

VIOLENT DEATHS IN OREGON: 2013

*Suicide, Homicide, Undetermined, Legal Interventions, and
Unintentional Firearm Deaths Investigated by Law
Enforcement and Medical Examiners*

Acknowledgements

We deeply appreciate the contributions of Oregon’s law enforcement professionals who investigate and document cases. The support and assistance of the Oregon State Police, the Department of Justice, local law enforcement records staff, the Oregon Association Chiefs of Police, the Sheriff’s Association, and the Oregon District Attorney’s Association make the Oregon Violent Death Reporting Data System possible.

This document was made possible in part, by grants from the Centers for Disease Control and Prevention, National Center for Injury Prevention and Control (1U17CE002619) and support from the Oregon Health Authority.

Suggested citation

Shen X, Millet L. Violent Deaths in Oregon, 2013. Oregon Health Authority, Portland, Oregon.

Technical Data Contact:

Xun Shen, MD, MPH, Epidemiologist, Oregon Violent Death Reporting System, Injury and Violence Prevention Section, Xun.Shen@state.or.us

Media Contact:

Susan Wickstrom, Communications Analyst, Susan.D.Wickstrom@state.or.us,

971-673-0892

Program Contact:

Lisa Millet, MSH, Section Manager, Injury and Violence Prevention Section, Center for Prevention and Health Promotion, Lisa.M.Millet@state.or.us

Oregon Health Authority
Public Health Division
Center for Prevention and Health Promotion
Injury and Violence Prevention Program
800 NE Oregon St. Ste. 730, Portland, Oregon 97232
<http://public.health.oregon.gov/PHD/ODPE/IPE/Pages/index.aspx>

Violent Deaths in Oregon: 2013

Executive Summary

The Oregon Violent Death Reporting System (ORVDRS) is a statewide, active public health surveillance system that collects detailed information on all homicides, suicides, deaths of undetermined intent, deaths resulting from legal intervention, and deaths related to unintentional firearm injuries. The goals of this system are to generate public health information on violent deaths and to work with partners to develop prevention strategies. Since 2003, ORVDRS has collected data from Oregon medical examiners, local police, death certificates, and the Homicide Incident Tracking System. This report describes 2013 data collected in the system.

Findings

- In 2013 violent death ranked as the second-leading cause of death among Oregonians aged 15-34 years and the eighth leading cause among all Oregonians. Violent death accounted for approximately 34 percent of all injury deaths.
- Of 874 violent deaths among Oregonians in 2013 (crude rate of 22.2 deaths per 100,000 population):
 - 701 (80 percent) were deaths by suicide (17.8 per 100,000);
 - 93 (11 percent) by homicide (2.4 per 100,000);
 - 64 (7 percent) by undetermined manner (1.6 per 100,000);
 - 8 (1 percent) by legal intervention; and
 - 8 (1 percent) by unintentional firearm injury.
- Nine incidents involved more than one death; five of those were homicide-suicides.
- The homicide rate remained relatively stable.
 - One in five homicides was related to intimate partner violence.
- Suicide deaths and rates remained high.
 - Suicides among adolescents aged 10 to 17 years increased from an average of 11 a year between 2001 and 2010 to 18 in 2011, 22 in 2012 and 29 in 2013.
 - Suicides and suicide rates among those aged 10 to 24 years started to increase beginning in 2011, from 54 (7.2 per 100,000) in 2010 to 74 (9.8 per 100,000) in 2011, 73 (9.7 per 100,000) in 2012 and 93 (12.3 per 100,000) in 2013.

- Nearly 23 percent of all suicides occurred among veterans who, as a group, comprise eight percent of Oregon's population. 160 veterans died by suicide in 2013, compared to 155 in 2012.
- Behavioral health problems, conflict in interpersonal relationships, and physical health problems among the elderly are the most reported factors surrounding suicide incidents.
- Firearms were the most common mechanism of violent death.
 - More than half of all violent deaths (465 deaths, 11.8 per 100,000) were due to gunshot wounds.
 - Most firearm fatalities (84 percent) were suicides (390 deaths), followed by homicides (56 deaths, 12 percent of total firearm fatalities).
 - Weapons used in firearm fatalities were handguns (78%), rifles (11%), and shotguns (11%).
 - Men were more than five times more likely than women to die from firearm injury.
 - 31 percent of people who died by suicide using a firearm had a diagnosed mental illness; and 12 percent of them had a previous suicide attempt.
 - 22 percent of homicides using a firearm were related to intimate partner violence; and 8 percent involved gang violence.

Oregon's State Health Improvement Plan documents strategies to prevent suicide and reduce the impact of suicide and suicide attempts after they occur. The strategies include:

1. Promote use of the National Suicide Prevention Lifeline
2. Ensure communities implement an array of services and programs to promote safe and nurturing environments
3. Reduce the disparity of suicide among veterans
4. Create incentives for private and public health plans and healthcare providers to prevent deaths from suicide
5. Establish universal screening for individuals at risk for suicide
6. Reduce access to lethal means, and
7. Ensure training for health professionals is available to address suicide risk

The State Health Improvement Plan can be found at:

<http://public.health.oregon.gov/About/Documents/ship/oregon-state-health-improvement-plan.pdf>

The Oregon Injury and Violence Prevention Plan contains more detailed strategies to reduce suicide by age group and it outlines recommended interventions in health plans and health systems. This plan can be found at:

<http://public.health.oregon.gov/diseasesconditions/injuryfatalitydata/documents/oregoninjurypreventionplan.pdf>

Violent Deaths in Oregon: 2013

The Oregon Violent Death Reporting System (ORVDRS) is a statewide, active surveillance system that collects detailed information on all homicides, suicides, deaths of undetermined intent, deaths resulting from legal intervention, and deaths related to unintentional firearm injuries. Since 2003, ORVDRS has collected data from Oregon medical examiners' reports, local police reports, death certificates and the Homicide Incident Tracking System. This report describes 2013 data collected in the system.

Case Definition

In this report, violent deaths are identified according to International Classification of Diseases, Tenth Revision (ICD-10) codes for the underlying cause of deaths on death certificates. Manner of death was coded according to ICD-10 classification and categorized as suicide, homicide, legal intervention, unintentional firearm discharge, undetermined, or terrorism-related death (Table 1).^{1,2} If the ICD-10 code is not available, the manner of death is determined according to death certificate and/or medical examiner report. Occasionally, data sources may record a different determination on the manner of death. **Deaths relating to the Death with Dignity Act (physician-assisted death in terminally ill patients) are not classified as suicides by Oregon law and therefore are excluded from data collection and this report.**

Table 1. Violent death by intent

Intent	ICD-10 code
Suicide	X60-X84, Y87.0
Homicide	X85-X99, Y00-Y09, Y87.1
Undetermined	Y10-Y34, Y87.2, Y89.9
Legal intervention excluding execution (Y35.5)	Y35.0-Y35.4, Y35.6-Y35.7, Y89.0
Unintentional firearm fatality	W32-W34, Y86 determined to be due to firearm
Terrorism-related death	U01-U03

Rate Calculation

Rates were calculated using bridged-race postcensal estimates of July 1, 2013, released by the National Center for Health Statistics (NCHS).³ The age-adjusted rate was adjusted to the 2000 standard million. Because of limited death counts in some races, age groups and/or manner of death, some rates might not be statistically reliable or stable; use caution with regard to those categories with fewer than 20 deaths.

Data Summary

Magnitude of violent death

In 2013, 864 violent death incidents resulted in 874 deaths among Oregon residents. The violent death rate was 22.2 per 100,000 (age-adjusted rate = 21.3 per 100,000). Of 864 incidents, 855 incidents involved one death; nine incidents involved more than one death, and those incidents resulted in a total of 19 deaths. Among the nine incidents involving multiple deaths, five were homicide-suicides (Table 2).

Table 2. Number of violent death incidents and deaths, Oregon, 2013

Type of Incident	# Incidents	# Deaths*
Unintentional Firearm Injury	8	8
<i>Shot by self</i>	4	4
<i>Shot by other</i>	4	4
Homicide	89	93
<i>Single Homicide</i>	81	81
<i>Multiple Homicides</i>	3	7
<i>Homicide-Legal intervention</i>	0	0
<i>Homicide-Suicide</i>	5	5
Suicide	700	701
<i>Single Suicide</i>	694	694
<i>Multiple Suicides</i>	1	2
<i>Homicide-Suicide</i>	5	5
<i>Undetermined-Suicide</i>	0	0
Combined Homicide-Suicide	5	10
Legal Intervention death	7	7
<i>With single death</i>	8	8
<i>With multiple deaths</i>	0	0
<i>Homicide-Legal intervention</i>	0	0
Undetermined death	64	64
<i>Single undetermined death</i>	64	64
<i>Undetermined-Suicide</i>	0	0
Total	864	874

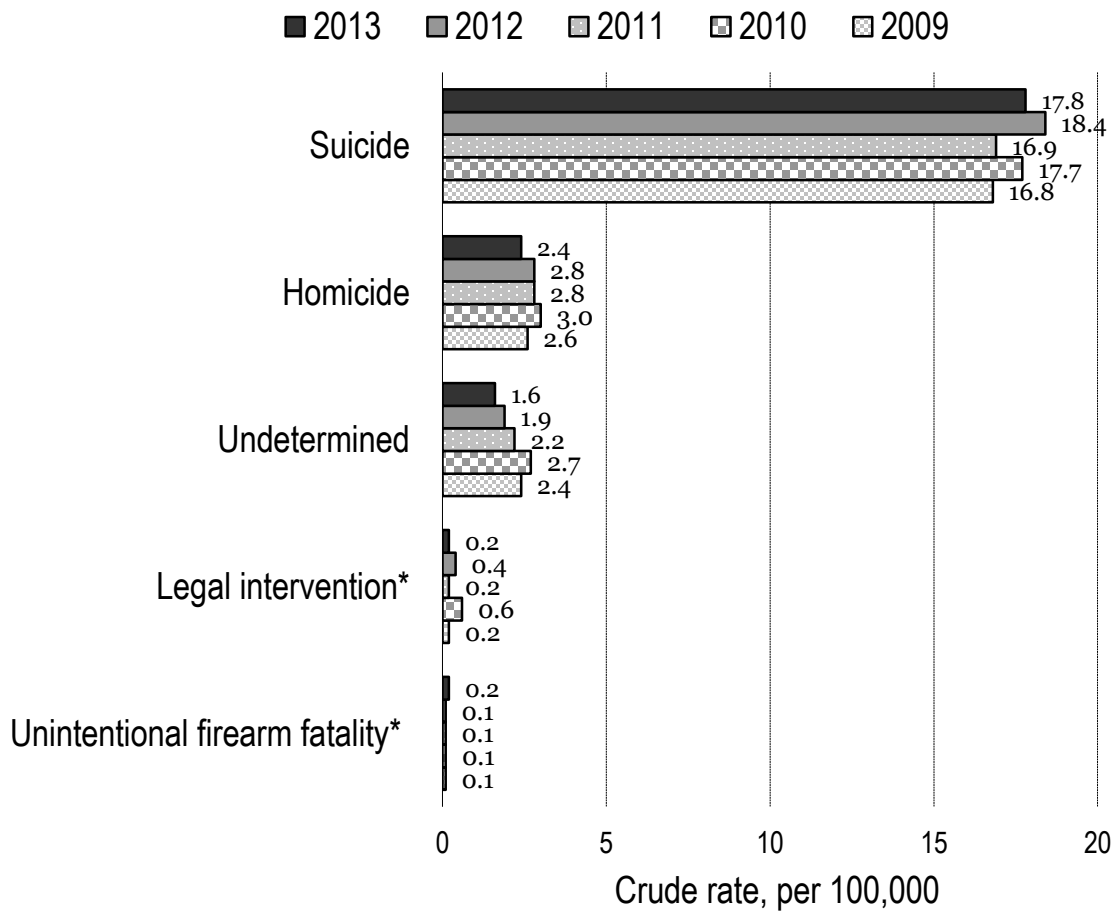
* Include Oregon residents only.

Source: Oregon Violent Death Reporting System

Overall, the number of violent deaths slightly decreased from 925 in 2012 to 874 in 2013. The state's number and rate of homicides remained stable: 110 (2.8 per 100,000) in 2012 and 93 (2.4 per 100,000) in 2013. The number and rate of suicide deaths remained high in Oregon during 2013 (n=701; rate=17.8 per 100,000). Adolescent suicides among those aged 10 to 17 years increased from an average of 11 a year between 2001 and 2010 to 18 in 2011, 22 in 2012 and 29 in 2013. Youth suicides and rates among those aged 10 to 24

years started to increase beginning in 2011, from 54 (7.2 per 100,000) in 2010 to 74 (9.8 per 100,000) in 2011, 73 (9.7 per 100,000) in 2012 and 93 (12.3 per 100,000) in 2013. Undetermined deaths and rates decreased from 80 (2.1 per 100,000) in 2012 to 64 (1.6 per 100,000) in 2013. The deaths involved with legal intervention decreased from 14 in 2012 to 8 in 2013 (Figure 1).

Figure 1. Violent death rate in Oregon: 2009-2013



* Rate was calculated from small number.

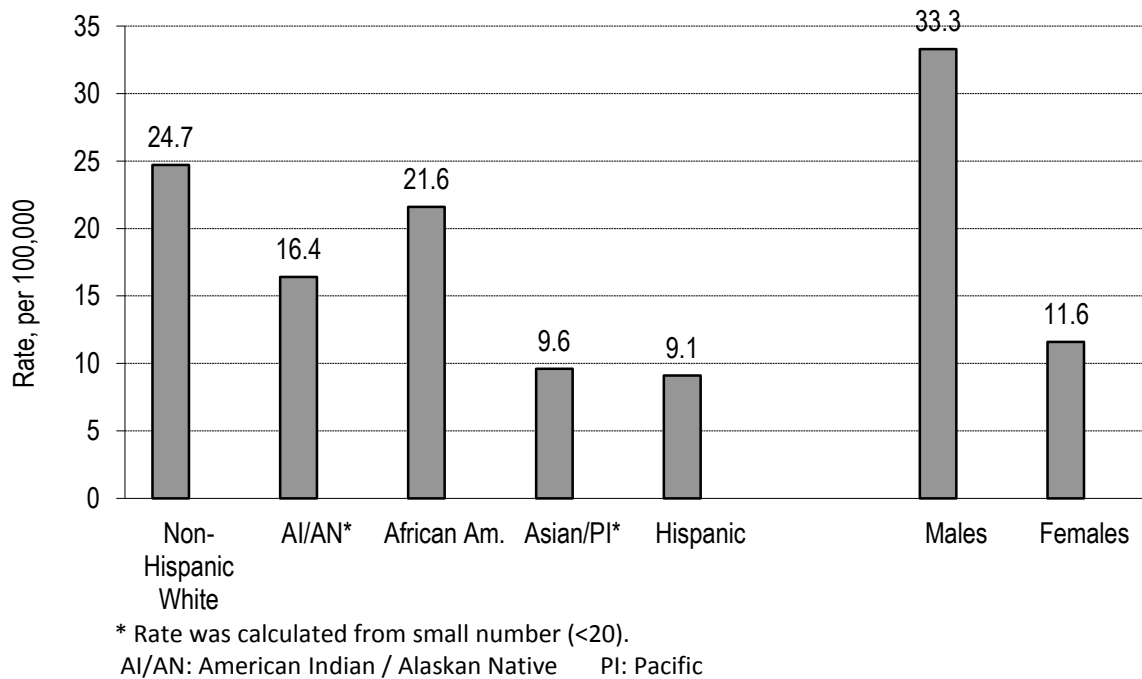
Source: Oregon Violent Death Reporting System

In 2013, violent death ranked as the second-leading cause of death among Oregonians aged 15-34 years and the eighth leading cause among all Oregonians. Violent deaths accounted for approximately 34 percent of total injury deaths.

Race, ethnicity and sex

Among the violent deaths, 771 (88.2 percent) were non-Hispanic white; 22 (2.5 percent) were African-American; 14 (1.6 percent) were American Indian/Alaska Native (AI/AN); 19 (2.2 percent) were Asian/Pacific Islander (PI); 10 (1.1 percent) identified race as more than one race, and 11 were other race/unspecified. Forty-five (5.1 percent) were of Hispanic ethnicity. The rate ratio of males to females was 2.9 (Figure 2). Suicide was the predominant manner of violent death among both males and females (Table 3).

Figure 2. Violent death rate, by race/ethnicity, and sex, Oregon, 2013



Source: Oregon Violent Death Reporting System

Table 3. Number, proportion, and rate of violent deaths by intent, Oregon, 2013

Intent	Sex				Total		Rate	
	Male	%	Female	%	All	%	Crude	Age-adjusted
Suicide	536	83	165	73	701	80	17.8	16.9
Homicide	62	10	31	14	93	11	2.4	2.3
Unintentional firearm fatality	7	1	1	0	8	<1	0.2*	0.2*
Legal intervention	7	1	1	0	8	1	0.2*	0.2*
Undetermined	36	6	28	12	64	7	1.6	1.7
Total	648		226		874		22.2	21.3

Rates are per 100,000.

* Use rates from small numbers (<20 events) with caution as they generate unstable rates.

Source: Oregon Violent Death Reporting System

Mechanism of death

Firearms were the mechanism of death in 53 percent of violent deaths. Other common mechanisms of death included poisoning (17 percent), suffocation (18 percent), sharp instruments (3 percent), falls (2 percent) and drowning (2 percent) (Table 4).

Table 4. Violent deaths, by mechanism, Oregon, 2013

Mechanism	Number	% of Total
Firearm	465	53
Poisoning	145	17
Hanging, Strangulation, Suffocation	159	18
Sharp instrument	24	3
Fall	21	2
Blunt instrument	8	1
Drowning	19	2
Personal weapons (fist,feet,hand)	7	<1
Fire or Burns	3	<1
Other transport vehicle (trains, boats)	7	<1
MV, including buses, motorcycles	7	<1
Shaking (shaken baby syndrome)	0	<1
Other	2	<1
Unknown	7	<1

Source: Oregon Violent Death Reporting System

Place of violent incident

Of 874 violent deaths involving Oregonians in 2013, 847 (97 percent) occurred in Oregon. Most incidents occurred at the home of the victim (Table 5).

Table 5. Location of injury, by manner, Oregon, 2013

Location Type	Suicide		Homicide		Undetermined	
	No.	%	No.	%	No.	%
House / Apartment	513	73	55	59	49	77
Nature Area	41	6	4	4	1	2
Park / Public use area	18	3	2	2	4	6
Street / Road	30	4	14	15	4	6
Parking lot / Garage	7	1	3	3	0	0
Motor vehicle (excluding public transportation)	24	3	4	4	0	0
Motel / Inn /Hotel	16	2	0	0	2	3
Jail	5	<1	3	3	0	0
Bridge	5	<1	0	0	0	0
Supervised Resident Facilities	3	<1	0	0	0	0
Hospital	2	<1	0	0	0	0
Commercial, industrial, construction Area	6	<1	1	1	0	0
Railroad	7	1	0	0	1	2
Other	14	2	4	4	0	0
Unknown	10	1	3	3	3	5

Source: Oregon Violent Death Reporting System

More than 50 percent of violent deaths occurred in five counties: Multnomah, Washington, Lane, Clackamas, and Jackson; each county had more than 50 cases (Table 6).

Table 6. Number, and proportion of violent deaths, by manner, and county, Oregon, 2013

County	Violent Death	Suicide		Homicide		Undetermined	
	Total	No.	%	No.	%	No.	%
Baker	6	3	50	2	33	1	17
Benton	13	12	92	0	0	0	0
Clackamas	66	55	83	4	6	6	9
Clatsop	14	13	93	1	7	0	0
Columbia	18	15	83	0	0	2	11
Coos	32	22	69	7	22	2	6
Crook	6	4	67	1	17	1	17
Curry	15	14	93	0	0	1	7
Deschutes	32	24	75	4	13	3	9
Douglas	43	34	79	4	9	4	9
Gilliam	0	0	N/A	0	N/A	0	N/A
Grant	3	3	100	0	0	0	0
Harney	2	1	50	1	50	0	0
Hood River	1	1	100	0	0	0	0
Jackson	58	52	90	5	9	1	2
Jefferson	4	3	75	1	25	0	0
Josephine	29	25	86	2	7	2	7
Klamath	20	12	60	5	25	1	5
Lake	1	1	100	0	0	0	0
Lane	93	77	83	8	9	7	8
Lincoln	18	14	78	0	0	4	22
Linn	24	19	79	2	8	2	8
Malheur	7	6	86	1	14	0	0
Marion	46	33	72	9	20	1	2
Morrow	1	0	0	0	0	1	100
Multnomah	171	135	79	24	14	12	7
Polk	10	8	80	1	10	0	0
Sherman	0	0	N/A	0	N/A	0	N/A
Tillamook	4	4	100	0	0	0	0
Umatilla	17	14	82	1	6	2	12
Union	4	4	100	0	0	0	0
Wallowa	2	2	100	0	0	0	0
Wasco	6	4	67	1	17	0	0
Washington	84	71	85	6	7	7	8
Wheeler	0	0	N/A	0	N/A	0	N/A
Yamhill	21	15	71	2	10	3	14
Unknown	3	1	50	0	0	1	33
<i>Statewide</i>	874	701	80	93	11	64	7

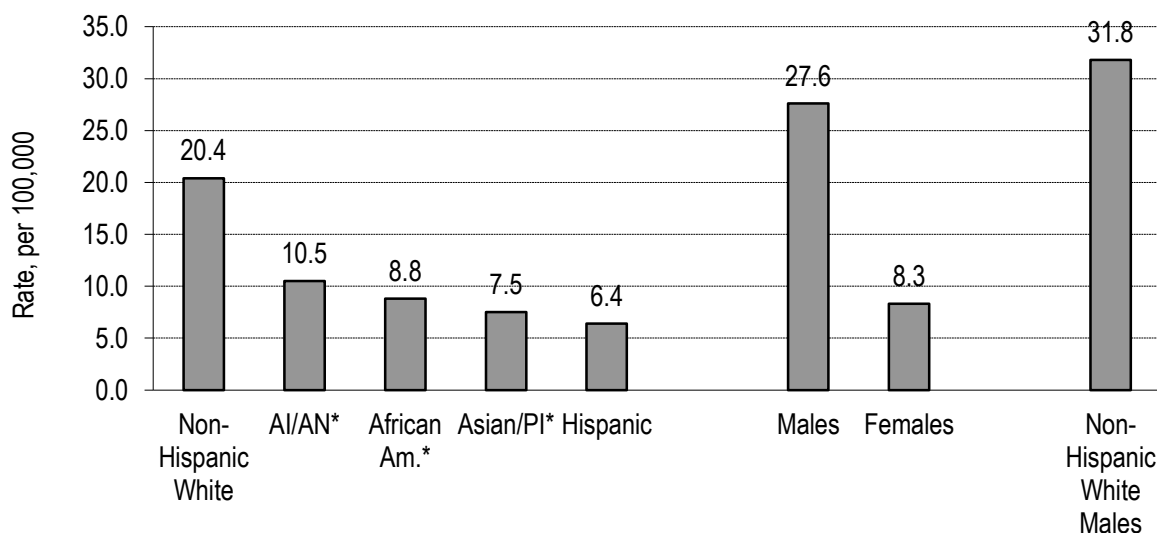
Source: Oregon Violent Death Reporting System

Suicides

Race, ethnicity and sex

Nearly 80 percent of violent deaths in Oregon in 2013 were suicides. Of 701 suicides, 536 (76 percent) occurred among males and 165 (24 percent) occurred among females; 636 (91 percent) were non-Hispanic white; 15 were Asian/Pacific Islander (PI); nine were American Indian/Alaska Native; nine were African-American; seven identified race as more than one race (three of them were identified as white and Indian/Alaska Native; three of them as white and Asian/PI), and five were other race/unspecified. Thirty-one (4 percent) were of Hispanic ethnicity. Males were more than three times more likely to die by suicide than females. The suicide rate among males was 27.6 per 100,000 and the rate among females was 8.3 per 100,000. The suicide rate overall was 17.8 per 100,000 (age-adjusted rate = 16.9 per 100,000). The highest rate was among non-Hispanic white males (Figure 3).

Figure 3. Suicide rate, by race / ethnicity, and sex, Oregon, 2013



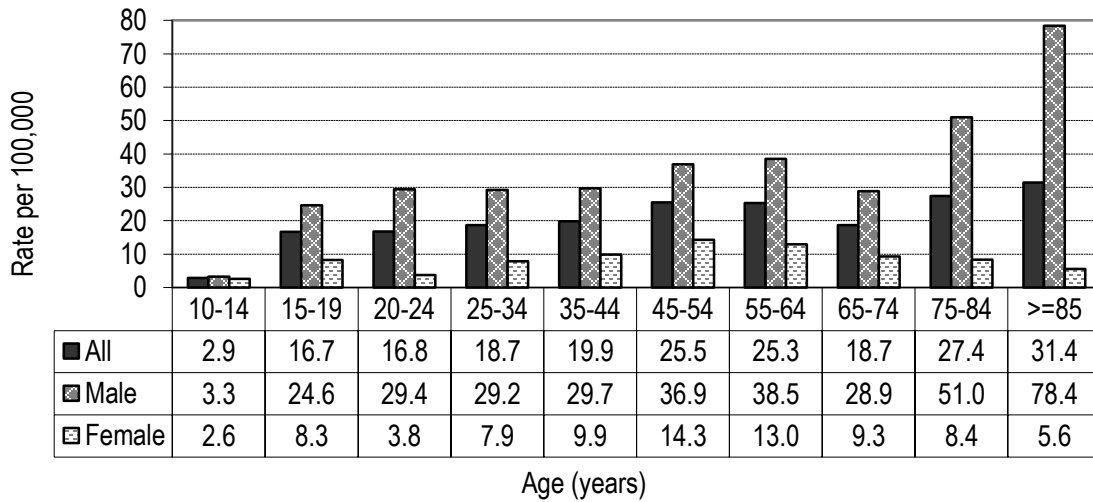
* Rate was calculated from small number (<20 events).

AI/AN: American Indian / Alaskan Native PI: Pacific Islander

Source: Oregon Violent Death Reporting System

Overall, suicide rates were highest in these specific age groups: aged 45-54 years, 55-64 years, 75-84 years, and ≥ 85 years. The age-specific rate of suicide among males largely drove this pattern, with suicide rates for males highest in the 75-84, and ≥ 85 years age groups. The highest suicide rate among females occurred among women aged 45-54 years (Figure 4).

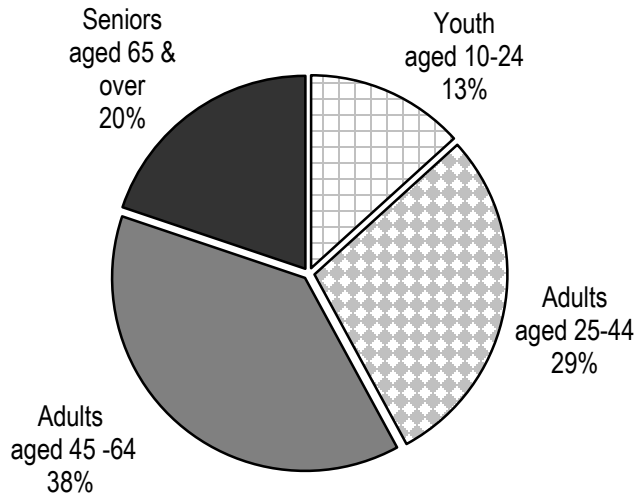
Figure 4. Age-specific rate of suicide, Oregon, 2013



Source: Oregon Violent Death Reporting System

The majority of suicides (67 percent) occurred among adults aged 25-64 years (Figure 5). However, the highest suicide rates occurred among those aged 45 years and older (Table 7).

Figure 5. Percentage of suicides, by age group, Oregon, 2013



Source: Oregon Violent death Reporting system

Table 7. Suicide deaths and rates, by sex and age group, Oregon, 2013

Sex	10-24 years		25-44 years		45-64 years		>=65 years	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
Female	18	4.9	46	8.9	73	13.6	28	8.4
Male	75	19.5	156	29.5	194	37.7	111	40.3
All	93	12.3	202	19.3	267	25.4	139	22.9

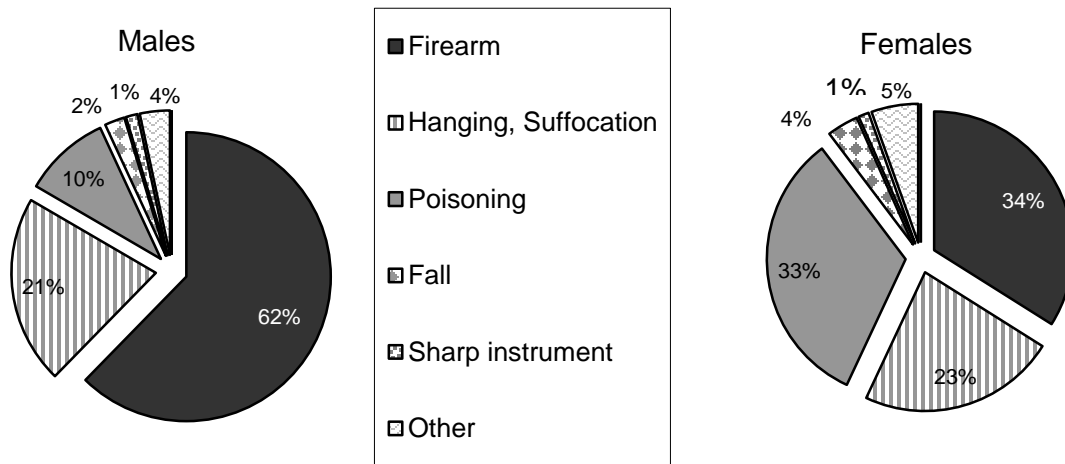
Rates are per 100,000.

Source: Oregon Violent Death Reporting System

Mechanism of death

Firearms, suffocation (hanging), and poisoning were the most frequently observed mechanisms of suicide deaths. Differences in mechanisms of death were observed by sex of the victim. Firearms were the mechanism of suicide in 62 percent of male deaths compared with 34 percent of female deaths. Suffocation was identified as the mechanism of death among 21 percent of male deaths and 23 percent of female deaths. Poisoning was the mechanism of death among 10 percent of deaths among males but 33 percent of the deaths among females (Figure 6).

Figure 6. Mechanism of suicide, by sex, Oregon, 2013



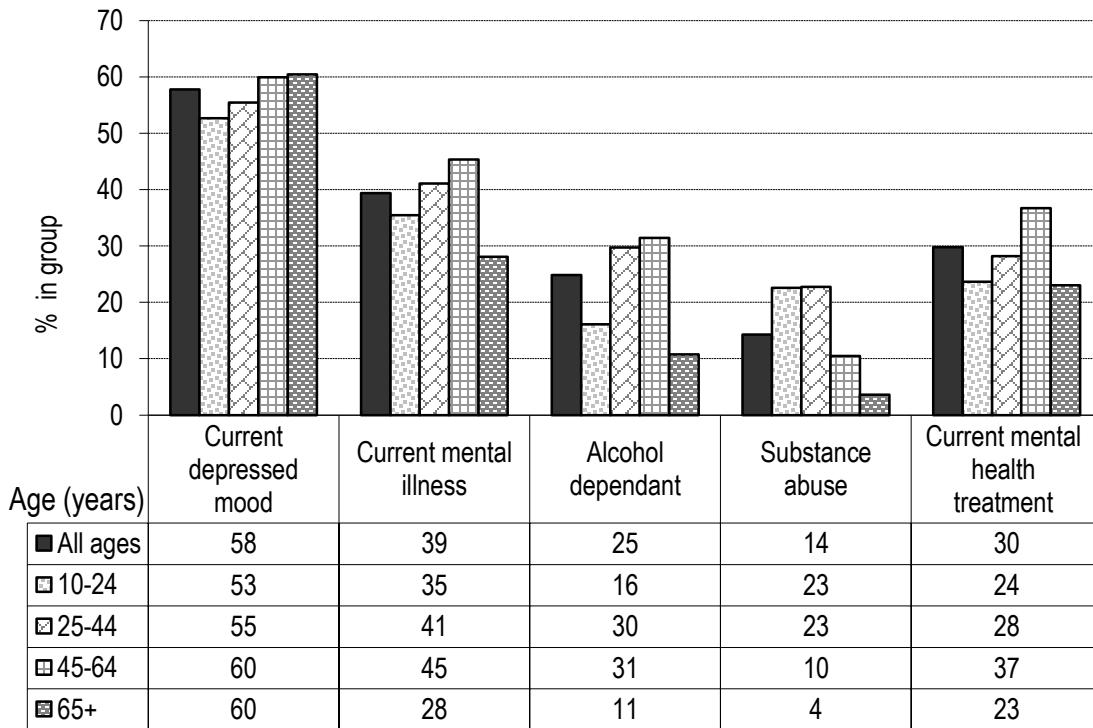
Source: Oregon Violent Death Reporting System

Of 390 firearm suicides, 285 (73 percent) involved a handgun, 40 (10 percent) involved a rifle and 39 (10 percent) involved a shotgun; in 26 cases (7 percent) the type of firearm involved was unknown.

Circumstances

Analysis of reports concerning circumstances surrounding suicides showed that, regardless of age, more than 50 percent of people who died by suicide were reported to have experienced a recent depressed mood. Overall, about 39 percent of them were reported to have a mental illness. But only 30 percent of them were being treated for a mental health problem (Figure 7).

Figure 7. Behavioral health status among suicide victims, by age group, Oregon, 2013

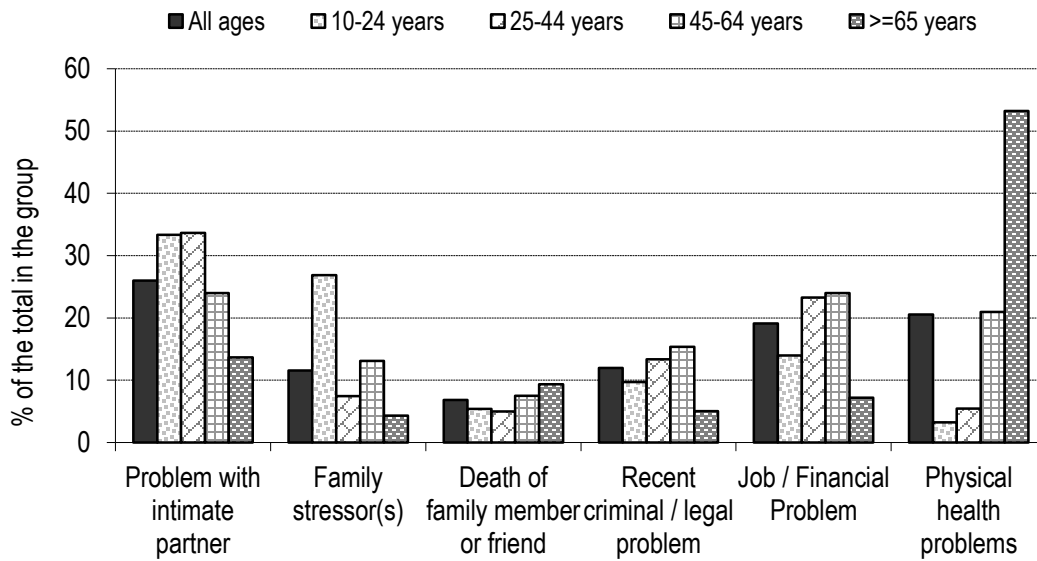


Source: Oregon Violent Death Reporting System

Among suicide victims with mental health problems (N=276), the most frequently-reported mental health problems were depression/dysthymia (64 percent), bipolar disorder (13 percent), and anxiety disorder (21 percent). Some victims experienced more than one behavioral health condition.

Overall, conflict in an interpersonal relationship (a problem with an intimate partner, and poor family relationships), criminal/civil legal problems, job/financial problems, and physical health problems were the most reported factors surrounding suicide incidents (Figure 8)

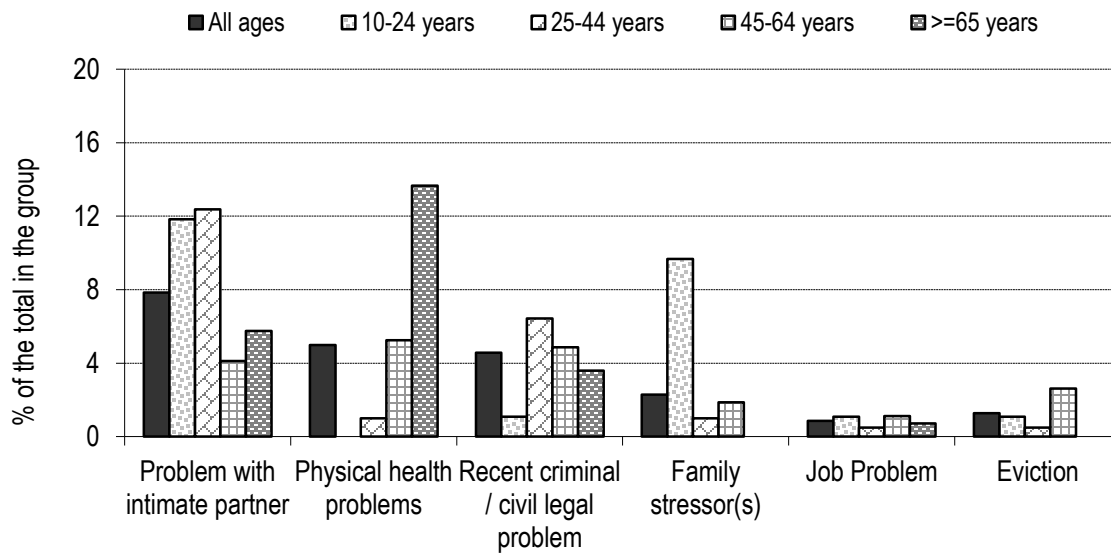
Figure 8. Factors surrounding suicide, by age group, Oregon, 2013



Source: Oregon Violent Death Reporting System

Approximately 25 percent of suicide victims experienced one or more crises within two weeks of death (Figure 9).

Figure 9. Common factors related to crisis surrounding suicide, by age group, Oregon, 2013

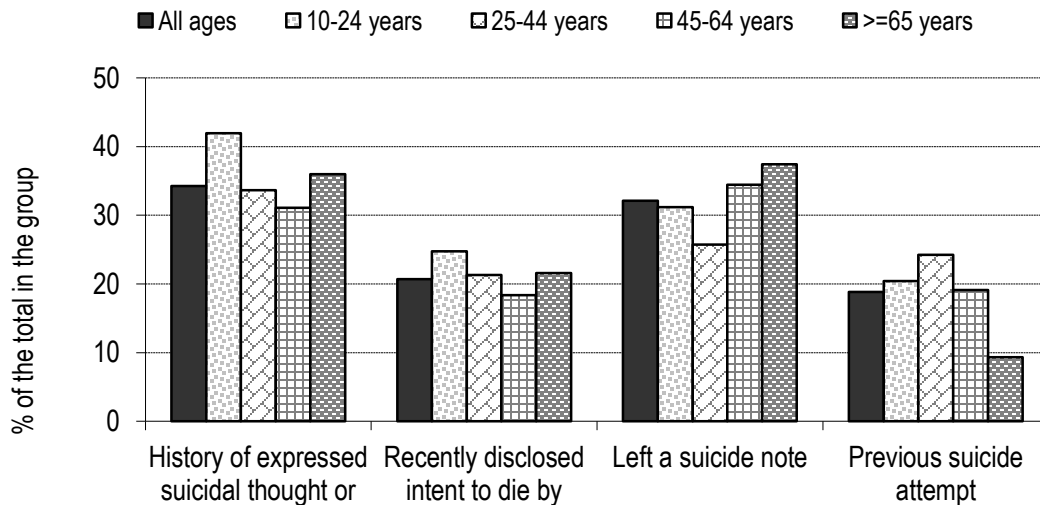


Source: Oregon Violent Death Reporting System

Among 139 adults aged 65 years and older who died by suicide, 37 percent lived alone. Numerous health conditions and health-related problems were reported among 74 people. Of 74 elder adults, 85 percent of them had declining health, 22 percent had a loss of autonomy or independence, and 24 percent had visited a physician within 30 days. The most frequently-reported physical illnesses were cancer (19 percent), heart disease (19 percent), chronic pain (18 percent), and chronic respiratory disease (15 percent).

Approximately one third of people who died by suicide had history of expressed suicidal thought and plan, one in five people who died by suicide (N=145) disclosed intent to die by suicide to their intimate partners (N=62, 43 percent), other family members (N=37, 26 percent), and friends/colleagues (N=26, 18 percent), and nearly one in five had attempted suicide previously (Figure 10).

Figure 10. Suicidal behavior, by age group, Oregon, 2013



Source: Oregon Violent Death Reporting System

Suicides among Oregon veterans

In 2013, 160 suicides (23 percent of total suicides) occurred among veterans in Oregon (Table 8). The suicide rate for this group was 51.0 per 100,000, compared to overall state rate of 21.9 per 100,000 among people aged 18 years and older.

Table 8. Veteran suicides, by year, sex, and age group, Oregon, 2003-2013

Year	Sex		Age group (years)			Total
	Male	Female	18-34	35-54	>=55	
2003	160	4	8	53	103	164
2004	160	6	10	54	102	166
2005	149	5	10	39	105	154
2006	135	7	8	48	86	142
2007	153	2	7	45	103	155
2008	134	4	11	42	85	138
2009	136	10	9	38	99	146
2010	144	6	11	43	96	150
2011	147	5	11	48	93	152
2012	150	5	9	51	95	155
2013	152	8	15	37	108	160

Source: Oregon Violent Death Reporting System

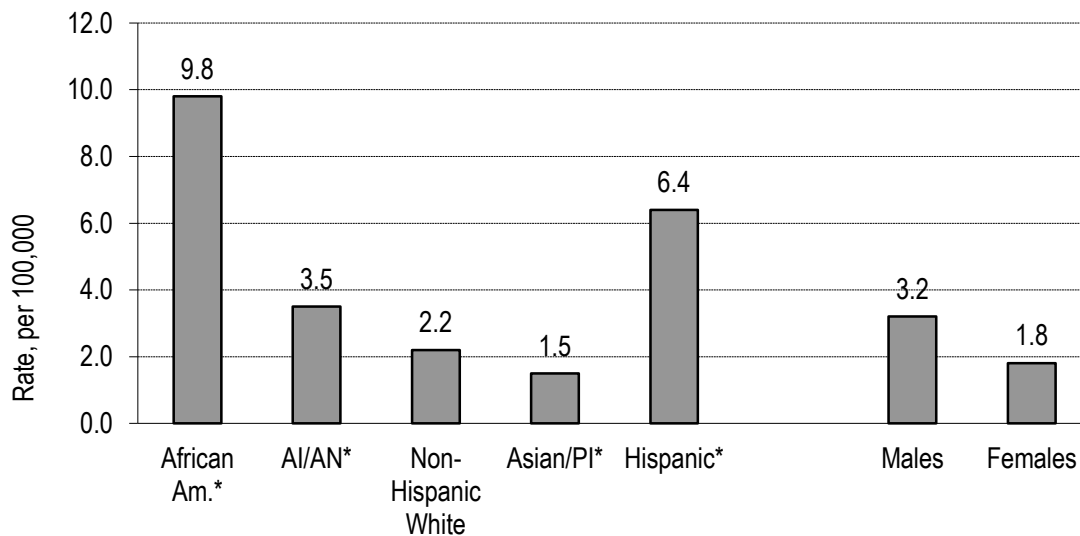
More detailed characteristics of suicides can be found in the report of [“Suicides in Oregon: Trends and Associated Factors, 2003-2012”](#) and [“Suicide among Oregon Veterans”](#).

Homicides

Race, ethnicity and sex

Homicide accounted for 11 percent (N=93) of violent deaths in Oregon in 2013. Of 93 homicides, 62 (67 percent) occurred among males and 31 (33 percent) occurred among females; 68 (73 percent) were non-Hispanic white; 10 were African-American; three were American Indian/Alaska Native; three were Asian/Pacific Islander; one identified as more than one race. Nine (10 percent) were of Hispanic ethnicity. The homicide death rate was 2.4 per 100,000 (age-adjusted rate = 2.3 per 100,000) overall. The rate was higher among males than among females (Figure 11).

Figure 11. Homicide rate, by race / ethnicity and sex, Oregon, 2013



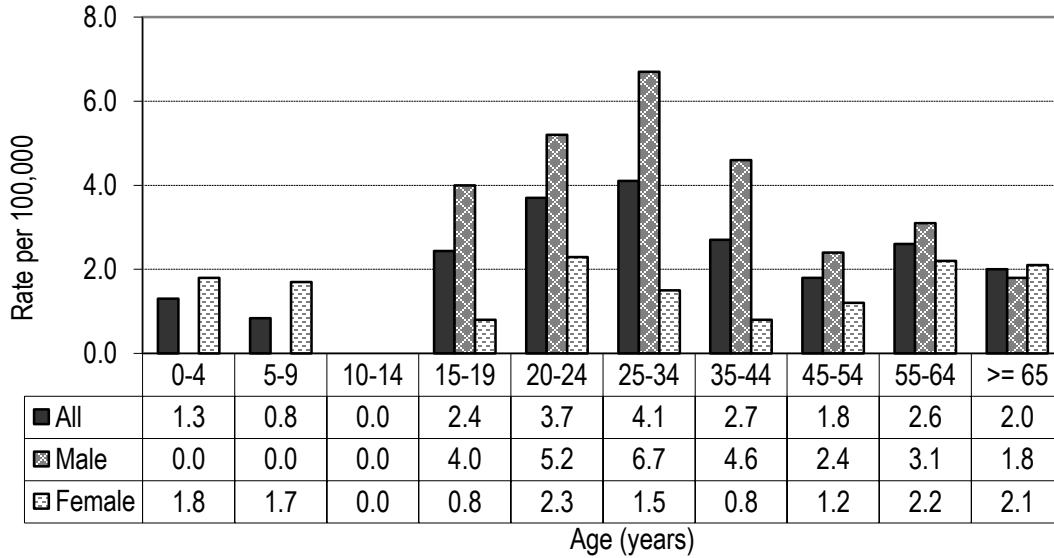
* Rate was calculated from small number (<20 events).

AI/AN: American Indian / Alaskan Native PI: Pacific Islander

Source: Oregon Violent Death Reporting System

The distribution of age-specific rates of homicide was 'W' shaped. The first peak occurred among young children, the second peak occurred among young adults aged 20-34 years, and the third peak occurred among adults aged 55-64 years (Figure 12). Of the 93 homicides, 5 (5 percent) were children aged less than 15 years; 16 (17 percent) were youth aged 15-24 years; 36 (39 percent) were young adults aged 25-44 years; 23 (25 percent) were adults aged 45-64 years and 12 (13 percent) were adults aged 65 years and older.

Figure 12. Age-specific rate of homicide, Oregon, 2013

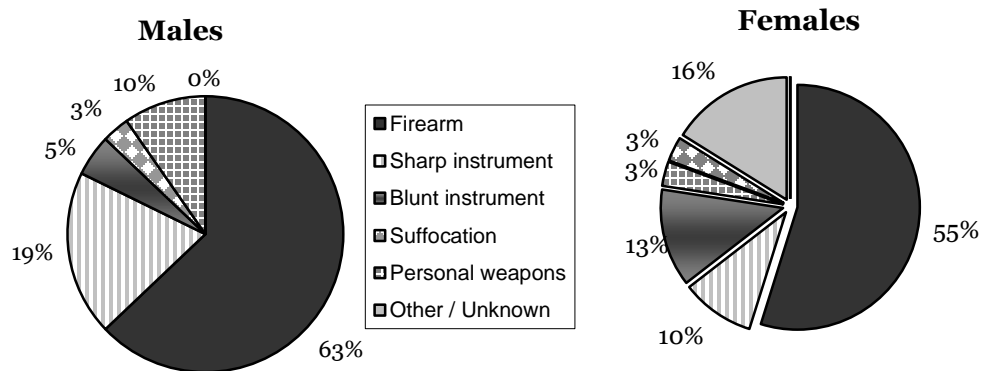


Source: Oregon Violent Death Reporting System

Mechanism of death

Firearms were the mechanism of death among 63 percent of male homicides and 55 percent of female homicides. Sharp instruments were the mechanism of death in about 19 percent of male and 10 percent of female homicides. Blunt instruments accounted for 13 percent of female homicides. Personal weapons (fist, feet and hand) accounted for about 10 percent of male homicides (Figure 13).

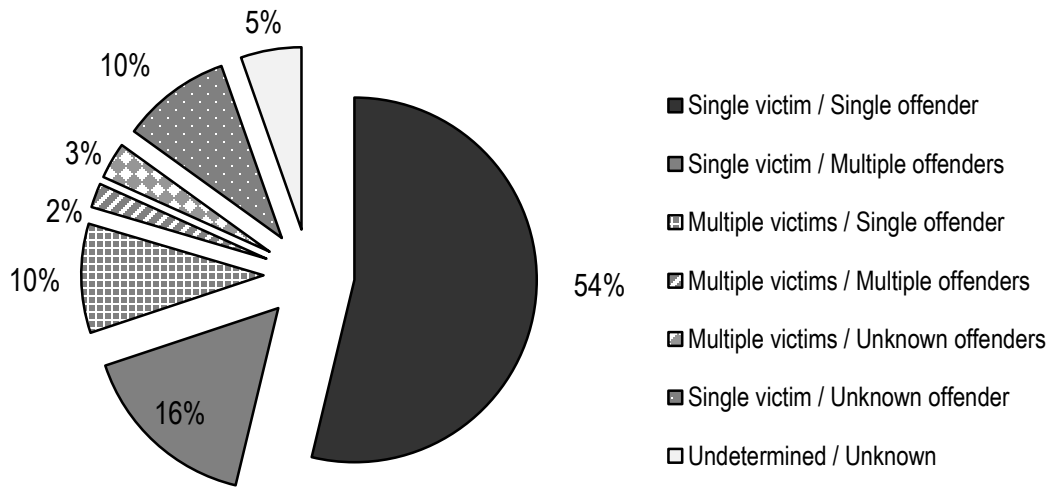
Figure 13. Mechanism of homicide, by sex, Oregon, 2013



Source: Oregon Violent Death Reporting System

A single suspect killed one person in most homicide incidents; multiple suspects were involved in the deaths of 18 percent of the victims; and a single suspect killed multiple victims in 10 percent of the cases (Figure 14).

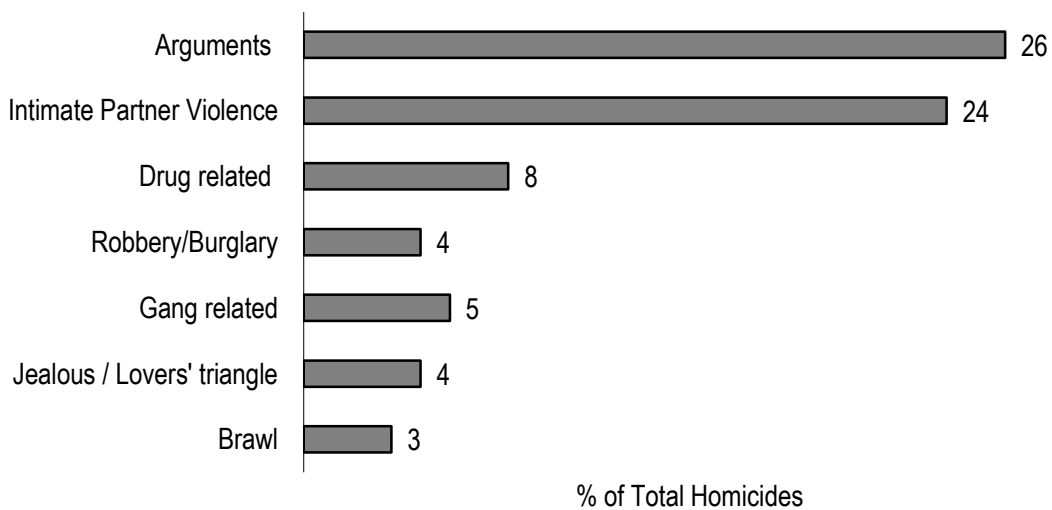
Figure 14. Type of homicide, Oregon, 2013



Source: Oregon Violent Death Reporting System

The most common circumstances surrounding homicides are shown in Figure 15.

Figure 15. Most common circumstances related to homicide, Oregon, 2013



Source: Oregon Violent Death Reporting System

Homicide suspect information

Based on available information, males aged 20-44 year were most likely to be suspects in homicide incidents (Table 9A).

Table 9A. Demographics of homicide-suspects, Oregon, 2013

Sex	Single Suspect		Multiple Suspects		Oregon Population
	No.	%	No.	%	%
Male	63	89	42	91	49.6
Female	1	1	3	7	50.4
Unknown	9	12	1	2	
Race					
White	42	59	34	74	91.3
African Am.	6	8	4	9	2.5
Asian	0	0	0	0	4.4
Am. Indian / Native	0	0	0	0	1.8
Unknown	23	32	8	17	
Ethnicity					
Hispanic	10	14	11	24	11.1
Hispanic, Unknown	31	44	14	30	
Age Group (years)					
<10	0	0	0	0	12.7
10-14	2	3	0	0	5.2
15-19	2	3	5	12	6.6
20-24	7	12	18	43	6.8
25-29	10	17	4	10	7.1
30-34	8	14	5	12	6.6
35-44	12	21	7	17	13.2
45-54	7	12	2	5	14.4
55-64	4	7	2	5	12.9
≥65	6	11	1	2	13.5
Unknown	13	-	4	-	
Age Range (years)	14-88		15-65		
Median Age (years)	35		23		

Source: Oregon Violent Death Reporting System

Most homicide suspects knew their victims (Table 9B).

Table 9B. Relationship between homicide victim and suspect, Oregon, 2013

Type of Relationship Victim to suspect	Single Suspect		Multiple Suspects	
	No.	%	No.	%
Spouse or ex-spouse	10	14	1	2
Parent	1	1	0	0
Child	2	3	1	2
Other family member	4	6	1	2
Girlfriend / Boyfriend or Ex	8	11	0	0
Child/parent of suspect's partner	1	1	1	2
Rival gang member	1	1	3	7
Acquaintance / Known to victim	15	21	16	35
Stranger	6	8	9	20
Friend	5	7	4	9
Roommate	4	6	0	0
Police officer in line of duty	2	3	0	0
Unknown	10	14	10	22

Source: Oregon Violent Death Reporting System

Intimate partner violence (IPV) - related homicide

A total of 27 IPV-related homicides occurred among Oregon residents in 2013. These deaths occurred among victims of IPV, perpetrators (primary aggressors) of IPV and relatives and friends of an IPV victim. The relationship of victim and suspect is shown in Table 10. Eighteen of the 27 IPV-related homicides were committed by an intimate partner. Among 18 intimate partner homicide victims, 13 were non-Hispanic white; one was African American; one was Asian; and three were of Hispanic ethnicity. The age range was 16 to 83 years, with an average age of 43 years. Five IPV-related homicides were followed by a suicide attempt. More detailed information of IPV-related homicides can be found in the following report: [“Homicide Trends and Characteristics, Oregon, 2003-2012”](#).⁶

Table 10. Relationship of victim and suspect among IPV-related homicides, by sex, Oregon, 2013

Homicide victim was killed by	Female	Male	Total
Current spouse	9	0	9
Ex-spouse	0	1	1
Current boy/girl friend	4	1	5
Ex-boy/girl friend	2	0	2
Couple (same sex)	0	1	1
<i>Total homicide victims killed by an intimate partner</i>	<i>15</i>	<i>3</i>	<i>18</i>
Partner's ex-partner	0	2	2
Ex-partner's or lover's current partner	0	2	2
Police officers	0	0	0
Other	2	3	5
<i>Total homicide victims killed by someone other than a partner</i>	<i>2</i>	<i>7</i>	<i>9</i>
Homicides related to IPV	17	10	27

Source: Oregon Violent Death Reporting System

Child deaths due to physical abuse ⁷

Among 7 children under 18 years of age who died by homicide, two children were killed by a parent or boyfriend of the child's mother. No child died from shaken baby syndrome in 2013.

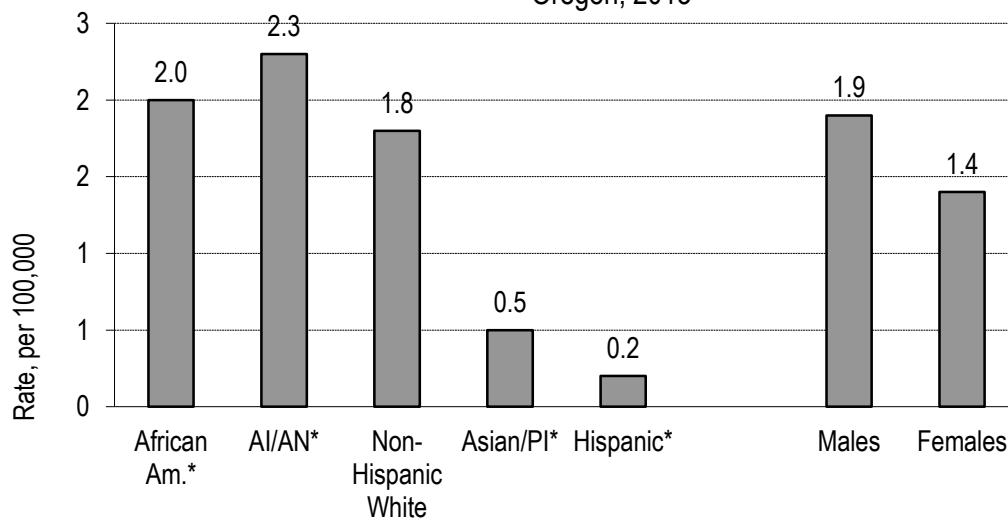
More detailed information on homicides due to physical abuse among children can be found in the following report: "[Homicide Trends and Characteristics, Oregon, 2003-2012](#)".⁶

Undetermined Deaths

Race, ethnicity and sex

Seven percent of violent deaths were classified as undetermined manner of death in 2013. Of 64 undetermined deaths, 36 (56 percent) were male and 28 (44 percent) were female; 56 (88 percent) were non-Hispanic white; two (3 percent) were American Indian/Alaska Native; two (3 percent) were African American; one was Asian; and two were more than one race. One was of Hispanic ethnicity. The undetermined death rate was 1.6 per 100,000 overall. Figure 16 shows the undetermined death rate by race, ethnicity, and sex.

Figure 16. Undetermined death rate, by race / ethnicity & sex
Oregon, 2013

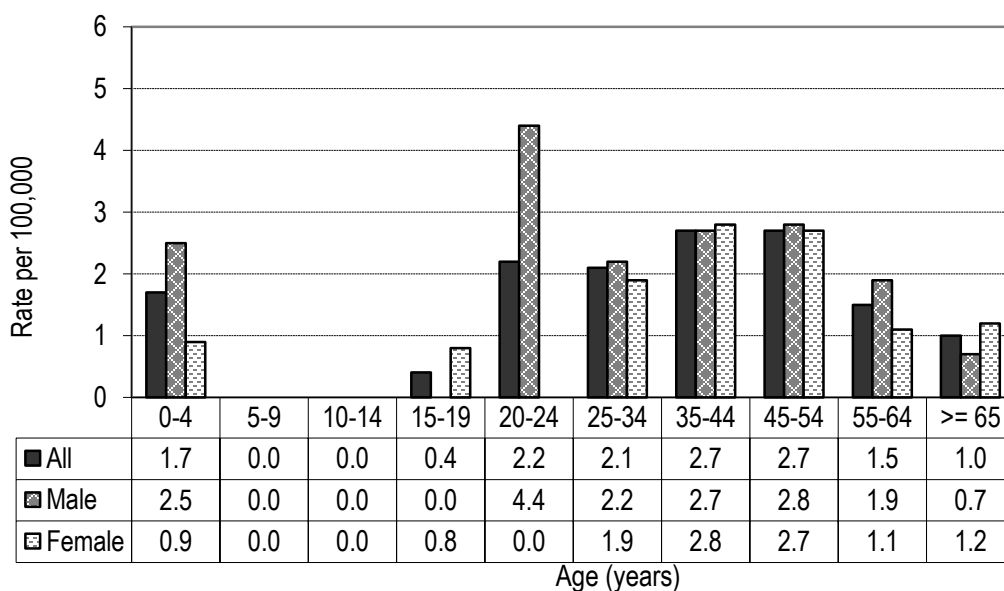


* Rate was calculated from small number (<20 events).
AI/AN: American Indian / Alaskan Native PI: Pacific Islander

Source: Oregon Violent Death Reporting System

Adults aged 35-54 years had the highest rate of undetermined death (Figure 17). Adults aged 20-64 years accounted for 83 percent (n=53) of those deaths.

Figure 17. Age-specific rate of undetermined death, Oregon, 2013



Source: Oregon Violent Death Reporting System

Mechanism of death

Poisoning was the mechanism of death in 53 percent of the undetermined deaths among males and 71 percent among females. The mechanism of death was not determined in 8 percent of the undetermined deaths among males and 4 percent of the undetermined deaths among females (Figure 17). In 39 undetermined poisoning deaths, common substances involved were methadone (N=9), oxycodone (N=6), heroin (N=5), Fentanyl (N=5), and methamphetamine (N=4).

Figure 17. Mechanism of undetermined death, by sex, OR, 2013

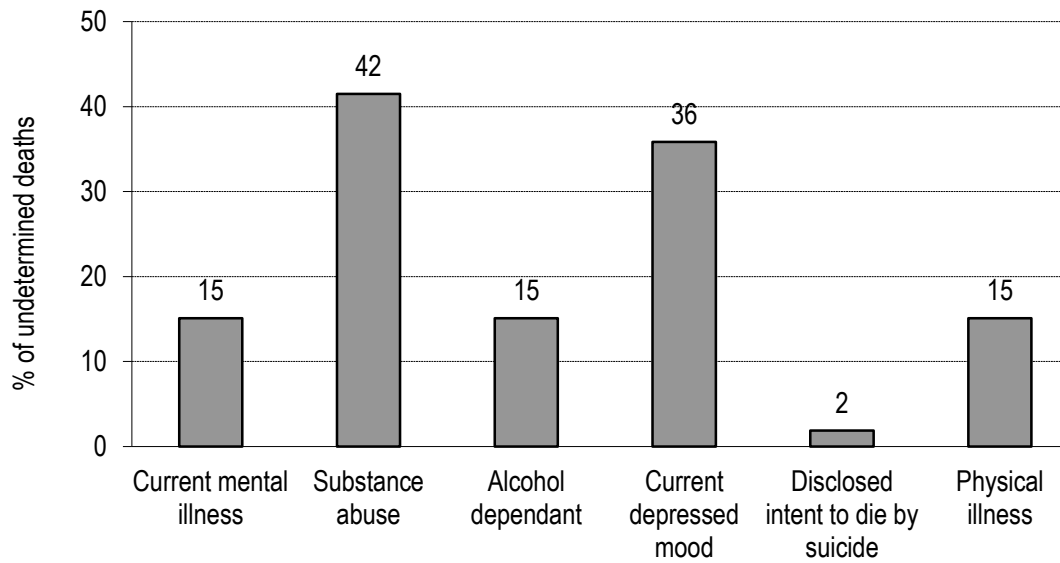


Source: Oregon Violent Death Reporting System

Circumstances

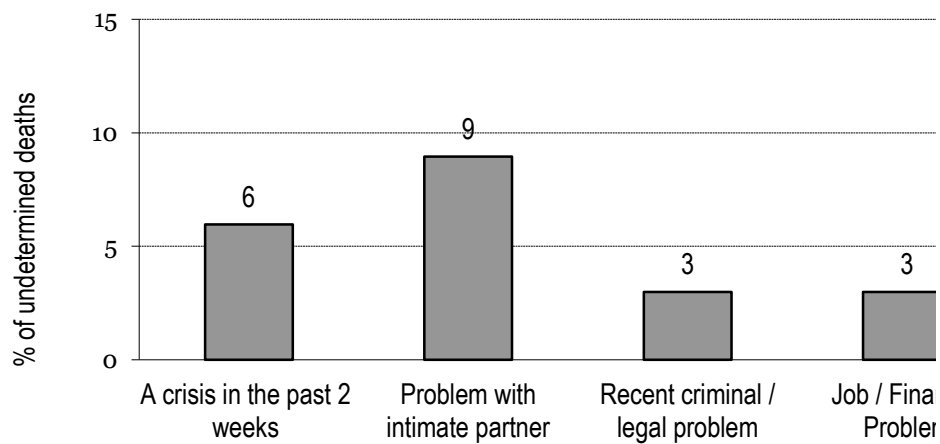
Many victims who died of undetermined manner who were aged 20-64 years had behavioral and physical health problems (Figure 19). Circumstances are illustrated in Figure 20.

Figure 19. Mental and physical status among undetermined deaths, adults aged 20-64 years, Oregon, 2013



Source: Oregon Violent Death Reporting System

Figure 20. Circumstances in adult undetermined deaths, adults aged 20-64 years surrounding undetermined deaths, Oregon, 2013



Source: Oregon Violent Death Reporting System

Firearm Fatalities

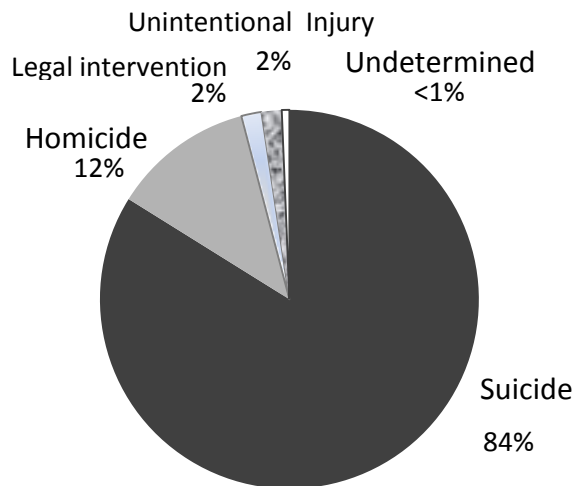
Magnitude

Firearms were the mechanism of injury in about half of violent deaths (N=465) in 2013. The firearm fatality rate was 11.8 per 100,000 (age-adjusted rate = 11.1 per 100,000).

Manner

Firearm deaths occur due to a variety of manners (intents). The majority of firearm deaths in Oregon were due to suicide (N= 390), which accounted for 84 percent of total firearm fatalities, followed by homicide (N=56, 12 percent), legal intervention (N=8), unintentional shootings (N=8), and undetermined deaths (N=3) (Figure 20).

Figure 20. Firearm fatalities by manner, Oregon, 2013

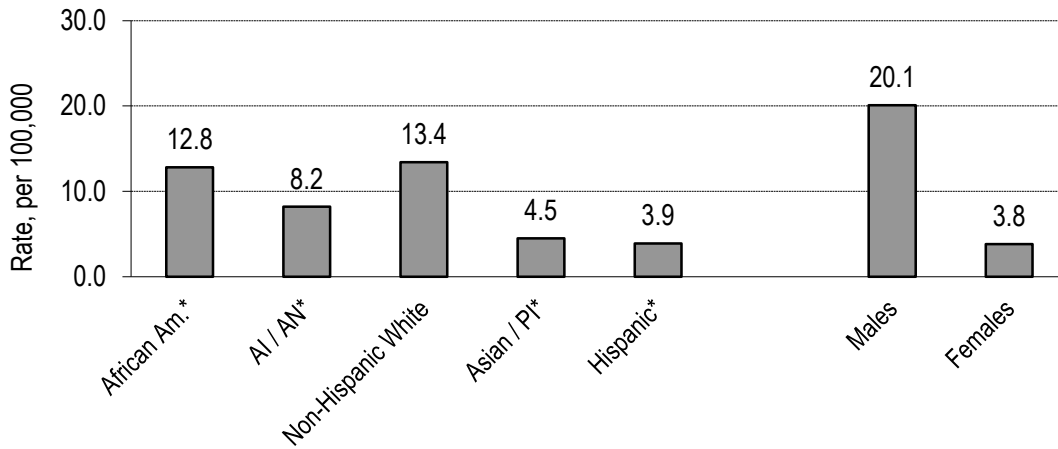


Source: Oregon Violent Death Reporting System

Race, ethnicity, age and sex

Of 465 firearm fatalities, 390 (84 percent) occurred among males and 75 (16 percent) occurred among females; 414 (89 percent) were non-Hispanic white; 13 were African-American; seven were American Indian/Alaska Native; nine were Asian/Pacific Islander; two identified as more than one race, and one was other race/unspecified. Nineteen (4 percent) were of Hispanic ethnicity (Figure 22). Males were almost five times more likely than females to die from firearm injury (Figure 23).

Figure 22. Firearm fatality rate, by race / ethnicity, and sex, Oregon, 2013



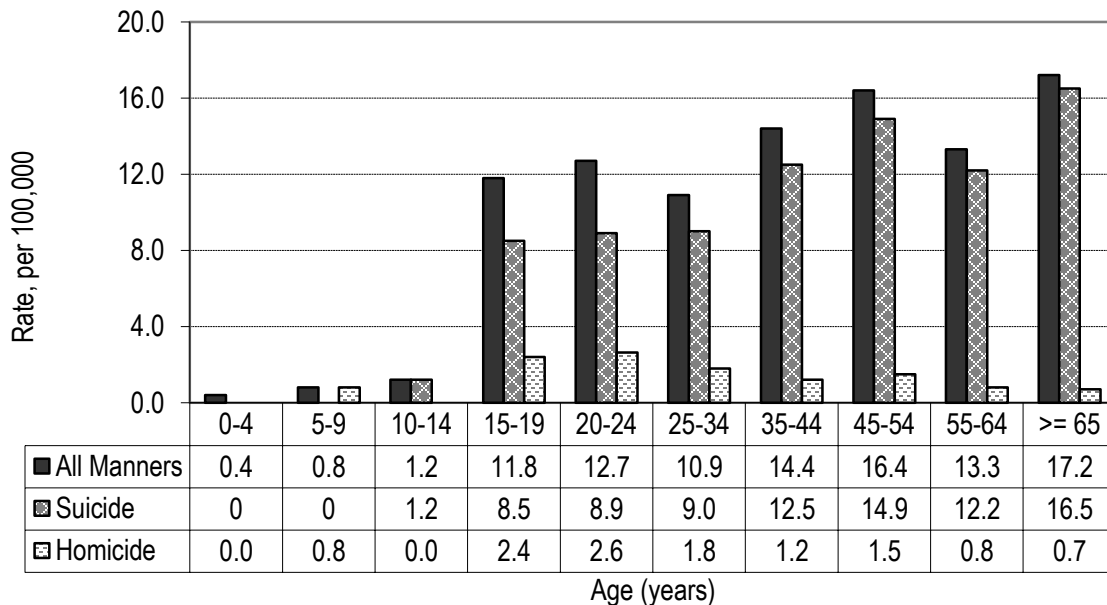
* Rate was calculated from small number (<20 events).

AI/AN: American Indian / Alaskan Native PI: Pacific Islander

Source: Oregon Violent Death Reporting System

Overall firearm fatality rates were higher among older age groups. But there were different patterns between suicides and homicides. The age-specific rate of firearm suicide was higher for older age groups, with the highest rates among those aged 65 years and older. The age-specific rate of firearm homicide peaked between the ages of 15 and 24 years (Figure 23).

Figure 23. Age-specific rate of firearm fatality, by manner, Oregon, 2013



Source: Oregon Violent Death Reporting System

Circumstances surrounding deaths

Based on available data (n=426), weapons used in firearm fatalities were handguns (78%), rifles (11%), and shotguns (11%).

Of 390 people who died by firearm suicide, 31 percent of them had a diagnosed mental illness; 40 percent of them had disclosed suicide threats or ideation prior to their deaths; and 12 percent had a previous suicide attempt.

Of 64 firearm homicides (n=56) and deaths due to legal intervention (n=8), 14 deaths (22 percent) were related to intimate partner violence; seven (11 percent) were related to drug trade/use; five (8 percent) were related to gang violence; two were involved with robbery; and two were involved with sexual assault.

Location

Gun violence can take place anywhere. Firearm suicides often took place at a house/apartment (80%). Firearm homicides often took place at a house/apartment (59%), and street/road (14%) (Table 11).

Table 11. Location of gun violence, by intent, Oregon, 2013

Type of location	Homicides	%	Suicides	%
House / Apartment	33	59	307	79
Street / Road	8	14	14	4
Motor Vehicle	2	4	17	4
Natural Area (e.g. field, river, woods)	4	7	17	4
Park / Public use area	2	4	9	2
Parking lot / Garage	2	4	6	2
Commercial area	0	0	3	1
Motel/Hotel	0	0	5	1
Bar, Nightclub	1	2	0	0
Other	4	7	12	3

Source: Oregon Violent Death Reporting System

Data Limitations

Although ORVDRS collects data from multiple sources, it is still a challenge to capture every detail and circumstance on violent deaths. Lack of standardized questionnaires and investigations on each death, and limited witnesses and contacts with a victim could result in incomplete information surrounding the incidents. Therefore, this report may underestimate some given circumstances.

References

1. Paulozzi LJ, Mercy J, Frazier Jr L, et al. CDC's National Violent Death Reporting System: Background and Methodology. *Injury Prevention*, 2004;10:47-52.
2. Centers for Disease Control and Prevention. National Violent Death Reporting System (NVDRS) Coding Manual (Online). (2008). National Center for Injury Prevention and Control, Centers for Disease Control and Prevention (producer). Available from: URL: www.cdc.gov/injury.
3. National Center for Health Statistics. U.S. Census Population with Bridged-race Categories (vintage 2013) postcensal estimates). Available from: URL: http://www.cdc.gov/nchs/nvss/bridged_race.htm
4. United States Department of Veteran Affairs. VetPop 2007 State data tables. Available from: URL: http://www1.va.gov/vetdata/Veteran_population.asp.
5. Shen X, Millet L. Suicides in Oregon: Trends and Associated Factors. 2003-2012. Oregon Health Authority, Portland, Oregon. Available from: URL: <http://public.health.oregon.gov/DiseasesConditions/InjuryFatalityData/Pages/nvdrs.aspx>
6. Shen X, Millet L. Homicide Trends and Characteristics, Oregon, 2003-2012. Oregon Health Authority, Portland, Oregon. Available from: URL: <http://public.health.oregon.gov/DiseasesConditions/InjuryFatalityData/Pages/nvdrs.aspx>
7. Leeb RT, Paulozzi L, Melanson C, et al. Child Maltreatment Surveillance: Uniform Definitions for Public Health and Recommended Data Elements, Version 1.0. Atlanta (GA): Centers for Disease Control and Prevention, National Center for Injury Prevention and Control; 2008.

Glossary

The following definitions refer to terms identified in this report from The State Violent Death Reporting System Workgroup¹, NVDRS coding manual².

Acquaintance: Someone with or about whom the victim had prior interaction or knowledge.

Age-adjusted mortality rate: A mortality rate statistically modified to eliminate the effect of different age distributions in the different populations.

Age-specific mortality rate: A mortality rate limited to a particular age group. The numerator is the number of deaths in that age group; the denominator is the population in that age group.

Alcohol problem: A suicide circumstance in which the victim is perceived by self or others as having a problem with or being addicted to alcohol. A victim who is participating in an alcohol rehabilitation program or treatment, including self-help groups and 12-step programs, and has been clean and sober for less than five years is also considered as having this circumstance.

Atypical antipsychotic drugs: A group of antipsychotic tranquilizing drugs used to treat psychiatric conditions such as schizophrenia. Atypical antipsychotics include drugs such as Clozapine, Olanzapine, Quetiapine, Risperidone and Ziprasidone.

Benzodiazepines: A class of drugs used to treat anxiety, insomnia, and seizures. Benzodiazepines include drugs such as Alprazolam, Clonazepam, Diazepam, and Lorazepam.

Blunt instrument: Clubs, bats, boards, or other objects that can be used to inflict an injury.

Child physical abuse: Defined as a parent or a caregiver intentionally uses physical force against a child that results in, or has the potential to result in, physical injury.

Crude mortality rate: The mortality rate from all causes of death for a population. It is calculated by dividing the number of deaths in a population in a period by resident population.

Criminal legal problem: A suicide circumstance in which the victim was facing a recent or impending arrest, police pursuit, or an impending criminal court date, and the consequence was relevant to the suicide event.

¹ Sanford C and Hedegaard H (editors). Deaths from Violence: A Look at 17 States -- Data from the National Violent Death Reporting System. December 2008

² . Centers for Disease Control and Prevention. National Violent Death Reporting System (NVDRS) Coding Manual (Online). (2008). National Center for Injury Prevention and Control, Centers for Disease Control and Prevention (producer). Available from: URL: www.cdc.gov/injury.

Crisis: A suicide circumstance in which an acute precipitating event appears to have contributed to the suicide (e.g., the victim was just arrested; divorce papers were served that day; the victim was about to be laid off; the person had a major argument with a spouse the night before).

Depressed mood: A suicide circumstance in which the person was noted by others to be sad, despondent, down, blue, unhappy, etc. This circumstance can apply whether or not the person has a diagnosed mental health problem.

Drowning: A mechanism of death resulting from submersion in water or other liquid.

Drug involvement: A homicide circumstance in which drug dealing, illegally trafficking a controlled substance, or illegal drug use is suspected to have played a role.

Falls: A mechanism of death resulting from a fall, push or jump from a high place.

Financial problem: A suicide circumstance in which the victim was experiencing monetary issues such as bankruptcy, overwhelming debts, a gambling problem, or foreclosure of a home or business.

Firearm: Any weapon (including a starter gun) which is designed to or may readily be converted to expel a projectile by the action of an explosive (e.g., gun powder).

Gang-related: A homicide circumstance in which the victim or suspect is a member of an association or organization that has the commission of crime as one of its reasons for existence, and the homicide resulted from gang rivalry or gang activity.

Hanging/suffocation/strangulation:

Mechanisms of injury resulting in airway obstruction in which the victim died from lack of oxygen.

Homicide: A death resulting from the intentional use of force or power, threatened or actual, against another person, group, or community. A preponderance of evidence must indicate that the use of force was intentional.

Homicide-suicide: Defined as one person killing one or more others then taking his/her own life within 24 hours.

Incident: All victims and suspects associated with a given incident are in one record. A violent death incident can be made up of any of the following: a) One isolated violent death. b) Two or more homicides, including legal interventions, when the deaths involve at least one person who is a suspect or victim in the first death and a suspect or victim in the second death. c) Two or more suicides or undetermined manner deaths, when there is some evidence that the second or subsequent death was planned to coincide with or follow the preceding death. d) One or more homicides or unintentional firearm deaths combined with

one or more suicides, when the suspect in the first death is the person who commits suicide.
e) Two or more unintentional firearm deaths when the same firearm inflicts two or more fatal injuries and the fatal injuries are inflicted by one shot or burst of shots. For categories (b), (c) and (d), the fatal injuries must occur within 24 hours of each other.

Intent to die by suicide: The victim had previously expressed suicidal feelings to another person, whether explicitly (e.g., “I’m considering killing myself”) or indirectly (e.g., “I know how to put a permanent end to this pain”).

Intimate partner: A current or former girlfriend, boyfriend, date or spouse. The definition of intimate partner includes first dates.

Intimate partner problem/violence: A suicide or homicide circumstance in which the victim was experiencing problems with a current or former intimate partner, such as a divorce, break-up, argument, jealousy, conflict, or discord.

IPV-related homicide: A homicide occurred in the context of intimate partner violence (IPV). IPV is actual or threatened physical aggression, sexual assault, and psychological / emotional abuse directed toward a spouse, ex-spouse, current or former boyfriend or girlfriend, or former dates. IPV-related homicides include but not limited to intimate partner homicide. For example, when a boyfriend killed his girlfriend and her child, the incident is defined as IPV-related homicide and both the girlfriend and the child are considered as IPV-related homicide victims.

Jealousy: A homicide circumstance in which the incident involved sexual rivals.

Job: A suicide circumstance in which the victim was either experiencing a problem at work (such as tension with a co-worker, poor performance reviews, increased pressure, feared layoff) or was having a problem with joblessness (e.g., recently laid off, having difficulty finding a job).

Legal intervention death: A death in which the decedent was killed by a police officer or other peace officer (persons with specified legal authority to use deadly force), including military police, acting in the line of duty.

Lover’s triangle: See Jealousy.

Mechanism: The primary instrument used by a victim or suspect that contributed to someone’s death.

Mental health problem (Current mental illness): A suicide circumstance in which the victim was identified as having a mental health illness, such as depression, schizophrenia, obsessive-compulsive disorder, etc. The mental health problem must have been diagnosed by someone who is professionally trained.

Mental health treatment: A suicide circumstance in which the victim had a current prescription for a psychiatric medication or saw a mental health professional within the two months prior to death. Treatment includes seeing a psychiatrist, psychologist, medical doctor, therapist or other counselor for a mental health or substance abuse problem; receiving a prescription for an antidepressant or other psychiatric medication; or residing in an inpatient or halfway house facility for mental health problems.

Motor vehicle: A mechanism of death resulting from a crash of any motorized vehicle.

Opioids: A group of psychoactive chemicals that work by binding to opioid receptors. Opioids include prescription drugs (e.g. Codeine, Fentanyl, Hydrocodone, Methadone, Morphine, and Oxycodone) and illicit drugs (e.g. Heroin).

Other relationship problem: A suicide circumstance in which the person was experiencing problems or conflict with a family member, friend or associate (other than an intimate partner) that appeared to have contributed to the suicide.

Personal weapon: Injury inflicted on another person using fists, feet, hands, or other body parts.

Physical health problem: A suicide circumstance in which the victim was experiencing terminal disease, debilitating condition, or chronic pain, that was relevant to the suicide event.

Poisoning: A state of illness caused by the presence of any harmful or toxic substance that has been ingested, inhaled, applied to the skin or resulted from any other form of contact.

Reliability of rates: Some rates in this report are based on a small number of deaths. Chance variation is a common problem when the numbers being used to calculate rates are extremely small. From year to year, large swings can occur in rates, which do not reflect real changes. The rates based on small numbers (less than 20 events) may be unstable due to random chance factors, and should be used with caution.

Resident: The decedent was an official inhabitant of the state (or territory) including those portions of a Native American reservation within the state at the time of injury, according to the death certificate.

Sharp instruments: Objects that can be used to inflict a penetrating injury, such as knives, razors, machetes or pointed instruments such as a chisel or broken glass.

Stranger: Someone with whom the victim has had no prior interaction before the event that culminated in the violent injury.

Substance problem: A suicide circumstance in which the victim was noted as using illegal drugs (such as heroin or cocaine), abusing prescription medications (such as pain relievers

or Valium), or regularly using inhalants (e.g., sniffing gas) even if the addiction or abuse is not specifically mentioned.

Suicide: A death resulting from the intentional use of force against oneself. A preponderance of evidence should indicate that the use of force was intentional.

Suicide attempt history: A suicide circumstance in which the victim was known to have previously tried to end his/her own life, regardless of the severity of the injury inflicted.

Suicide note: A suicide circumstance in which the victim left a message, e-mail, video, or other communication that he or she intended to end his/her own life. A will or folder of financial papers near the victim does not constitute a suicide note.

Suspect (Perpetrator): Person or persons suspected of having killed another person in an incident, whether intentionally (any method/weapon) or unintentionally (firearm only) or assisted in the homicide.

Terrorism-related death: Homicide or suicide deaths that result from events that are labeled by the Federal Bureau of Investigation as acts of terrorism. Terrorism is a mechanism of death rather than a manner of death. The manner of death is either homicide or suicide. Terrorism-related deaths include ICD-10 codes U01 and U03.

Undetermined death: A death resulting from the use of force or power against oneself or another person for which the evidence indicating one manner of death is no more compelling than the evidence indicating another manner of death.

Unintentional firearm death: A death resulting from a penetrating injury or gunshot wound from a weapon that uses a powder charge to fire a projectile when there was a preponderance of evidence that the shooting was not intentionally directed at the victim.

Victim: Person or persons who died in a suicide, violence-related homicide, legal intervention, as the result of a firearm injury, or from an undetermined manner.