



# Homicides

**Involving Native Americans**

**Arizona Violent Death  
Reporting System**

January 1, 2015 – December 31, 2017





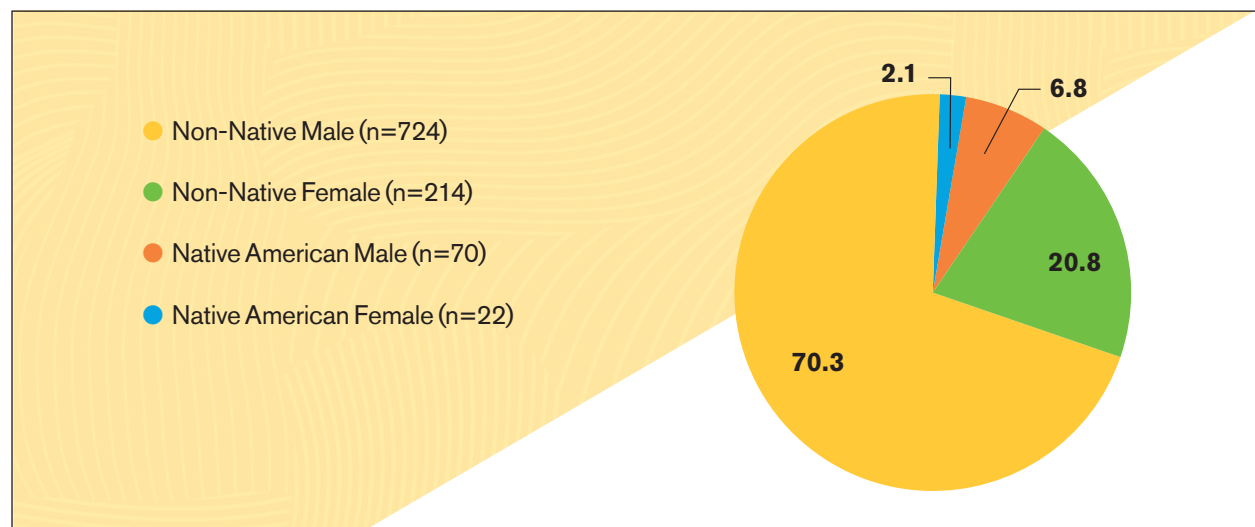
**The Arizona Violent Death Reporting System (AZ-VDRS)** collects violent death data from multiple sources: death certificates issued by the Arizona Department of Health Services, police reports obtained from investigating agencies, and autopsy reports from medical examiner offices. The purpose of this project is to support stakeholders in strategic planning and prevention efforts aimed towards reducing the number of violent deaths that occur each year in Arizona. The data used for this report – *Homicides Involving Native Americans* – were drawn from the compilation and analysis of three years of AZ-VDRS data, from January 1, 2015 through December 31, 2017.

AZ-VDRS recorded a total of 5,711 violent deaths for this period; circumstance data were available for 5,292 (92.7%) of the decedents. From these, we

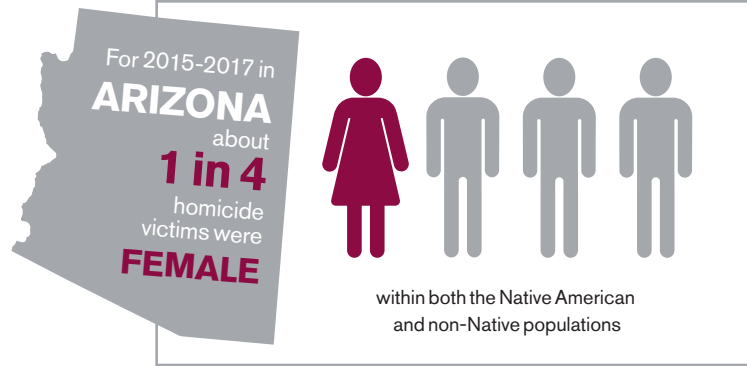
excluded suicides (n=3632; 68.6%) and deaths with undetermined or unintentional causes (n=630; 11.9%), after which our sample consisted of 1,030 (19.5%) homicides for which circumstance data were available.

The AZ-VDRS identified Native American/American Indian decedents by relying upon race/ethnicity information obtained from the data sources noted above. The US Census treats American Indian and Alaskan Native (AIAN) as one distinct racial group for categorizing, collecting and reporting data for both the Census and the American Community Survey (ACS); the CDC also uses this classification. The AZ-VDRS has, therefore, adopted this same data collection classification for calculating and reporting counts and rates. For this report, we prioritized the AIAN classification when multiple races including AIAN were reported for a given individual. For example, if a person was reported as both AIAN and White/non-Hispanic, that individual would be classified as AIAN. This definition strategy is consistent with prior work and published guidelines used with US Census, ACS and NVDRS data.<sup>1</sup>

**EXHIBIT 1:**  
**PERCENTAGE OF HOMICIDES BY SEX AND NATIVE AMERICAN STATUS,**  
**2015–2017 (N=1030)**



“The homicide rate for Native American males was more than twice the rate for non-Native males”



Note also that AZ-VDRS data analyses and rate calculations may differ from those of other sources, such as the Arizona Department of Health Services (ADHS). This happens when our respective analytic processes differ. For example, AZ-VDRS counts occurrent deaths (those occurring in-state, regardless of the decedent's legal residency), while others, including ADHS, may count resident deaths (those of Arizona residents, regardless of where death occurred). For this reason, at first glance, AZ-VDRS and other

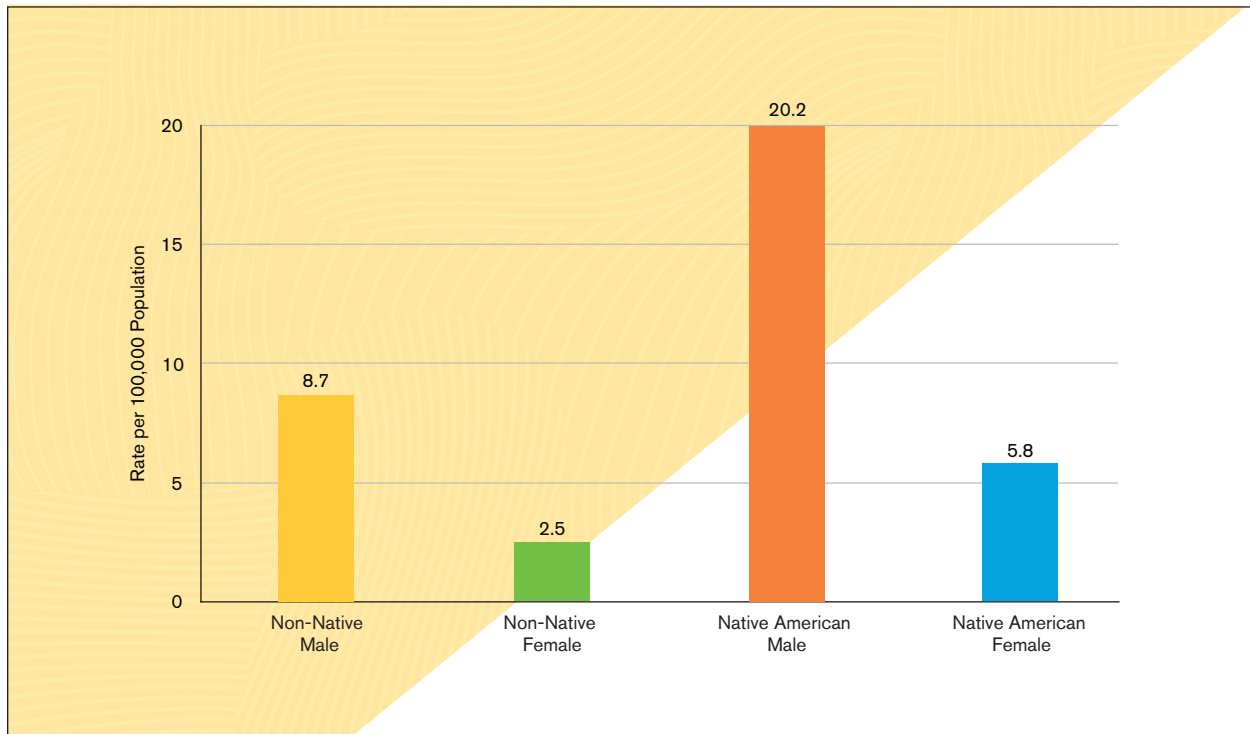
organizations' results may appear to differ. Rather, the organizations each are offering unique insights that reflect their respective analytic strategies.

For population estimates, we relied on the American Community Survey (US Census) 5-year estimates for 2015, 2016, and 2017 to compute crude rates wherever rates are presented. In all of the exhibits below, data and analyses represented are for the state of Arizona, 2015–2017, unless otherwise indicated.



## EXHIBIT 2:

### HOMICIDE RATES PER 100,000 POPULATION BY SEX AND NATIVE AMERICAN STATUS\*, 2015–2017 (N=1030)

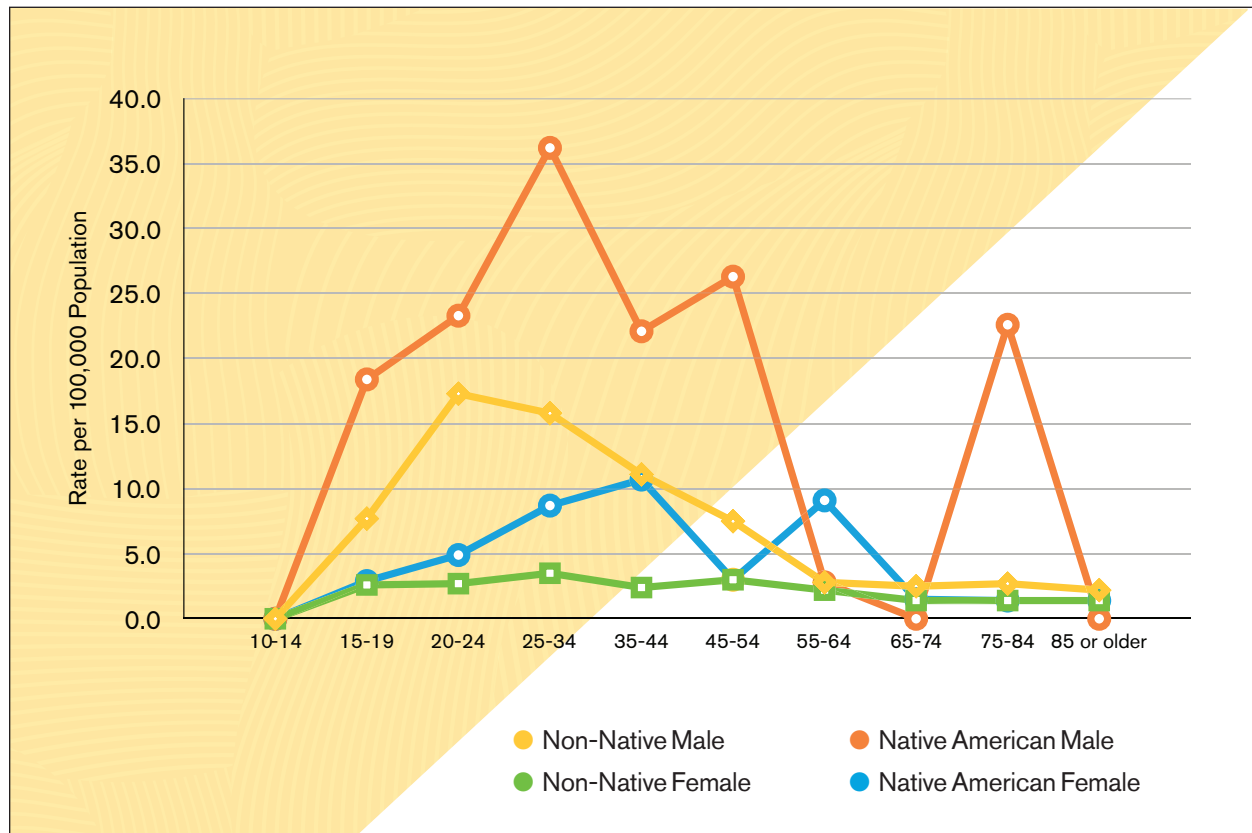


\* Statistically significant at  $p \leq .05$

- For 2015–2017, in Arizona, homicide rates per 100,000 population were significantly higher for Native Americans than for non-Native Americans, regardless of sex; the rate for Native Americans was more than double the rate for non-Native Americans among both males (20.2, 8.7) and females (5.8, 2.5).<sup>3</sup>
- During this period, the overall homicide rate was significantly higher for males than for females (9.2, 2.7) (AZ-VDRS data, not shown).

### EXHIBIT 3:

### HOMICIDE RATES BY AGE GROUP\* SEX AND NATIVE AMERICAN STATUS, 2015–2017 (N=988)



\* Statistically significant at  $p \leq .05$

Note: An unexpected spike appears in the homicide rate for Native American males aged 75-84 (22.6). In contrast, rates were low for this group when compared with rates for other ethnicities within the same group, as well as with Native American males in adjacent age groups (65-74 and 85 and older). This is likely an anomaly due to very low incidence counts (e.g., <5 victims) and the population denominator (e.g., <10,000 Native American males aged 75-84); policymakers and planners should not rely on this analysis alone.

- In 2015-2017, the homicide rate per 100,000 population among Arizona's Native American males was highest among those aged 25-34, substantially higher than the homicide rate among non-Native males in the same age group (36.2, 15.8).
- Among non-Native males, the homicide rate was highest among those aged 20-24 (17.3), followed by the rate among those aged 25-34 (15.8).
- Among Native American females, the homicide rate was highest among those aged 35-44 (11.1), followed by those aged 55-64 (9.1).
- Non-Native females in nearly all age groups were at lower risk for homicidal victimization than Native females and all males; among non-Native females, those in the age group 25-34 years had the highest rates (3.5).

# More research and better census estimates needed

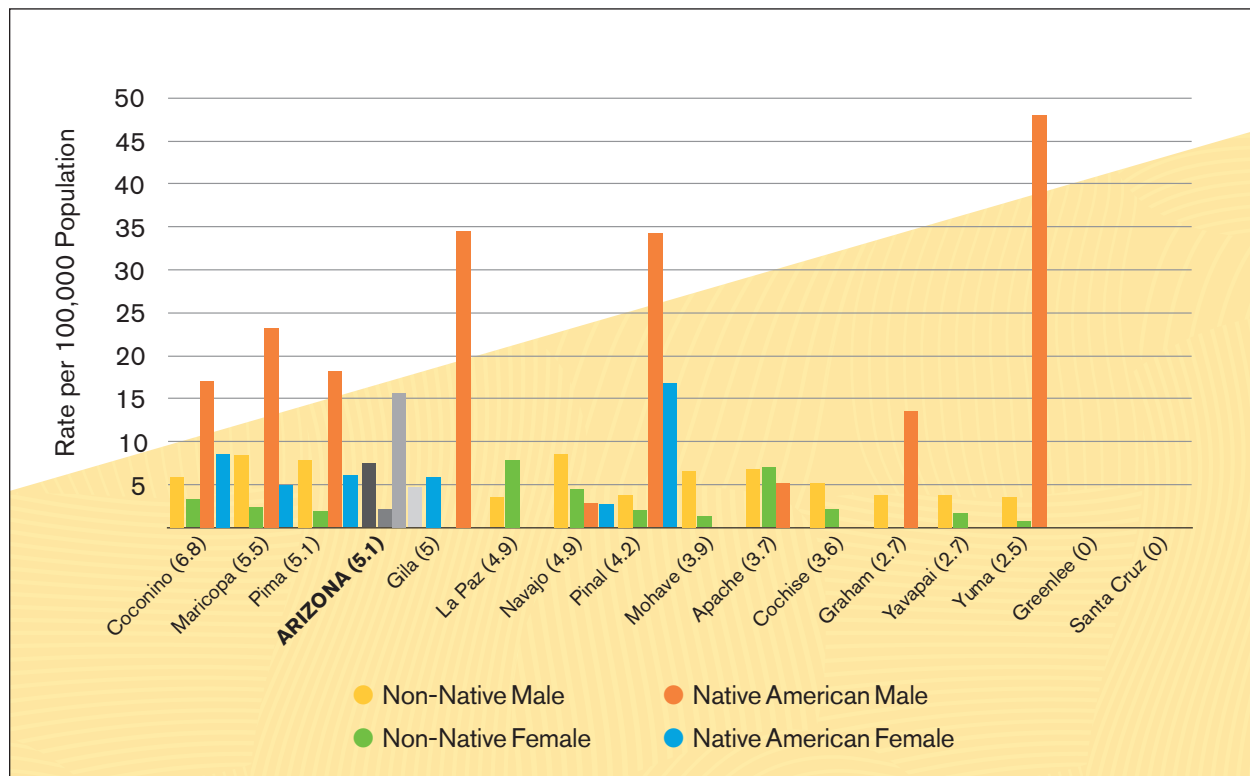
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“The tendency for age-based homicide rates to appear much higher for Native American males than for others, and the somewhat erratic nature of these rates, raises important questions.”

The tendency for age-based homicide rates to appear much higher for Native American males than for others, and the somewhat erratic nature of these rates, raises important questions. This is most striking for age groups 65-74, 75-81, and 85 and older. For both 65-74 and 85 and older age groups, homicide rates for Native American males appear exceptionally low; yet for those aged 75-84, the rate is 22.6 per 100,000, the highest in that age group of any of the four groups analyzed. We speculate that these results may indicate an ongoing problem with data estimations. Specifically, there are limited details regarding the numerator of Native American homicides generally, and poor or questionable census population estimates for Native Americans as a whole (i.e., a denominator problem). More research and better census estimates or estimation approaches are needed to better understand the impact on the rates cited here, based on data quality and sociological/epidemiological factors independently.

## EXHIBIT 4:

### HOMICIDE RATES PER 100,000 POPULATION BY COUNTY, SEX AND NATIVE AMERICAN STATUS, 2015–2017 (N=1020)



\* Statistically significant at  $p \leq .05$

- For 2015-2017, Arizona's statewide homicide rate was 5.1 per 100,000 population.
- For Native American males, homicide rates were highest in Yuma (47.9), Gila (34.5), Pinal (34.2), and Maricopa (23.3) counties (AZ-VDRS data not shown).
- For Native American females, homicide rates were significantly higher in Pinal (16.8) and Coconino (8.6) counties than elsewhere (AZ-VDRS data not shown).
- In Greenlee and Santa Cruz counties, AZ-VDRS data showed no reported homicides overall during 2015-2017; also, no homicides of Native American females were reported in Apache, Cochise, Gila, Graham, La Paz, Mohave, Yavapai and Yuma counties.



# EXHIBIT 5:

## EDUCATION COMPLETED , MARITAL STATUS, VETERAN STATUS AND BIRTHPLACE AMONG HOMICIDE VICTIMS AGED 18 OR OLDER, BY SEX AND NATIVE AMERICAN STATUS, 2015-2017 (N=959)

	NON-NATIVE MALE		NON-NATIVE FEMALE		NATIVE AMERICAN MALE		NATIVE AMERICAN FEMALE		TOTAL	
	n	%	n	%	n	%	n	%	n	%
<b>Education Completed*</b>										
<= 8th grade	49	7.1	5	2.7	5	7.4	<5	na	62	6.5
9th - 12th grade	165	24.0	23	12.4	30	44.1	<5	na	225	23.5
High school/GED grad	298	43.4	66	35.7	23	33.8	5	26.3	392	40.9
Some college credit	97	14.1	33	17.8	6	8.8	<5	na	137	14.3
Associate or bachelor's degree	47	6.8	40	21.6	<5	na	<5	na	90	9.4
Advanced degree	13	1.9	10	5.4	<5	na	<5	na	25	2.6
Unknown	18	2.6	8	4.3	<5	na	<5	na	28	2.9
<b>Marital Status*</b>										
Never married	410	59.7	64	34.6	60	88.2	12	63.2	546	56.9
Married	119	17.3	62	33.5	<5	na	5	26.3	189	19.7
Married, but separated	9	1.3	12	6.5	0	0.0	<5	na	22	2.3
Divorced	116	16.9	32	17.3	<5	na	0	0.0	151	15.7
Widowed	13	1.9	13	7.0	<5	na	<5	na	29	3.0
Single, unspecified	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	20	2.9	<5	na	0	0.0	0	0.0	22	2.3
<b>Veteran Status</b>										
Non-veteran	611	88.9	175	94.6	66	97.1	19	100.0	871	90.8
Veteran	56	8.2	6	3.2	<5	na	0	0.0	64	6.7
Unknown	20	2.9	<5	na	0	0.0	0	0.0	24	2.5
<b>Birthlace*</b>										
Arizona	274	39.9	53	28.6	58	85.3	18	94.7	403	42.0
Other US state/ territory	291	42.4	90	48.6	9	13.2	<5	na	391	40.8
Foreign country	103	15.0	40	21.6	<5	na	0	0.0	144	15.0
Unknown	19	2.8	<5	na	0	0.0	0	0.0	21	2.2

\* Statistically significant at  $p \leq .05$

Note: CDC reporting requirements require that counts less than 5 not be shown for reasons related to data reliability and identity protection. These counts can, however, be included in totals. Therefore, totals in each row may include values represented here only as <5.



# Implications of AZ-VDRS Findings



- For 2015-2017, in Arizona, comparing Native American and non-Native homicide victims, their demographic characteristics pertaining to education, marital status and birthplace differed significantly; differences in veteran status were not significant.



- Native American homicide victims, males and females, had completed significantly less education than non-Native victims; it appeared that no more than 9% of Native American male victims and few if any of Native American female victims had earned, at minimum, some college credit or a degree, compared to 22.8% of non-Native male victims and 44.8% of non-Native female victims.



- Native American male and female homicide victims were more likely than non-Native male and female victims to never have been married (for males, 88.2% vs. 59.7%; for females, 63.2% vs. 34.6%, respectively).



- Not surprisingly, the vast majority of all Native American homicide victims in Arizona had been born in the state — 85.3% of Native American male victims (vs. 39.9% of non-Native male victims) and 94.7% of Native American female victims (vs. 28.6% of non-Native female victims).

# EXHIBIT 6:

## LOCATIONS OF HOMICIDE BY SEX AND NATIVE AMERICAN STATUS, 2015-2017

(N=1030)

	NON-NATIVE MALE		NON-NATIVE FEMALE		NATIVE AMERICAN MALE		NATIVE AMERICAN FEMALE		TOTAL	
	n	%	n	%	n	%	n	%	n	%
<b>Location</b>										
House or apartment	319	44.1	151	70.6	27	38.6	9	40.9	506	49.1
Street/road, sidewalk, alley	108	14.9	20	9.3	13	18.6	<5	na	144	14.0
Motor vehicle (excluding school bus, and public transportation)	38	5.2	9	4.2	<5	na	<5	na	52	5.0
Commercial establishment (e.g., bar, store, service station)	40	5.5	<5	na	<5	na	<5	na	45	4.4
Parking lot/public parking garage	79	10.9	<5	na	<5	na	0	0.0	86	8.3
Jail, prison, group home, shelter, other supervised residential facility	17	2.3	0	0.0	<5	na	0	0.0	20	1.9
Park, playground, public use area	9	1.2	<5	na	<5	na	<5	na	14	1.4
Natural area (e.g., field, river, beaches, woods)	33	4.6	<5	na	<5	na	0	0.0	38	3.7
Hotel/motel	17	2.3	5	2.3	<5	na	<5	na	24	2.3
Other	25	3.5	6	2.8	<5	na	<5	na	37	3.6
Unknown	39	5.4	12	5.6	9	12.9	<5	na	64	6.2

\* Statistically significant at  $p \leq .05$

Note: CDC reporting requirements require that counts less than 5 not be shown for reasons related to data reliability and identity protection. These counts can, however, be included in totals. Therefore, totals in each row may include values represented here only as <5.

- The most notable distinction among homicide locations was found for non-Native female victims: 70.6% died at a private home, compared with between 38.6% and 44.1% of all other homicide victims.
- Overall, the next most frequent homicide sites were public roads and walkways (14.0%): 18.6% of Native male victims, 14.9% of non-Native male victims, and 9.3% of non-Native female victims died at this type of location.

## EXHIBIT 7:

### METHODS OF DEATH, BY SEX AND NATIVE AMERICAN STATUS, 2015–2017 (N=1030)

	NON-NATIVE MALE		NON-NATIVE FEMALE		NATIVE AMERICAN MALE		NATIVE AMERICAN FEMALE		TOTAL	
	n	%	n	%	n	%	n	%	n	%
<b>Method</b>										
Firearm	535	73.9	140	65.4	30	42.9	9	40.9	714	69.3
Sharp Instrument	84	11.6	21	9.8	21	30.0	<5	na	130	12.6
Blunt Instrument	68	9.4	28	13.1	13	18.6	9	40.9	118	11.5
Hanging, strangulation, suffocation	20	2.8	14	6.5	<5	na	0	0.0	35	3.4
Poisoning	<5	na	<5	na	0	0.0	0	0.0	<5	na
Other <sup>a</sup>	13	1.8	7	3.3	5	7.1	0	0.0	25	2.4
Unknown	<5	na	<5	na	0	0.0	0	0.0	5	0.5

\* Statistically significant at  $p \leq .05$

<sup>a</sup> Including, but not limited to falls, fire/burns, motor vehicles and drowning.

Note: CDC reporting requirements require that counts less than 5 not be shown for reasons related to data reliability and identity protection. These counts can, however, be included in totals. Therefore, totals in each row may include values represented here only as <5.

- Among both sexes, Native American homicide victims were significantly less likely than non-Native victims to have been killed with a firearm (respectively, for males, 42.9% vs. 73.9%, and for females, 40.9% vs. 65.4%).
- Sharp instruments (e.g., knives) were significantly more commonly involved in homicides of Native American males (30.0%), compared to non-Native males (11.6%), non-Native females (9.8%) and Native American females (na).
- Firearm injuries and blunt force trauma were the most frequent causes of death in homicides of Native American females (40.9% for each method).

**EXHIBIT 8:****SUSPECT TO VICTIM RELATIONSHIP, BY SEX AND NATIVE AMERICAN STATUS,  
2015-2017 (N=947)**

	NON-NATIVE MALE		NON-NATIVE FEMALE		NATIVE AMERICAN MALE		NATIVE AMERICAN FEMALE		TOTAL	
	n	%	n	%	n	%	n	%	n	%
<b>Relationship*</b>										
Current partner	26	3.9	73	35.3	<5	na	5	31.3	104	11.2
Former partner	<5	na	20	9.7	0	0.0	0	0.0	20	2.4
Family member	64	9.6	46	22.2	6	10.0	<5	na	116	12.7
Friend or acquaintance	190	28.6	18	8.7	13	21.7	<5	na	221	23.5
Other person known to victim	61	9.2	6	2.9	5	8.3	<5	na	72	7.7
Stranger	135	20.3	18	8.7	9	15.0	0	0.0	162	17.1
Relationship unknown	185	27.9	26	12.6	25	41.7	<5	na	236	25.3

\* Statistically significant at  $p \leq .05$

- Females, both Native American (31.3%) and non-Native American (45.0%), were at significantly greater risk of becoming homicide victims at the hands of a current or former intimate partner than were their male counterparts (na, 3.9%).

## EXHIBIT 9:

### CIRCUMSTANCES RELATED TO THE HOMICIDE EVENT, 2015-2017 (N=1030)

	NON-NATIVE MALE	NON-NATIVE FEMALE	NATIVE AMERICAN MALE	NATIVE AMERICAN FEMALE	TOTAL
	%	%	%	%	%
Circumstance					
Violence in the past month *	2.2	13.6	1.4	18.2	4.9
Precipitated by another crime *	28.7	12.6	25.7	4.5	24.7
Crime in progress *	22.9	11.7	22.9	0.0	20.1
Drug involvement *	25.2	7.9	13.0	4.5	20.3
Victim used a weapon *	11.2	0.9	11.6	0.0	8.9

\* Statistically significant at  $p \leq .05$

- Nearly one in five Native American females had experienced violence in the month prior to their homicides, as did nearly 14% of non-Native female victims.
- About 25% of all male homicides were precipitated by involvement in a prior crime; about one in four were killed during another crime in progress. Fewer than 5% of Native American female homicides were precipitated by a prior crime, and none occurred during another crime in progress.
- Slightly more than 10% of all male homicide victims were, themselves, using a weapon at the time; no Native American female victims and only 1% of non-Native female victims were using a weapon at the time of their homicide.



# Conclusion

The circumstances and characteristics of Native American homicides and victims differ in certain ways from others, and these differences need to be better understood. In 2015-2017, the homicide rates per 100,000 population for Native Americans of both sexes was more than double those of non-Native Americans (for males, 20.2 vs. 8.7, and for females, 5.8 vs. 2.5). Given this, particular attention should be paid to addressing homicide-related issues that disproportionately affect Native Americans.

Our analysis of the data available indicates comparative shortfalls in social capital systems among Native American homicide victims, and this could contribute to their disproportionate risk. Education and marriage, for example, are known to be strong social support indicators. Our analysis found that only a very few Native American homicide victims, and especially female victims, had any college education, compared with non-Native male and female victims (23% and 45%, respectively). Among Native American homicide victims, about 88% of males and 63% of females had never been married; comparatively, among non-Native homicide victims, 60% of males and 35% of females had been married at some time.

Other differences in the circumstances surrounding homicides of Native and non-Native victims are of importance for considering homicide prevention policies and strategies, as well. For example, during

2015-2017, non-Native victims—74% of males and 65% of females—were most often killed with firearms. This was substantially less true for Native American victims, for whom firearms were involved in fewer than half of all reported incidents. Native female victims were about as likely to have been killed with a sharp or blunt force instrument as with a firearm (41%, in either case); among Native American male victims, more homicides were caused by a sharp or blunt force instrument than with a firearm (49% vs. 43%). Further, although suspect-to-victim relationships, when identified, were somewhat similar for Native American and non-Native victims, the percentage of victims whose relationship to the suspect was unknown differed notably. About 28% of non-Native male homicide victims had no known relationship to the suspect, compared with 42% of Native American male homicide victims. All, or nearly all, Native American female victims had a known relationship with their suspects; about 13% of non-Native female victims had no known relationship to their suspects.

The raw numbers of Native American homicide victims may be low, but their disproportionate representation in the overall homicide victim population is cause for concern. An appropriate allocation of resources and effort should be invested in better understanding these circumstances and the kinds of homicide prevention strategies that could be most effective in helping this vulnerable population.

Note: The information presented here is factual and accurate. This report does have important limitations, however, and these should be considered when using this information to support policy and strategic decision making.

AZ-VDRS analysis relies on the completeness and accuracy of certain information related to every homicide committed in Arizona—that is, the data reflecting the circumstances of each incident and the characteristics of each victim and, especially, of each suspect. The quality of this data depends on the quality of our law enforcement partnerships and those partners' participation in sharing data. When reviewing the findings reported here, decision makers should consider the comparatively low rate of tribal law enforcement participation in the data-gathering process. AZ-VDRS continues to be challenged by this. Our analysis and reporting of homicide data is most effective for developing prevention and intervention strategies, and for directing resources where they are most needed, when all law enforcement partners are willing and able to provide full, unredacted investigative case files and supplemental reports for review and data abstraction. The thorough understanding and interpretation of a given death, decedent and suspect, and in turn our understanding of the respective homicide risks of each population group, depends heavily on these sources. Currently, the majority of analyses regarding the circumstances of homicides with Native American victims depend solely on medical examiners' reports, not all of which indicate race/ethnicity. Given more complete law enforcement data from tribal communities, we might find that the facts would differ substantially. The

issue of non-participation among law enforcement agencies for tribal-related deaths is further complicated by the fact that some tribal communities operate their own agencies, while others rely on the support of the Federal Bureau of Investigation (FBI) or other non-participating federal agencies.

Nonetheless, based on the data available, we know that Native American homicide victims are different in important ways from non-Native victims. This is likely due to a myriad of inter-related influences. Although certain socio-demographic and geographical differences might explain some of the findings observed, the issue is almost certainly more complicated than this. The low incidence rate of Native American homicides, as well as the low population denominators for Native Americans, may explain some of what appear to be substantial differences; these findings appear to be subject to substantial variation based on relatively small numbers.

In summary, important and meaningful socio-demographic differences, such as those reported here, are indeed likely to exist for Native American homicide victims, although the nature and possible causality of those differences is still elusive, given the limited availability of in-depth law enforcement data. Therefore, we recommend considering the findings in this report in combination with data from additional reliable sources to inform decision making.

## END NOTES

<sup>1</sup> Leavitt, R. A., Ertl, A., Sheats, K., Petrosky, E., Ivey-Stephenson, A., & Fowler, K. A., 2018, Suicides Among American Indian/Alaska Natives—National Violent Death Reporting System, 18 States, 2003–2014, *Morbidity and Mortality Weekly Report*, 67(8), 237. See also Tian, N., Zack, M., Fowler, K. A., & Hesdorffor, D. C., 2019, Suicide Timing in 18 States of the United States from 2003–2014, *Archives of Suicide Research*, 23(2), 261–272. For more on NVDRS data, also see Karch, D. L., Logan, J., & Patel, N., (2011), Surveillance for violent deaths—National deaths reporting systems, 16 states, 2008, *Morbidity and Mortality Weekly Report: Surveillance Summaries*, 60(10), 1–49; see also, Karch, D. L., Barker, L., & Strine, T. W., (2006), Race/ethnicity, substance abuse, and mental illness among suicide victims in 13 US states: 2004 data from the National Violent Death Reporting System, *Injury Prevention*, 12(supp 2), ii22–ii27.

<sup>2</sup> US Census Bureau, American Fact Finder: 2013–2017 American Community Survey 5-Year Estimates. For purposes of this report, Arizona population is 6.81 million, and rates per 100,000 are based on 3-year incident counts and annual averages.

<sup>3</sup> AZ-VDRS estimates of violent death rates may differ from rates reported by other death surveillance systems, due to important variations in data sources and coding protocols. For this reason, comparative analyses outside NVDRS and AZ-VDRS should be approached with caution.

**Suggested citation:** *Homicides Involving Native Americans, 2015–2017*. (May 2020). Arizona State University, Center for Violence Prevention and Community Safety. Arizona Violent Death Reporting System.