



Morrison Institute for Public Policy

Arizona State University

Firearm Deaths in Arizona 2015 - 2017: Facts and Trends

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Morrison Institute partnered with ASU's Center for Violence Prevention and Community Safety to analyze Arizona's firearm death data from 2015 - 2017

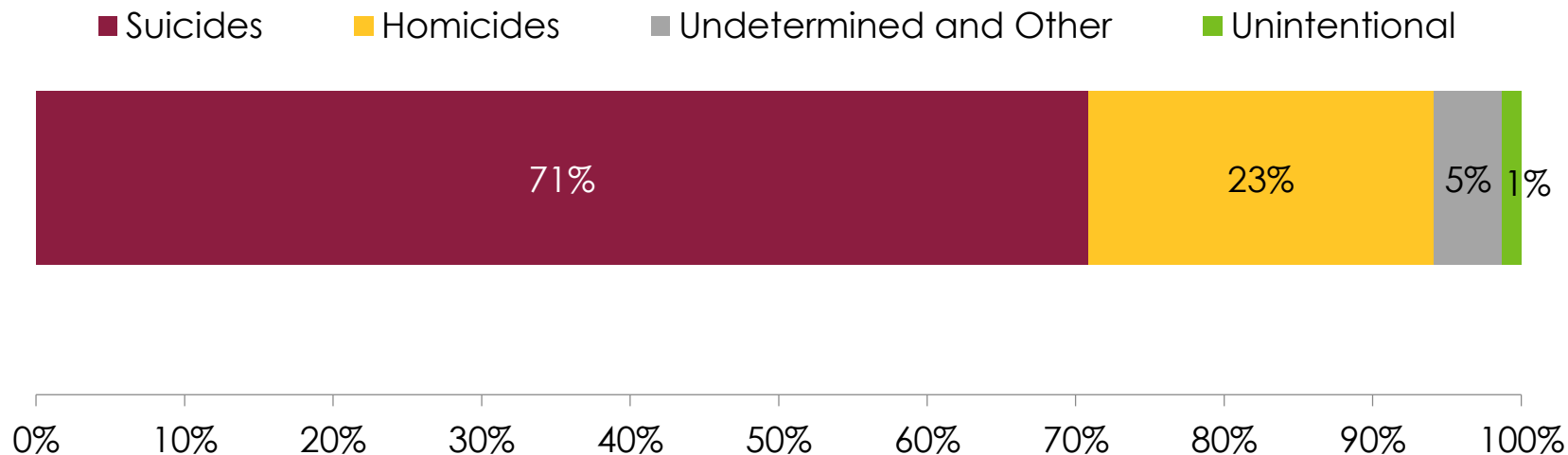
Findings:

- Manner of Death
- Demographics
- Location of Death
- Firearm Type
- Firing Action Category

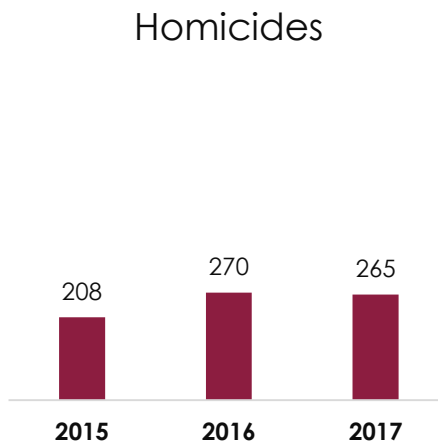
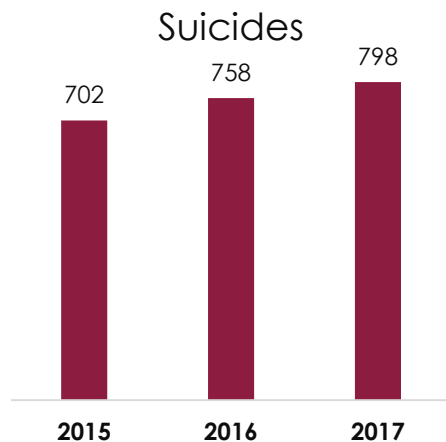
Firearm Deaths in Arizona, 2015 - 2017

Year	Number of Gun Deaths
2015	961
2016	1,095
2017	1,132
Total	3,188

Proportion of Firearm Deaths by Manner of Death



Number of Suicides, Homicides, and Unintentional Firearm Deaths by Year

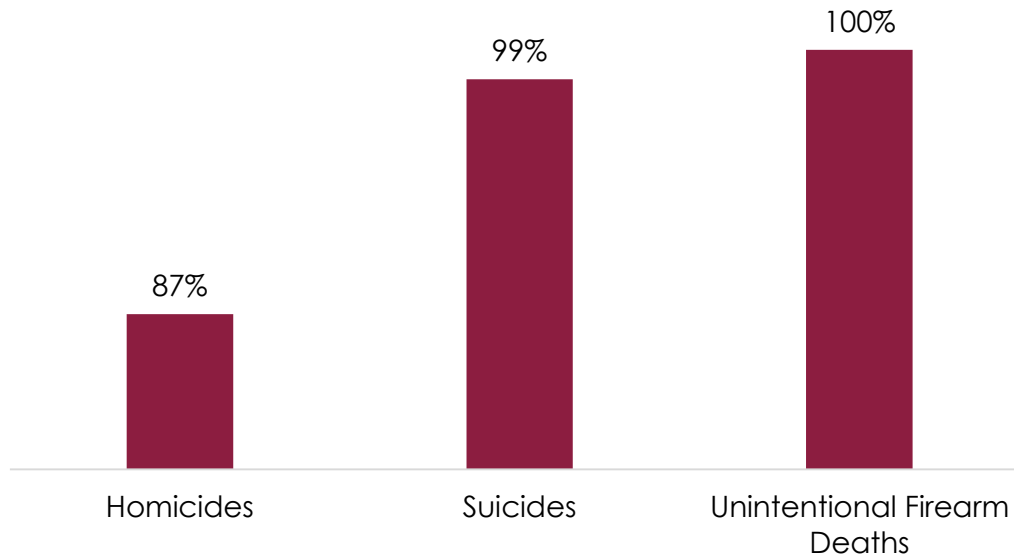


Rate of Suicides, Homicides, and Unintentional Firearm Deaths by Year

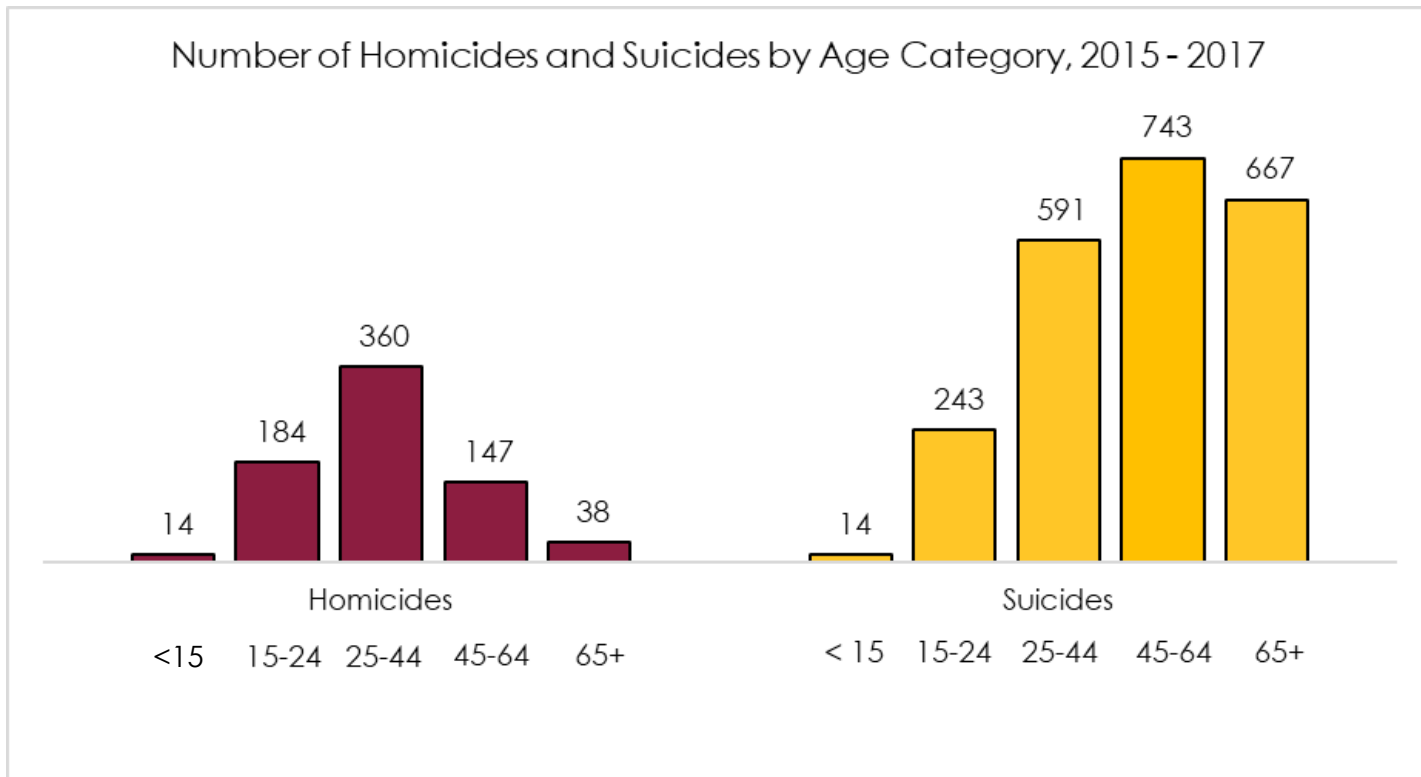
	<u>2015</u>	<u>2016</u>	<u>2017</u>
Homicides	3.13	4.01	3.89
Suicides	10.57	11.27	11.72
Legal Intervention	0.56	0.58	0.53
Unintentional Deaths	0.08	0.18	0.37
Undetermined Intent	0.14	0.24	0.12

Firearm Incidents with a Single Victim

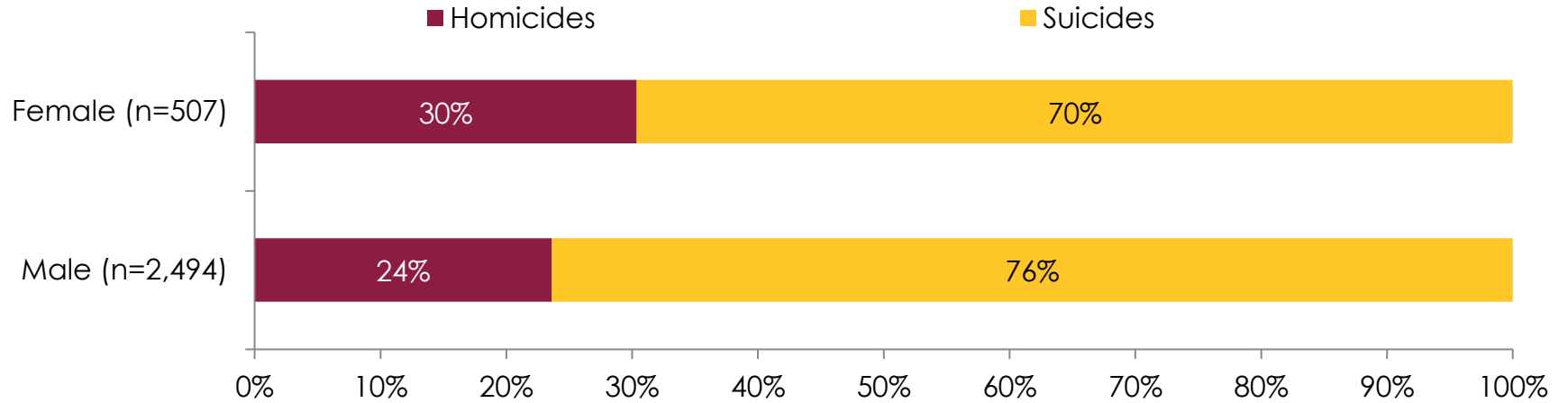
Percentage of Firearm Incidents with a Single Victim by Manner of Death



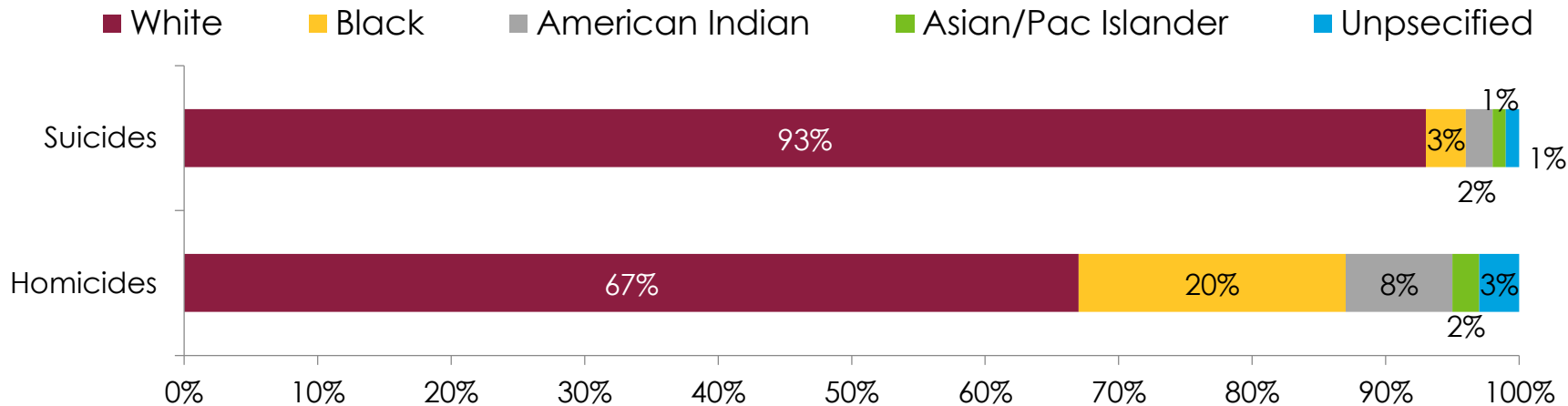
Age



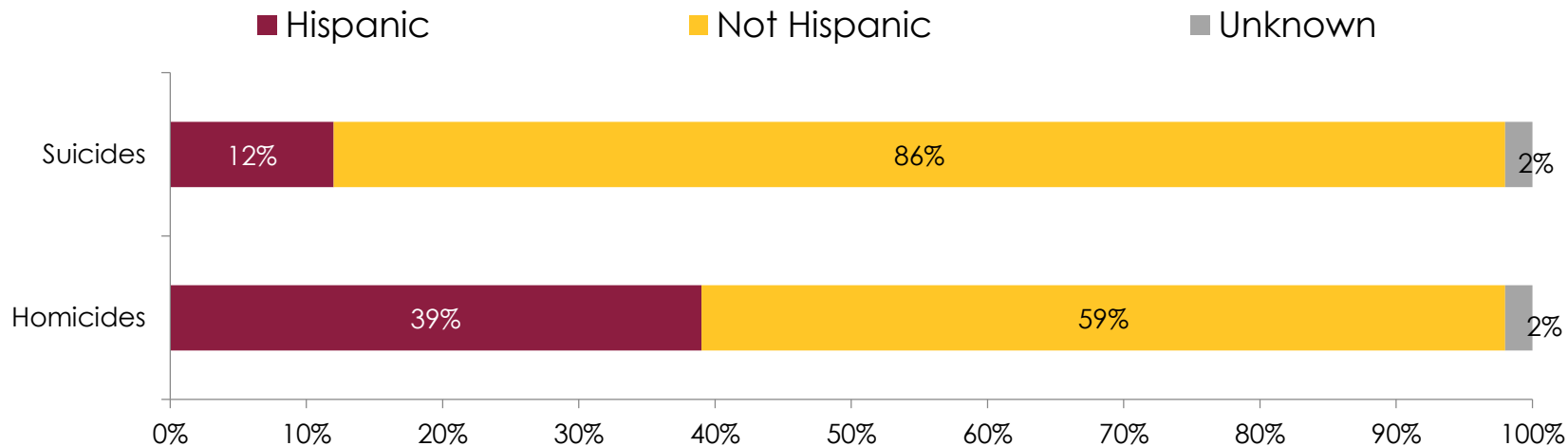
Sex



Firearm Deaths by Race as a Proportion of Total



Firearm Deaths by Ethnicity as a Proportion of Total



Victim-Suspect Relationship in Firearm Homicides

Most Common Victim-Suspect Relationships in Homicides

<u>Relationship</u>	<u>Percentage</u>
Relationship Unknown	28%
Stranger	19%
Acquaintance	13%
Friend	7%
Spouse	7%

Firearm Deaths by Common Location

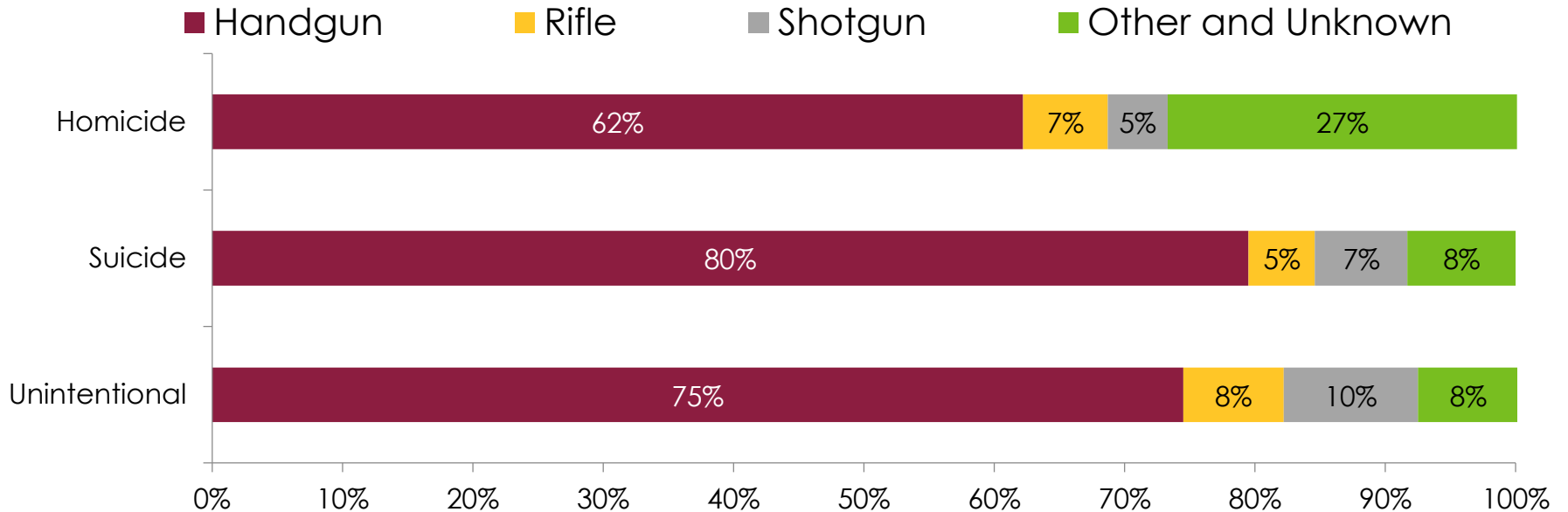
Most Common Locations of Homicides	
<u>Location</u>	<u>Percentage</u>
House, apartment	49%
Street/road, sidewalk, alley	15%
Parking lot/public parking garage	9%
Motor vehicle (excluding school bus and public transportation)	6%
Unknown	5%

Firearm Deaths by Common Location

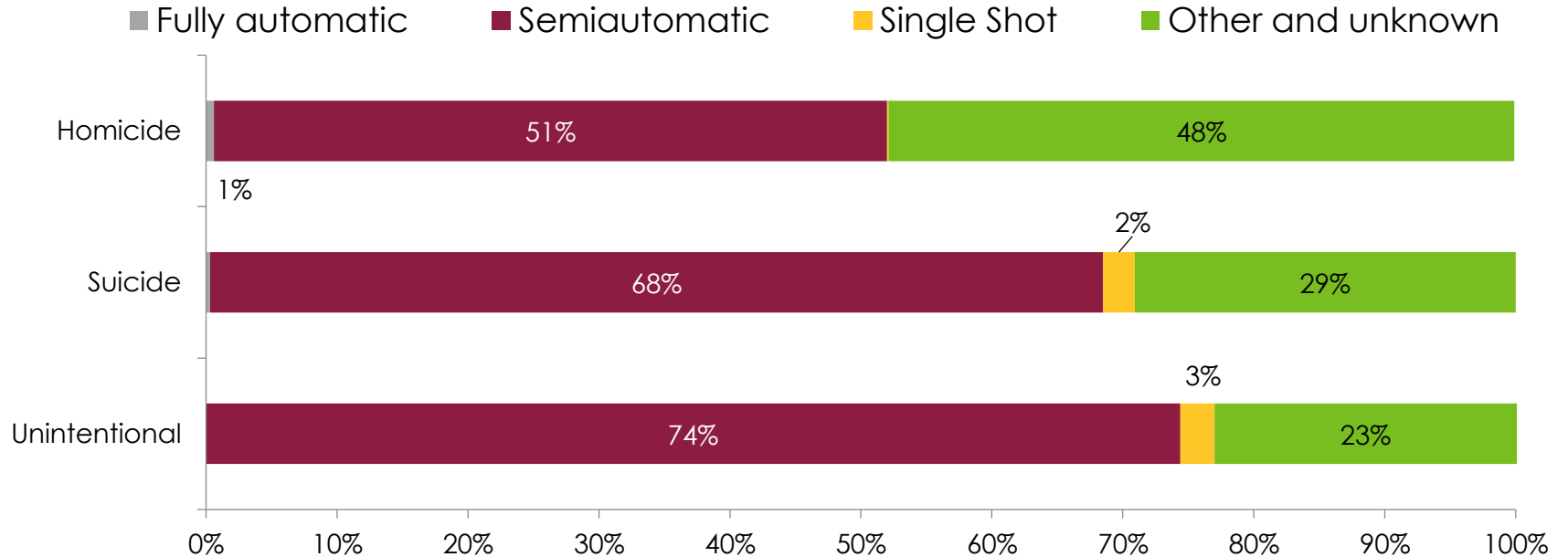
Most Common Locations of Suicides

<u>Location</u>	<u>Percentage</u>
House, apartment	74%
Motor vehicle (excluding school bus and public transportation)	6%
Natural area (e.g., field, river, beaches, woods)	6%
Street/road, sidewalk, alley	4%
Parking lot/public parking garage	3%

Manner of Death by Gun Type



Manner of Death by Firing Action



Ideas for further study:

Intimate partner violence-related gun deaths and sex;

Trends and patterns of gun deaths regarding Arizona geography;

Potential co-morbidity findings – i.e. substance abuse, mental illness, etc.;

Other dataset elements not yet explored:

- Role of abuse / neglect in a violent firearm incident;
- Other victims non-fatally injured in firearm incident;
- Presence of other demographics (pregnancy status, veteran status, birthplace, sexual orientation, homelessness status, education level).



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Questions?

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Full report available:

morrisoninstitute.asu.edu

Figure 1: Gun Type Categories

<u>Handgun</u>	<u>Rifle</u>	<u>Shotgun</u>	<u>Other and unknown</u>
Handgun, Pistol-Bolt Action	Rifle-shotgun combination	Shotgun, automatic	Submachine gun
Handgun, Pistol-Derringer	Rifle, automatic	Shotgun, bolt action	Long gun, unknown type
Handgun, Pistol Semiautomatic	Rifle, bolt action	Shotgun, double barrel	Other (handmade gun)
Handgun, Pistol Single Shot	Rifle, lever action	Shotgun, pump action	Unknown
Handgun, Revolver	Rifle, pump action	Shotgun, semiautomatic	
Handgun, unknown type	Rifle, semiautomatic	Shotgun, single shot	
	Rifle, single shot	Shotgun, unknown type	
	Rifle, unknown type		

Figure 1: Firing Action Categories

Firing Action Categories			
<u>Fully Automatic</u>	<u>Semiautomatic</u>	<u>Single Shot</u>	<u>Other and unknown</u>
Submachine gun	Handgun, Pistol-Bolt Action	Handgun, Pistol-Derringer	Handgun, unknown type
Rifle, automatic	Handgun, Pistol Semi-Automatic	Handgun, Pistol Single Shot	Long gun, unknown type
Shotgun, automatic	Handgun, Revolver	Rifle-shotgun combination	Other (handmade gun)
	Rifle, bolt action	Rifle, lever action	Rifle, unknown type
	Rifle, pump action	Rifle, single shot	Shotgun, unknown type
	Rifle, semiautomatic	Shotgun, double barrel	Unknown
	Shotgun, bolt action	Shotgun, single shot	
	Shotgun, pump action		
	Shotgun, semiautomatic		

Firearm Deaths by Race - Rates

All Deaths, all Years				Homicides, all Years				Suicides, all Years			
	Number	Percentage			Number	Percentage			Number	Percentage	
Black	215	7%		Black	148	20%		Black	55	2%	
American Indian	112	3%		American Indian	58	8%		American Indian	38	2%	
White	2,762	86%		White	503	67%		White	2,109	93%	
Asian/Pacific Islander	52	2%		Asian/Pacific Islander	16	2%		Asian/Pacific Islander	34	1%	
Unspecified	66	2%		Unspecified	24	3%		Unspecified	34	1%	
All Deaths, 2015				Homicides, 2015				Suicides, 2015			
	Number	Percentage	Rate		Number	Percentage	Rate		Number	Percentage	Rate
Black	56	6%	19.89	Black	41	20%	14.56	Black	13	2%	4.62
American Indian	31	3%	10.52	American Indian	16	8%	5.43	American Indian	10	1%	3.39
White	845	90%	16.22	White	142	70%	2.73	White	663	96%	12.72
Asian/Pacific Islander	11	1%	5.17	Asian/Pacific Islander	n<5	n/a	n/a	Asian/Pacific Islander	7	1%	3.29
All Deaths, 2016				Homicides, 2016				Suicides, 2016			
	Number	Percentage	Rate		Number	Percentage	Rate		Number	Percentage	Rate
Black	78	7%	27.17	Black	58	22%	20.20	Black	17	2%	5.92
American Indian	32	3%	10.78	American Indian	19	7%	6.40	American Indian	6	1%	2.02
White	947	88%	18.09	White	179	68%	3.42	White	713	95%	13.62
Asian/Pacific Islander	23	2%	10.55	Asian/Pacific Islander	8	3%	3.67	Asian/Pacific Islander	13	2%	5.96
All Deaths, 2017				Homicides, 2017				Suicides, 2017			
	Number	Percentage	Rate		Number	Percentage	Rate		Number	Percentage	Rate
Black	81	7%	27.66	Black	49	19%	16.73	Black	25	3%	8.54
American Indian	49	4%	16.32	American Indian	23	9%	7.66	American Indian	22	3%	7.33
White	970	87%	18.38	White	182	71%	3.45	White	733	92%	13.89
Asian/Pacific Islander	18	2%	7.80	Asian/Pacific Islander	n<5	n/a	n/a	Asian/Pacific Islander	14	2%	6.07

Firearm Deaths by Ethnicity - Rates

All Deaths, all Years				Homicides, all Years				Suicides, all Years			
	Number	Percentage			Number	Percentage			Number	Percentage	
Hispanic	618	19%		Hispanic	286	38%		Hispanic	271	12%	
Not Hispanic	2510	79%		Not Hispanic	441	59%		Not Hispanic	1951	86%	
Unknown	60	2%		Unknown	16	2%		Unknown	36	2%	
All Deaths, 2015				Homicides, 2015				Suicides, 2015			
	Number	Percentage	Rate		Number	Percentage	Rate		Number	Percentage	Rate
Hispanic	158	16%	7.84	Hispanic	73	35%	3.62	Hispanic	73	10%	3.62
Not Hispanic	774	81%	16.73	Not Hispanic	130	63%	2.81	Not Hispanic	610	87%	13.18
Unknown	29	3%		Unknown	5	2%		Unknown	19	3%	
All Deaths, 2016				Homicides, 2016				Suicides, 2016			
	Number	Percentage	Rate		Number	Percentage	Rate		Number	Percentage	Rate
Hispanic	217	20%	10.56	Hispanic	100	37%	4.87	Hispanic	93	12%	4.53
Not Hispanic	850	78%	18.19	Not Hispanic	161	60%	3.44	Not Hispanic	648	85%	13.86
Unknown	28	3%		Unknown	9	3%		Unknown	17	2%	
All Deaths, 2017				Homicides, 2017				Suicides, 2017			
	Number	Percentage	Rate		Number	Percentage	Rate		Number	Percentage	Rate
Hispanic	243	21%	11.55	Hispanic	113	43%	5.37	Hispanic	105	13%	4.99
Not Hispanic	886	78%	18.83	Not Hispanic	150	57%	3.19	Not Hispanic	693	87%	14.72
Unknown	n<5	n/a	n/a	Unknown	n<5	n/a	n/a	Unknown	0	0%	