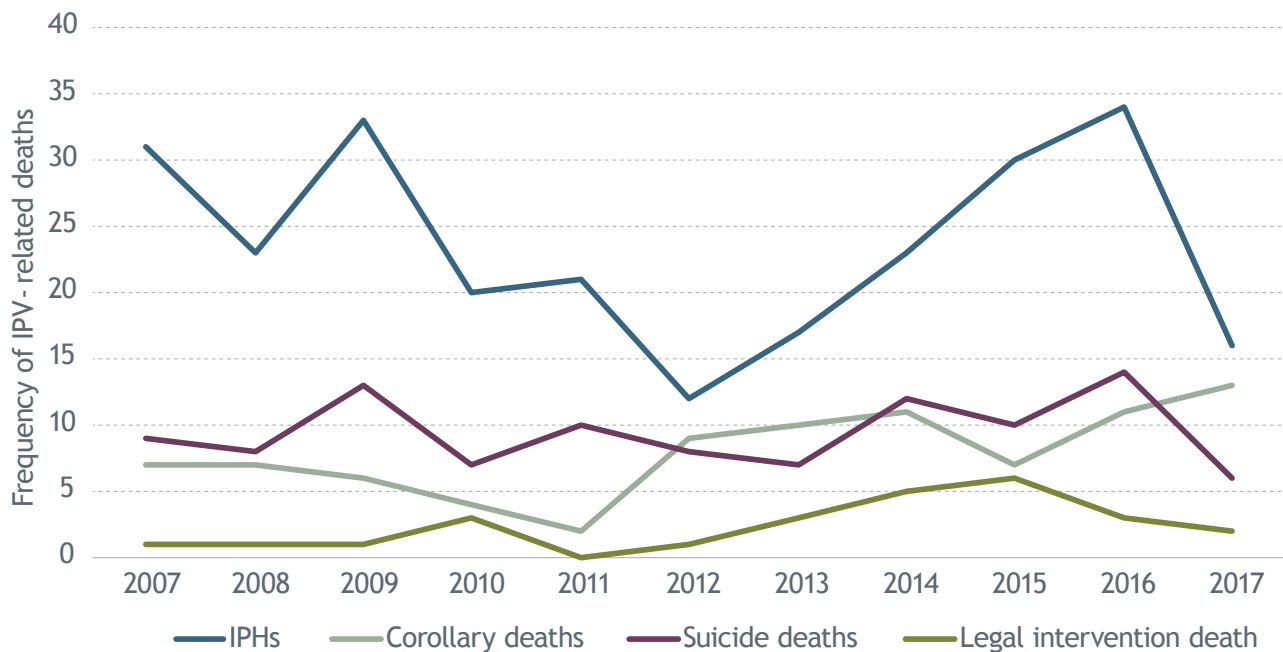
Table 1. IPV mortality types per incident (n=477 deaths, n=345 incidents), Colorado residents 2007-2017.

IPH	Corollary victim	Suicide (after homicide)	Legal intervention	Number of incidents	Number of deaths
One death					
1				155	155
	1			54	54
			1	20	20
Two deaths					
1		1		86	172
	1	1		7	14
1			1	4	8
Other combination	5	10			
Three or more deaths					
1	1	1		9	27
Other combination				4	15
TOTAL				345 incidents	477 deaths

Trends over time

While IPH decreased from 2007 to 2012, there was a sharp increase from 2012 to 2016, followed by a decline in 2017 (figure 3). The frequency of corollary deaths, suicides, and legal intervention deaths has remained relatively stable over time, although corollary deaths have increased from 2011-2017.

Figure 2. IPV mortality types over time (n=477), Colorado residents 2007-2017.

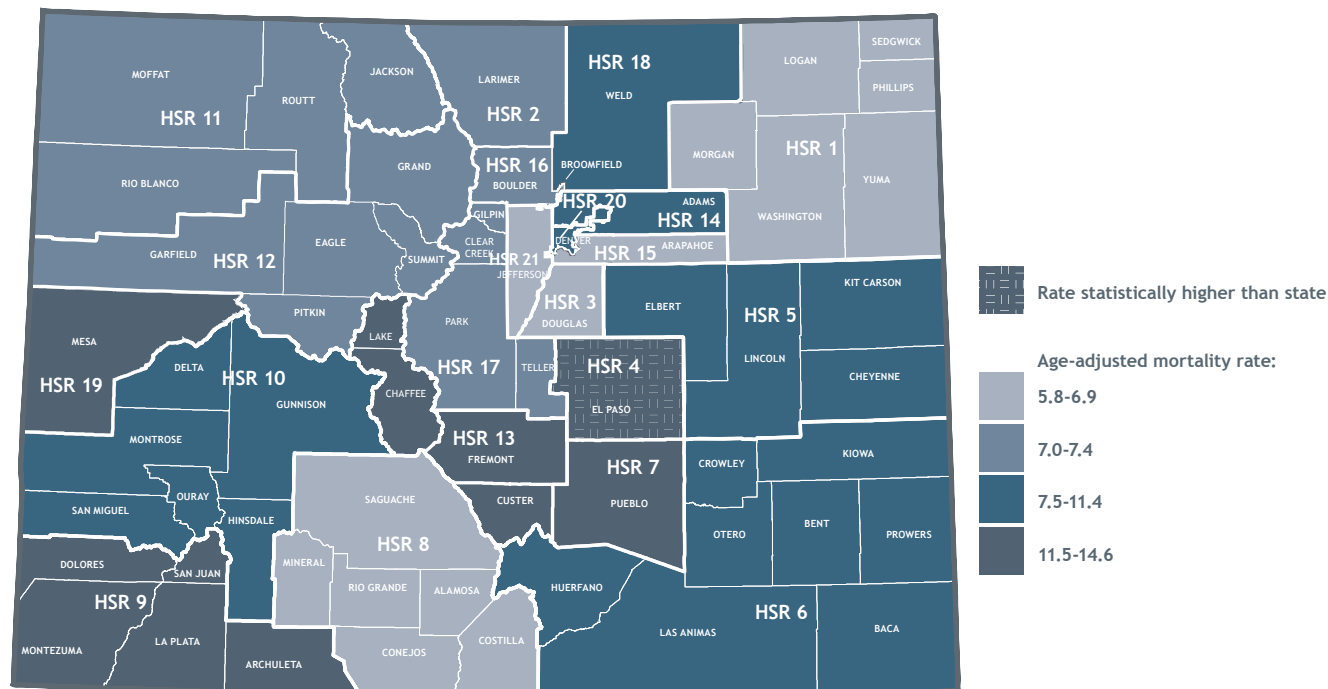


Regional Distribution

Figure 3 represents the age-adjusted rates of IPV fatalities per 1,000,000 population based on Health Statistics Region of residence (HSR). The map indicates that HSRs 19 (Mesa County), 9 (Dolores, San Juan, Montezuma, and La Plata counties), 13 (Lake, Chaffee, Fremont and Custer Counties), 4 (El Paso County), and 7 (Pueblo County), had the highest rates of IPV related deaths, though only HSR 4 had a rate that was

statistically significantly higher than that of the state rate (8.2 deaths per 1,000,000, 95% confidence interval/CI: 7.5-9.0). There were no regions with a rate that was statistically significantly lower than the state rate.

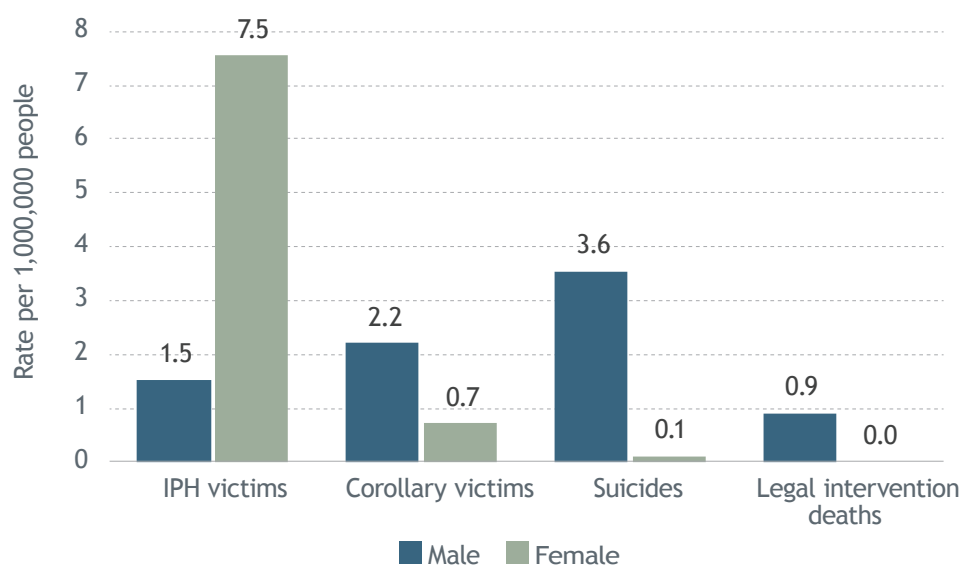
Figure 3. Age-adjusted IPV mortality rates per 1,000,000 population by Health Statistics Region of residence, Colorado, 2007-2017.



Age and Sex

Overall, the rate of IPV-related death (any subtype) for females was 8.4 per 1,000,000 (95% CI: 7.3 - 9.4). For males it was 8.2 per 1,000,000 (95% CI: 7.1 - 9.2). Rates among females appeared much higher for IPH; the age-adjusted rate for females was 7.5 per 1,000,000 (95% CI: 6.5 - 8.6), compared to 1.5 per 1,000,000 (95% CI: 1.1 - 2.0) for males. Figure 4 illustrates the rate of each violent outcome type by sex.

Figure 4. IPV age-adjusted mortality rates (per 1,000,000 people) by sex (n=477), Colorado residents 2007-2017.



Figures 5 and 6 depict breakouts by age group and IPV mortality type for females and males, respectively. For female victims of IPH, the highest rates were for individuals ages 25-44, followed by 45-64. For males, IPH

victimization was highest among ages 45-64. Rates of IPH were higher for female victims compared to male victims in all age groups.

While females had higher rates of IPH victimization, males were more often corollary victims. The age-adjusted rate of corollary victimization for males was 2.2 per 1,000,000 (95% CI: 1.7 - 2.7). Males between the ages of 25-44 had the highest rates of victimization in this category.

Males were most often identified as the perpetrators of homicide-suicides where after perpetrating the homicide they went on to die by suicide. The age-adjusted rate of suicides (as part of a homicide-suicide event) for males was 3.6 per 1,000,000 (95% CI: 2.9-4.3). Of these 104 suicides in our sample, only three of these were among females. The age group with the highest rates of homicide-suicide were males ages 65 and older.

Legal intervention deaths related to an IPV incident were the least common occurrence out of all four types of IPV-related deaths examined in this report, and all were male.

Figure 5. Age-adjusted IPV mortality rates for females by age group, (per 1,000,000 people), Colorado residents 2007-2017.

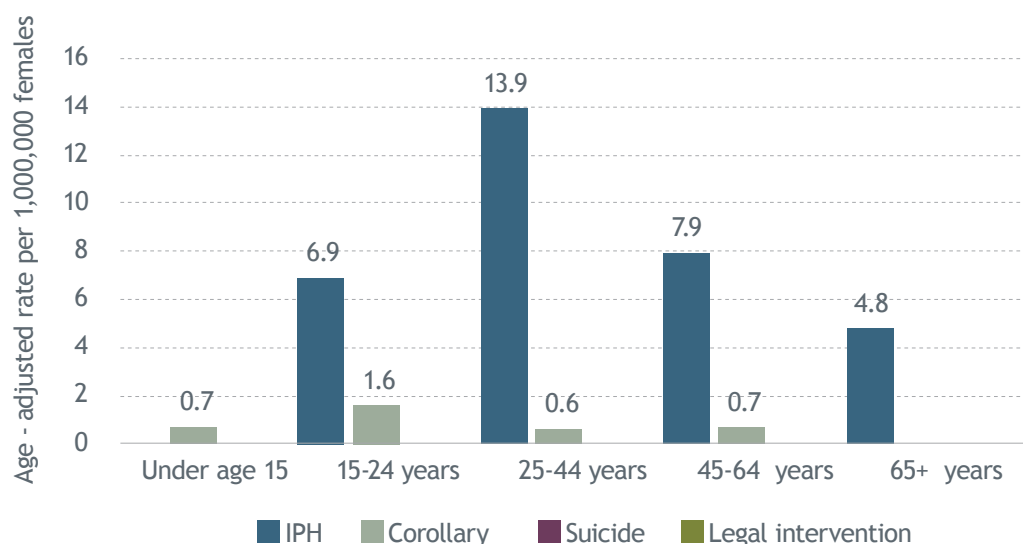
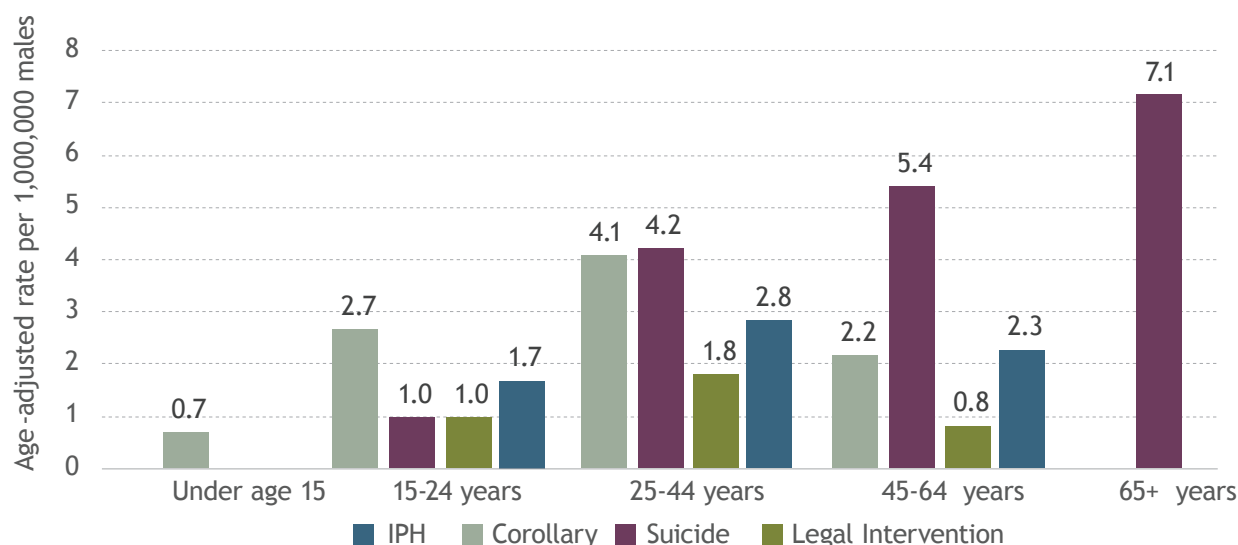


Figure 6. Age-adjusted IPV mortality rates for males by age group, (per 1,000,000 people), Colorado residents 2007-2017.

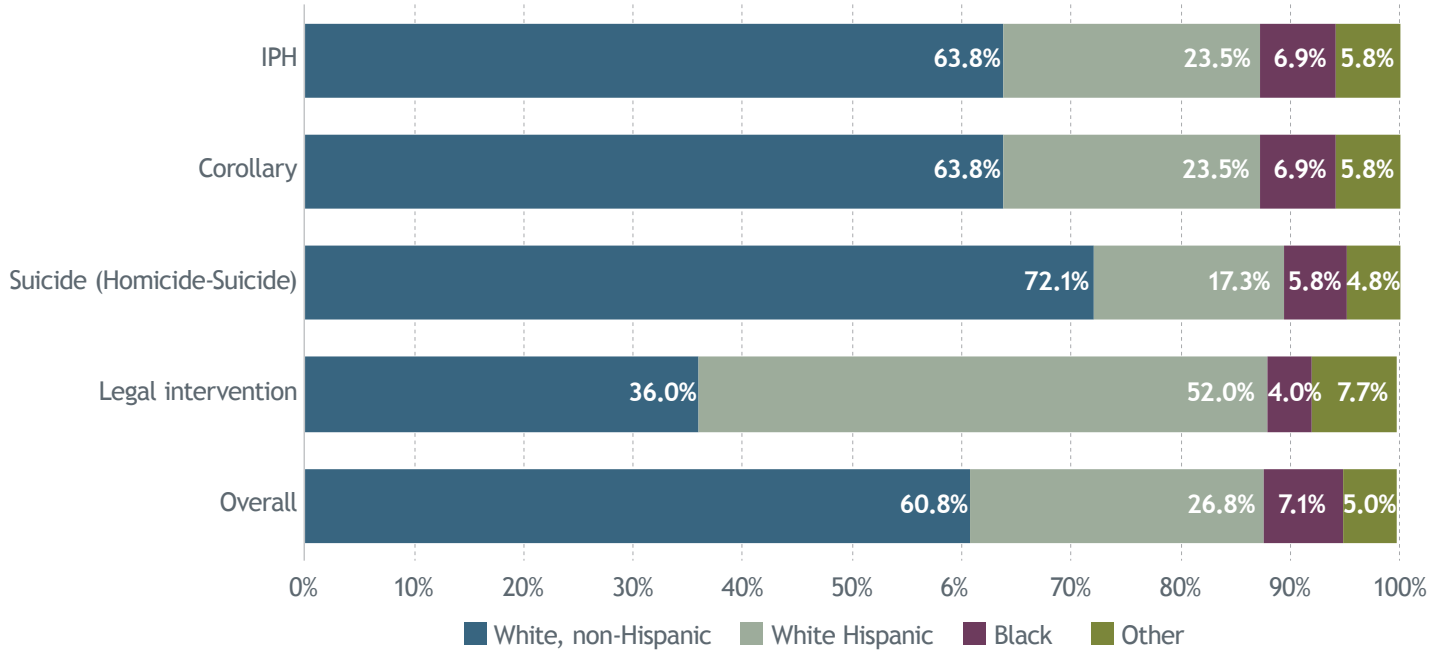


*Rates where number of deaths are less than three are suppressed.

Race/ethnicity

Nearly half of all decedents were White, non-Hispanic (n=290, 60.8%) and over a quarter were White Hispanic (n=128, 26.8%). For the entire state population, 70.5% are White, non-Hispanic, and 18.9% were White, Hispanic.⁹ Individuals who identified as Black, Asian Pacific Islander, or American Indian were relatively less common (the latter two which are grouped as “other” in the graphic below). Notably, more of those who died by suicide were White non-Hispanic (n=75, 72.1%) compared to other IPV mortality types, and more legal intervention decedents were White Hispanic (n=13, 52.0%).

Figure 7. IPV mortality type by race, Colorado residents, 2007-2017.



Community-Poverty Level (only includes 2013-2017 deaths)*

The age-adjusted rates for each type of IPV mortality are depicted below in Figure 8 by the proportion of residents in their community living below the federal poverty level. The rate of IPV fatalities was highest for males living in a community where nearly a third or more (30%+) of residents were at or below the federal poverty level (rate of 25.2 per 1,000,000, 95% CI: 12.1-38.3). Females in high-poverty communities also had the highest rates of IPV-related death (20.0 per 1,000,000, 95% CI: 11.7-28.2). IPV-related deaths were present at lower rates in communities with <10% living at or below the federal poverty level.

The age-adjusted rates for all types of IPV-related death were elevated in high-poverty areas (see Figure 8), IPH occurred at the highest rate (8.3 per 1,000,000, 95% CI: 6.9-9.9) for victims where the community had nearly a third or more (30%+) of residents at or below the federal poverty level. Rates of corollary deaths were also elevated in these high-poverty areas (6.4 per 1,000,000, 95% CI: 5.1-7.8).

Figure 8. Age-adjusted rate of intimate partner violence related deaths per 1,000,000 population, by community level poverty and victim sex, Colorado Residents, 2013-2017.

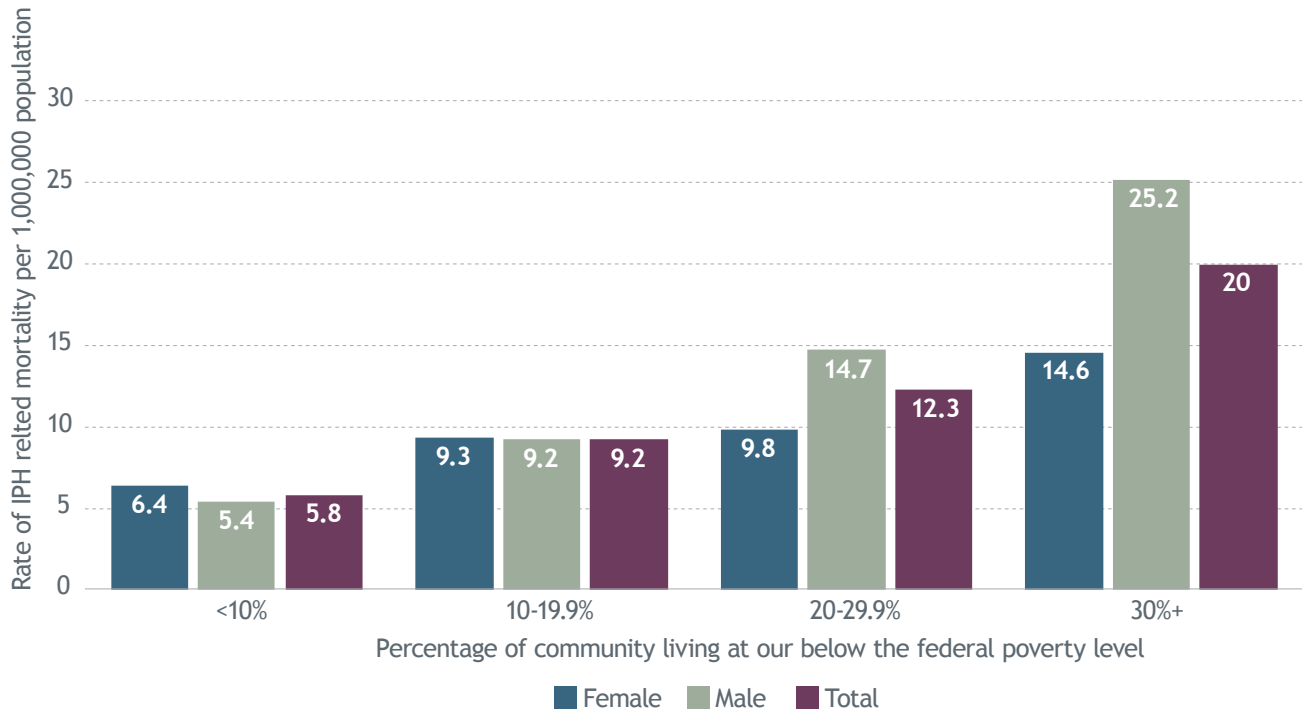
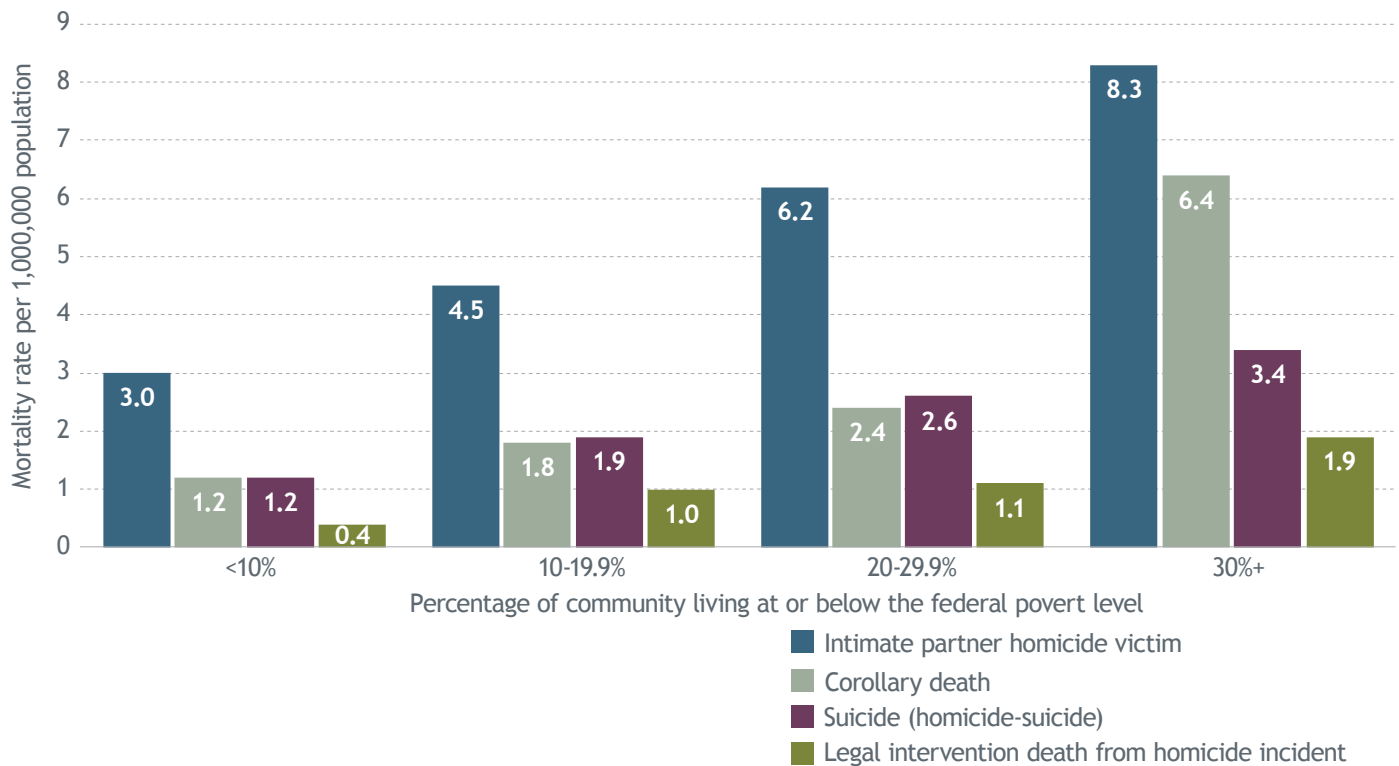


Figure 9. Age-adjusted rate of intimate partner violence related deaths per 1,000,000 population, by community level poverty and victim type, Colorado Residents, 2013-2017.

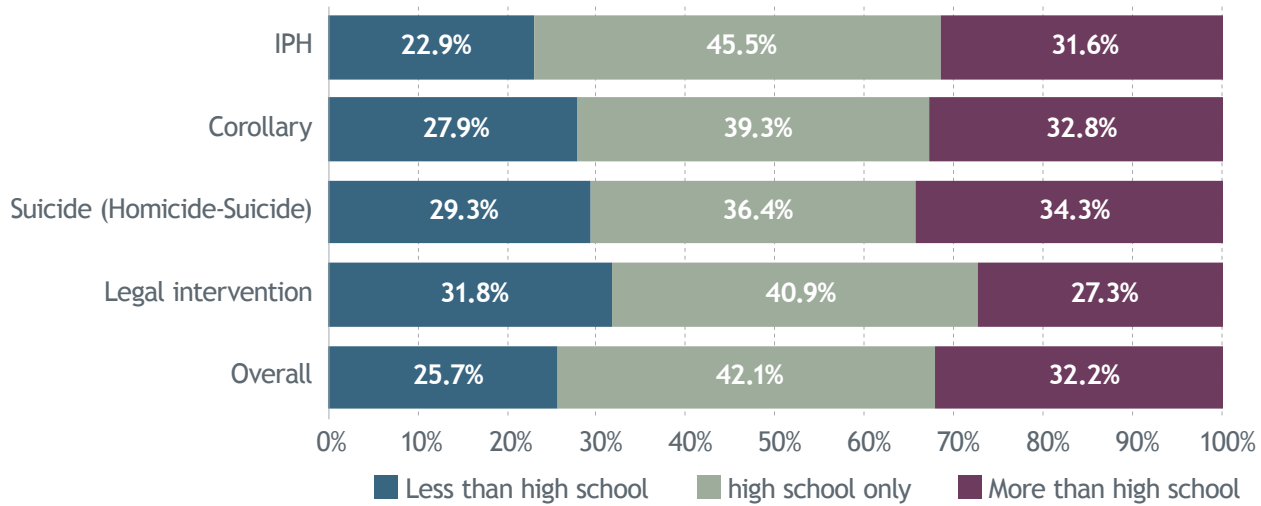


Educational Attainment

Most adult IPV decedents (ages 25 years and older) had attained a high school degree (n=174, 42.1%) but did not receive further education. About a quarter never finished high school (n=106, 25.7%). About a third of the

sample had received education beyond high school (n=113, 32.2%), such as an Associate's Degree, Bachelor's Degree, a Master's, or a Doctorate. Overall 74.3% (n=307) received a High school diploma or above.

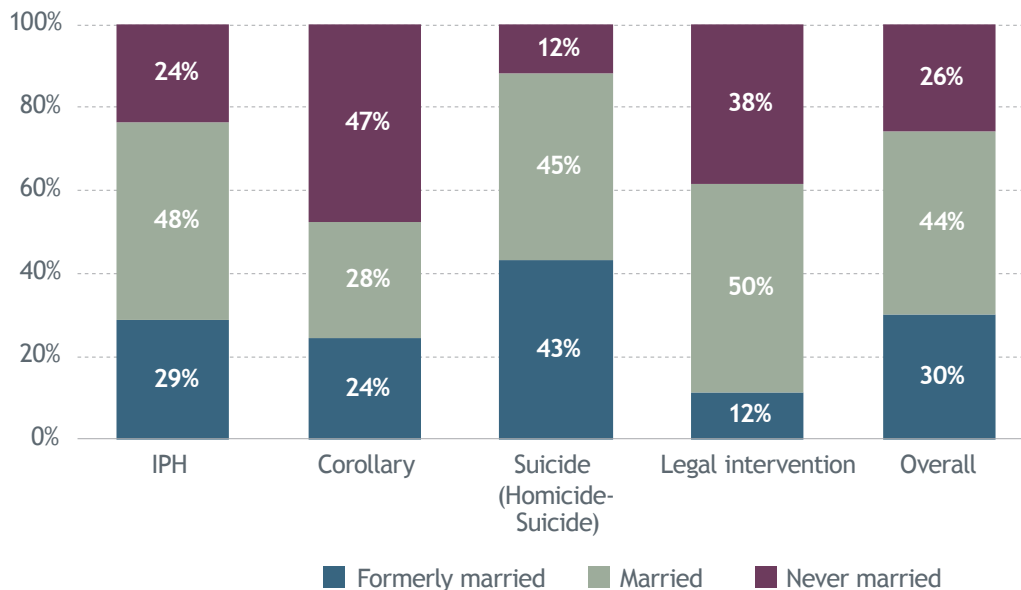
Figure 10. Educational attainment by IPV mortality type among adult victims (ages 25+) (n=411), Colorado residents, 2007-2017.



Marital status

Marital status is reported below by victim type for all adult decedents ages 18 or older. Just under half of IPH victims were currently married (n= 123, 47.7%). Corollary victims had the highest percentage of victims who were never married (n=37, 47.4%). For homicide-suicides, the suicide decedents were often married (n=46, 45.1%) or formerly married (n=44, 43.1%). Half of the legal intervention decedents were married at the time of death (n=13, 50.0%), while over a third were never married (n=10, 38.5%).

Figure 11. Marital status among adult victims of IPV violence (ages 18+) (n=464), Colorado residents, 2007-2017.

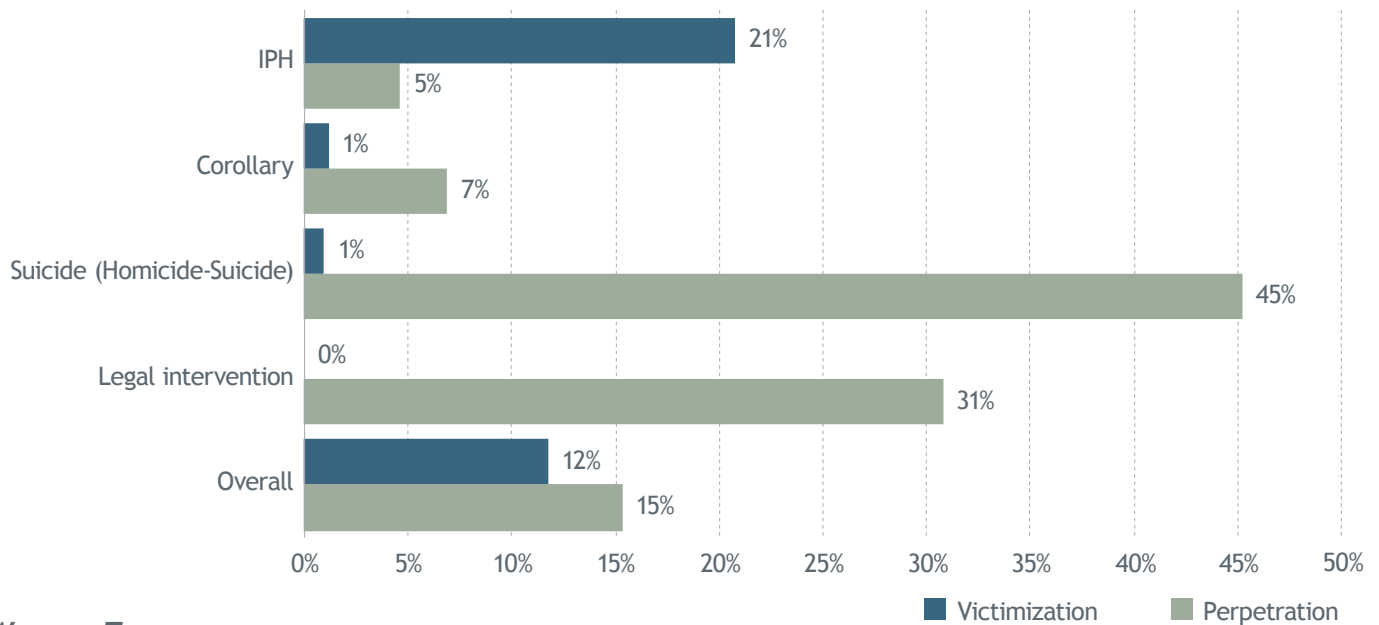


Recent perpetration or victimization in violent conflict

Information on whether or not the decedent had been a perpetrator or victim of violence during a distinct incident (different than fatal event) that occurred within one month prior to the death is depicted in Figure

12. There are clear differences by victim type. Over 20% (n=54, 20.8%) of IPH victims had been victimized during another event within the past month, very few had been identified as perpetrators (n=12, 4.6%). All other groups had a higher proportion of individuals who were identified as perpetrators; about 7% of corollary victims (n=6, 6.9%), one third of legal intervention victims (n=8, 30.7%), and almost half of all suicide decedents in a homicide-suicide event (n=47, 45.2%) were implicated as perpetrators in other distinct incidents, within the month preceding death.

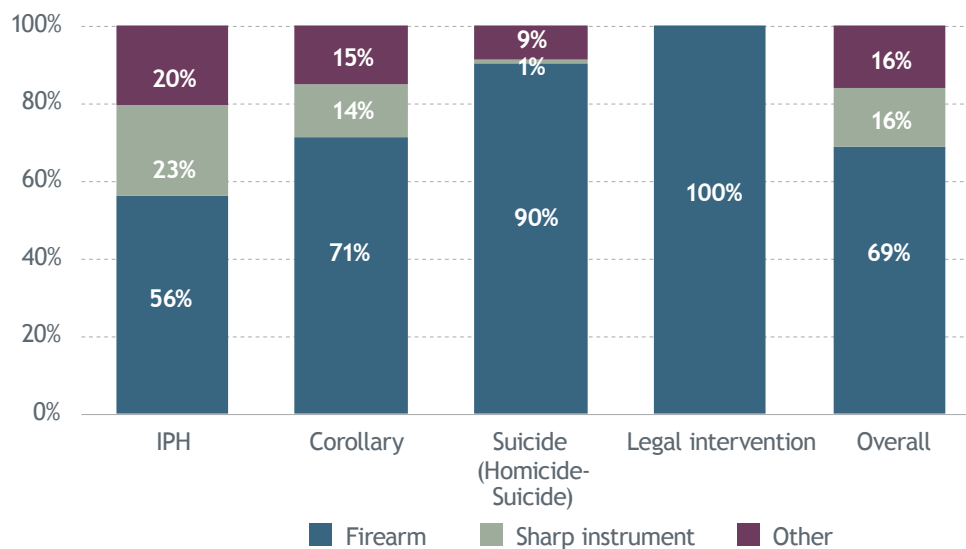
Figure 12. Victimization and perpetration of violence within the 30 days prior to death among IPV-related mortalities (n=477), Colorado residents, 2007-2017.



Weapon Type

The majority of decedents in the sample were killed by a firearm (n= 328, 69%). This constitutes over half of IPH victims (n=146, 56%), nearly three quarters of corollary victims (n=62, 71%), nine out of ten suicide decedents (n=94, 90%), and all legal intervention decedents (n=26, 100%). The second most common method overall was a sharp instrument (n=74, 16%), followed by other weapons including; hanging or strangulation (n=24, 5.0%), a blunt instrument (n=20, 4.2%), or personal weapons (punching/kicking, n=15, 3.1%).

Figure 13. IPV mortality types by primary weapon (n=477), Colorado residents, 2007-2017.



Circumstances for Homicide Deaths

Homicide-specific circumstances for IPH and corollary victims are available in Table 2, which are derived from the coroner and law enforcement investigations and subsequently coded based on the NVDRS coding manual.⁸ An argument preceded the IPH mortality in about half of all cases (n=128, 49.2%), and the conflict itself may have been related to jealousy in about one out of five cases (n=48, 18.5%). For corollary deaths, the fatal incident may have been related to jealousy for about one quarter of deaths (n=25, 27.8%). More than one out of three corollary deaths were precipitated by an argument (n=34, 39.1%), and about a third were precipitated by another crime (n=32, 36.8%).

Table 2. Circumstances for homicide victims (n=347), Colorado residents 2007-2017.

	IPH victims n=260		Corollary victim n=87	
	N	%	N	%
Argument preceded the death	128	49.2%	34	39.1%
Jealousy	48	18.5%	25	27.8%
Death was precipitated by another serious crime	38	14.6%	32	36.8%
Physical fight preceded the event	19	7.3%	14	16.1%
Drug dealing played a role in the incident	7	2.7%	3	3.5%
Stalking	6	2.3%	*	*
Victim also used a weapon	*	*	12	13.8%
Victim was intervening in the incident	*	*	9	10.3%
Victim was a bystander in the incident	*	*	4	4.6%

*Counts of less than three are suppressed

Suspect information

There was some information available about the suspect for all IPH deaths (n=260, 100%), and most corollary deaths (n=76, 90.8%), as uncovered during the coroner and law enforcement investigations, and presented in Table 3. The majority of IPH suspects were male (n=220, 84.9%) and over one-quarter (n=71, 27.3%) had a history of abusing the victim. The majority of suspects in corollary deaths were also male (n=72, 91.1%). About one-half of IPH suspects were White, non-Hispanic (n=131, 50.4%). For suspects in corollary death cases, only about one-third were White, non-Hispanic (n=27, 34.2%) and just under one-third were white Hispanic (n=23, 29.1%). There were relatively fewer black suspects overall (n=33, 9.7%). A notable amount of suspects had an unknown race (n=47, 18.8%), and other unknown demographics, which may be related to the NVDRS system and source documents focusing on victim information.

Most suspects were between the ages of 25-64, with IPH suspects being slightly older on average compared to suspects in corollary death cases; a quarter of the suspects in corollary death cases were between the ages of 15-24 (n=17, 25.0%) compared to only 10% of IPH suspects (n=23, 10%). Very few suspects in corollary case were over the age of 65 years and about 10% of IPH suspects were over the age of 65 (n=25, 10.8%). Nearly one out of every five corollary victims was a child (n=14, 17.7%) of the suspect/perpetrator. Corollary victims were also other family members (n=12, 15.2%) or acquaintances/friends (n=19, 24.1%).

Table 3. Suspect information (n=339 homicide suspect was known), Colorado residents 2007-2017.

	Suspects for IPHs n=260		Suspects for corollary victim homicides n=79	
	N	%	N	%
Age				
Under age 15	*	*	*	*
15-24 years	23	8.9%	17	21.5%
25-44 years	106	40.8%	35	44.3%
45-64 years	76	29.2%	15	189.0%
65+ years	25	9.6%	*	*
Unknown	29	11.2%	11	13.9%
Sex				
Male	220	84.9%	72	91.1%
Female	39	14.7%	6	7.6%
Victim's relationship to suspect				
Intimate partner	260	100.0%	0	0%
Acquaintance/friend	0	0%	19	24.1%
Other family member	0	0%	12	15.2%
Child of the suspect	0	0%	14	17.7%
Stranger	0	0%	9	11.4%
Other	0	0%	17	21.5%
Unknown	0	0%	6	7.6%
Race/ethnicity				
White, non-Hispanic	131	50.4%	27	34.2%
White Hispanic	52	20.0%	23	29.1%
Black	25	9.6%	8	10.1%
Other	5	1.9%	*	*
Unknown	47	18.8%	20	25.3%
Documented history of mental illness	17	6.5%	6	7.6%
History of abuse of victim by this suspect	71	27.3%	5	6.3%

* Counts of less than three are suppressed.

Because some incidents included multiple deaths where only one suspect was identified, individual suspects may be counted in both columns.

Circumstances for Suicide Deaths (homicide/suicide incidents)

Additional information on suicide decedents following an Intimate partner homicide (homicide/suicide) is available in Table 4. About one out of four suicide decedents (n=25, 24.0%) were known to have some sort of mental health problem, and only about half of those were receiving treatment (n=11, 10.6%). About one in five individuals had disclosed suicidal intent (n=20, 19.2%), while one in four left a suicide note (n=26, 25.0%), or had a contributing physical health problem (n=26, 25.0%). Just under half of suicide decedents were also facing criminal legal problems (n=42, 40.4%). About 17% were dealing with other familial relationship problems (n=18, 17.3%) or financial problems (n=18, 17.3%). These circumstances likely also contributed to the homicide perpetration that preceded their death.

Table 4. Circumstances for suicide following intimate partner homicide (n=104), Colorado residents 2007-2017.

Circumstances	Suicide victims (of homicide-suicide events)	
	N	%
Intimate partner problems	101	97.2%
Relationship problems with other family member	18	17.3%
Known mental health diagnosis	25	24.0%
Current mental health treatment	11	10.6%
Suicidal intent disclosed	20	19.2%
Left a suicide note	26	25.0%
Criminal legal problem	42	40.4%
Contributing physical health problem	26	25.0%
Civil legal problem	12	11.5%
Financial problems	18	17.3%
Eviction or housing problems	7	6.7%

Discussion

Over the last eleven years (2007-2017), there have been 477 IPV-related fatalities that occurred among Colorado residents within the state. That is equivalent to at least 43 deaths each year. Our results describe the full spectrum of IPV-related fatalities, including intimate partner homicide (IPH), homicide-suicide, legal intervention deaths, and deaths of individuals outside of the abusive relationship (corollary deaths). IPV prevention efforts can therefore not only save the lives of IPV victims, but also the lives of their family, friends, and perhaps the abusive partner.

While this report takes a more comprehensive approach to assessing the burden of fatal IPV, IPV deaths are more commonly measured in terms of female IPH victimization. Existing female IPH data suggests that rates in Colorado are lower than in the other states that use NVDRS.¹¹ It is likely that IPV-related deaths overall may also be lower in Colorado; however, comparable data on IPV fatalities (not just IPH) for other states or at the national level are not yet available.

It is important to use an encompassing approach to assess the burden of IPV mortality, but not all victims of fatal IPV are the same. We identified clear profiles of decedents that distinguished who was victimized and under what circumstances. These distinctions may have implications for policy, prevention, and intervention efforts.

Most victims of intimate partner homicide (IPH) were young or middle-aged adult females. Many IPH incidents were preceded by an argument with the suspect that resulted in death. The majority of suspects that were identified in these IPH cases were adult males. About one third of IPH decedents had a known history of non-fatal abuse at the hand of the identified suspect, although this number is likely underreported; research shows that as much as half of non-fatal IPV incidents are never reported to law enforcement.¹² Reporting IPV is associated with a number of barriers, including fear of not being believed, fear of repercussion from an abusive partner, and other situational considerations which can interfere with a victim's ability to seek help.¹²

Corollary victims, on the other hand, were more often male. Corollary victims ranged from young children, to acquaintances, friends, and other family members of individuals in the abusive relationship. The suspects that had been identified in these cases were similar to suspects in IPH cases. Similarly, many cases where a corollary victim died were preceded by an argument and/or were related to jealousy.

The suicide decedents in this study were all implicated as perpetrators of a related intimate partner homicide (IPH) that they had carried out immediately prior to dying by suicide. Many had also committed other, distinct violent acts in the month before their death. A substantial proportion of these decedents also had documented relationship problems and criminal legal problems. While it is likely that mental health diagnoses were under-reported, still a substantial proportion of suicide decedents had known mental health problems. These decedents were almost all older male adults (ages 45 and up), and 72% were White, non-Hispanic. As past research demonstrates, younger individuals that commit an IPV-related homicide-suicide may be more driven by homicidal intent (e.g., have made past threats, intentionally provoked fear, exhibited controlling behavior), whereas older individuals who committed homicide-suicide are more often driven by suicidal intent (e.g., exhibiting depression, concerns with poor health, financial stress)¹³ The age breakdown of homicide-suicide decedents by age in Colorado was similar to that of national studies, with about a third of these decedents being ages 60 or older at the time of death.¹³ Programs that address some of the crosscutting risk factors and warning signs for suicide and IPH perpetration therefore may effectively prevent multiple violent death outcomes.

There are a few important commonalities to note across these subtypes. First, firearms were the most common weapon in IPV-related fatalities. Firearms are quite lethal compared to other weapons, and may also be used in non-fatal incidents to intimidate, scare, and manipulate survivors of IPV into staying in an abusive relationship.¹⁴ Education and community-level poverty were also common factors. The age-adjusted rate for IPV mortality was substantially elevated for high-poverty areas; in communities where 30% or more of the population was living in poverty. Education may also affect the incidence of IPV-related deaths. Only about 75% of adult decedents (ages 25 or older) in our sample had attained a high school degree (n= 307, 74.3%), compared to the state average of 91%.¹⁵

Overall, these commonalities illustrate how structural factors such as poverty and education affect perpetration and victimization. Providing focused efforts to identify and support individuals affected by IPV is essential to interrupt these violent patterns of behavior, and community-level approaches further upstream can promote healthier relationships which prevent IPV from starting in the first place.^{16,17}

This report aims to serve the efforts of local, state, and nonprofit agencies that seek to understand the incidence of fatal IPV and prevent these violent deaths before they occur. IPV also shares many risk and protective factors with other forms of violence. According to CDC's Connecting the Dots framework, coordinated efforts such as those described in Colorado's State Sexual Violence Prevention Plan can have positive spillover effects.^{16,17} ultimately reducing not only IPV but also related outcomes while improving overall health and wellness for all Colorado residents.

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Addendum 1: IPV Mortality types as described in this report:

Intimate Partner Homicide (IPH) Victims

IPH is when a person kills their current or former intimate partner, usually after a long history of prior, non-fatal abuse.¹ In 2017, IPH was the cause of death for 1,350 people in the United States.² Although IPH can affect people regardless of sex, most IPH victims are female. In fact, when women are murdered in the United States, over half of these victims (55.3%) are killed by an intimate partner.³

Corollary Victims

IPV can also fatally injure family members, friends, new intimate partners, police officers, and even strangers.⁴ When people who are not the partners in the abusive relationship are killed in an IPV-related conflict, we refer to these decedents as “corollary victims.”⁵ Data from the National Violent Death Reporting System (NVDRS) suggests that for every eight victims of IPH there could be an additional two corollary victims that are killed in the same incidents or other IPV-related conflicts.⁴

Suicide Decedents in Homicide-Suicide Events

Sometimes when an individual commits homicide they go on to die by suicide within 24 hours of the homicide event, in a directly related death. Data from North Carolina (2004-2013) suggests that on average, nearly 1 out of 4 IPHs (24.8%) are followed by an immediate suicide.⁶ The likelihood that a perpetrator of IPH will die by suicide within 24 hours is much higher than with other types of homicide. In fact, homicide-suicides most commonly occur within the context of IPV or other romantic relationship distress.⁷

Legal Intervention Deaths

IPV conflicts may escalate to the point that law enforcement is called and an officer determines there is a need to use lethal force to protect a victim, themselves, or other bystanders. When an individual is killed by an active duty police officer, it is often referred to as a “death due to lethal force by law enforcement” or a “legal intervention death.”⁸ While police use of lethal force is not common in the context of IPV, one study suggests that 1 out of 7 legal intervention deaths (13.9%) are related to IPV.⁸

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