

A Look at the Homicide-Suicide Relationship in the Midwest

NVDRS Committee

Background of NVDRS

- Created by CDC in 2002
- Fully funded in 2018
 - 50 states
 - Washington, D.C.
 - Puerto Rico
- Homicides, suicides, deaths of undetermined manner involving poisoning or trauma, accidental firearm-related deaths
- Web-based data entry system
- Links data from
 - Death certificates
 - Coroner/Medical Examiner case files, incl. toxicology
 - Law enforcement reports
- 5Ws + H
- >600 data items

Illinois



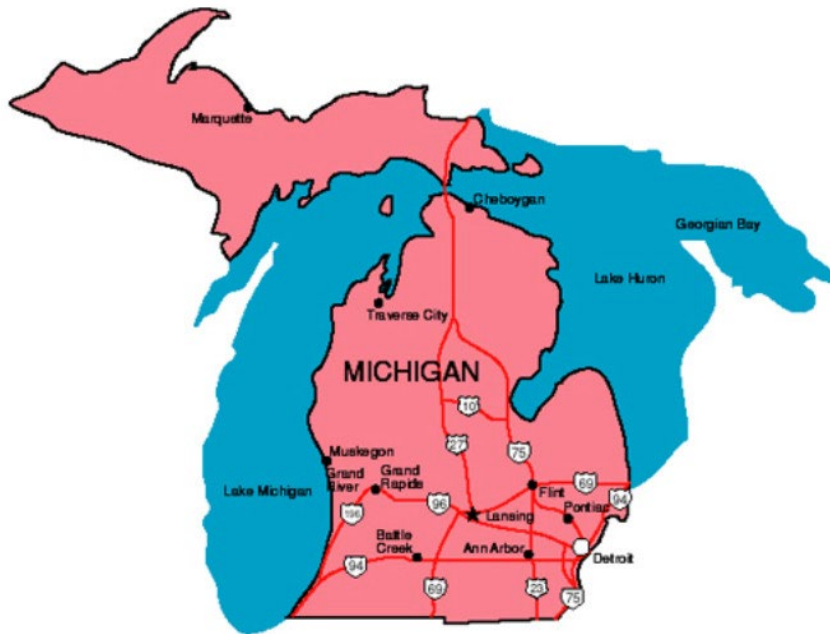
- State Population - 12.8 million (2017)
- 2015 (pilot year) and 2016
 - Began data collection in 2005 but not part of NVDRS, shadow system funded by Illinois Dept. of Public Health and The Joyce Foundation
- 1123 homicides (2016)
- 999 suicides (2016)
- 16 participating counties capturing 82% of violent deaths (2 more possible)



Indiana

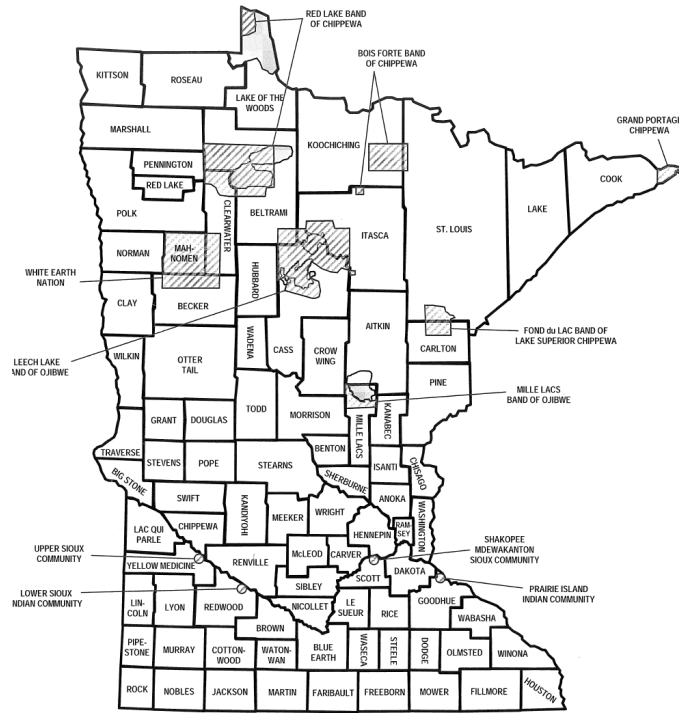
- State Population – 6.63 million (2016)
- 2015 (pilot year) to Current
- 92 counties, 100% captured
- 551 homicides (2016)
- 1,042 suicides (2016)

Michigan



- State Population – 9,928,300 million (2016)
- 2010 to Current
- 83 counties, 100% captured
- 605 homicides (2016)
- 1,281 suicides (2016)

Minnesota



- 87 Counties, 11 Tribes
- 5.6 million, about 60% live in Minneapolis-St. Paul metro area
- 84% Caucasian, 6% Black, 5% Asian, 1% Native American, 4% other or two or more races
- 2015 & 2016 NVDRS data, 100% state
- 132 homicides (2016)
- 745 suicides (2016)



Ohio

- State Population – 11,622,554 (2016)
- 2010 (pilot year) to Current
- 88 counties, 100% captured
- 726 homicides (2016)
- 1,706 suicides (2016)

Demographics – Homicide Decedent

	Minnesota	Ohio	Indiana	Michigan	Illinois	TOTAL
Sex						
Female	13	4	15	17	16	65
Male	3	26	7	5	4	45
Age						
0-19	4	3	0	1	3	11
20-39	3	14	10	9	4	40
40-59	5	10	7	8	8	38
60+	4	3	5	4	5	21

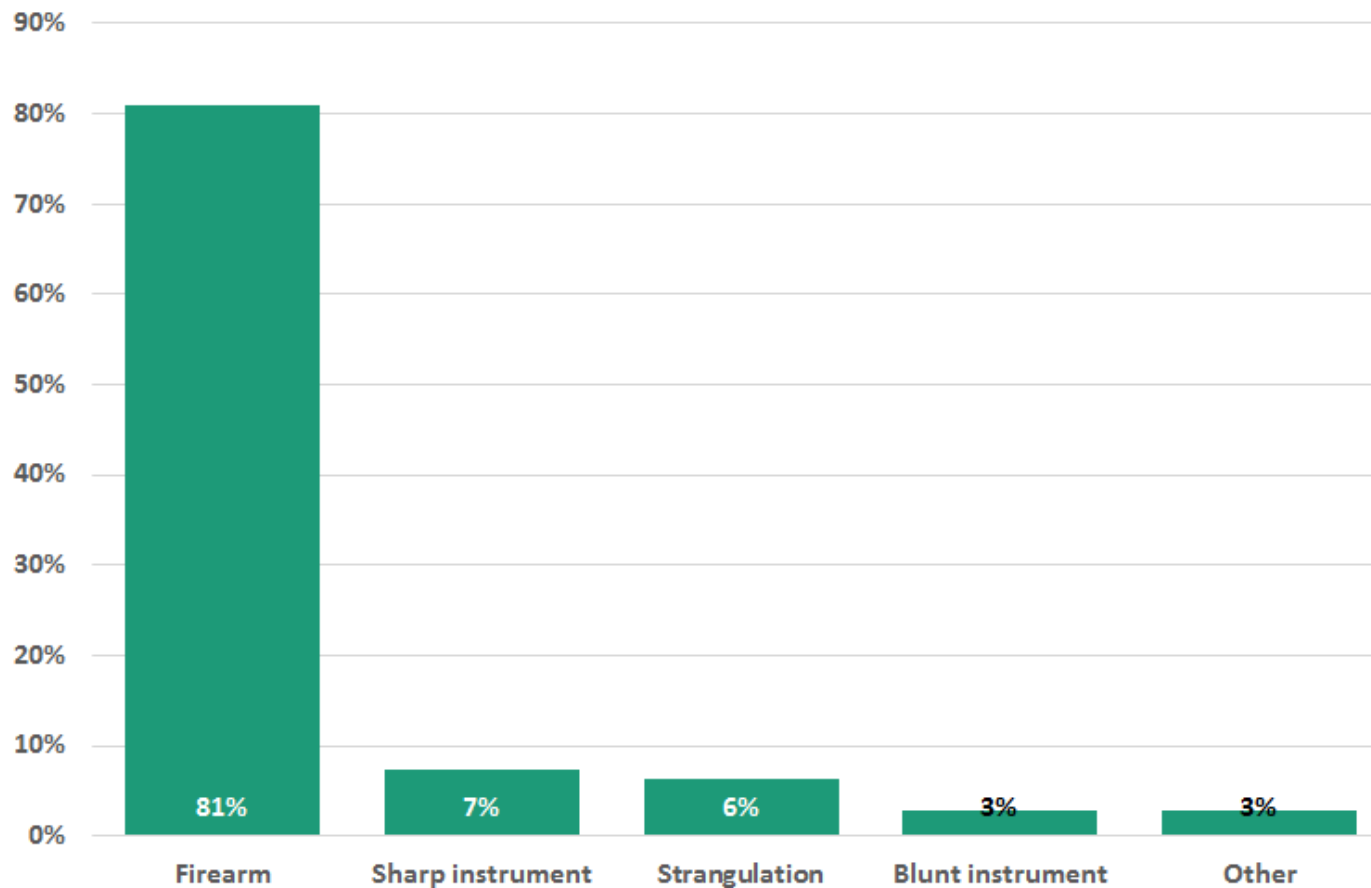
Demographics – Victim-Suspect Decedent

	Minnesota	Ohio	Indiana	Michigan	Illinois	TOTAL
Sex						
Female	0	1	2	3	1	7
Male	15	27	17	18	17	94
Age						
0-19	1	2	0	1	0	4
20-39	4	10	10	9	5	38
40-59	5	13	6	7	8	39
60+	5	3	3	4	5	20

Mechanism of Fatal Injury - Homicide Decedent

	Minnesota	Ohio	Indiana	Michigan	Illinois	TOTAL
Firearm	9	27	20	20	13	89
Sharp instrument	0	1	2	1	4	8
Blunt instrument	3	0	0	0	0	3
Strangulation/Suffocation	2	2	0	1	2	7
Other	2	0	0	0	1	3
TOTAL	16	30	22	22	20	110
% Firearm	57%	90%	91%	91%	65%	81%

Mechanism of Fatal Injury - Homicide Decedent



N=110

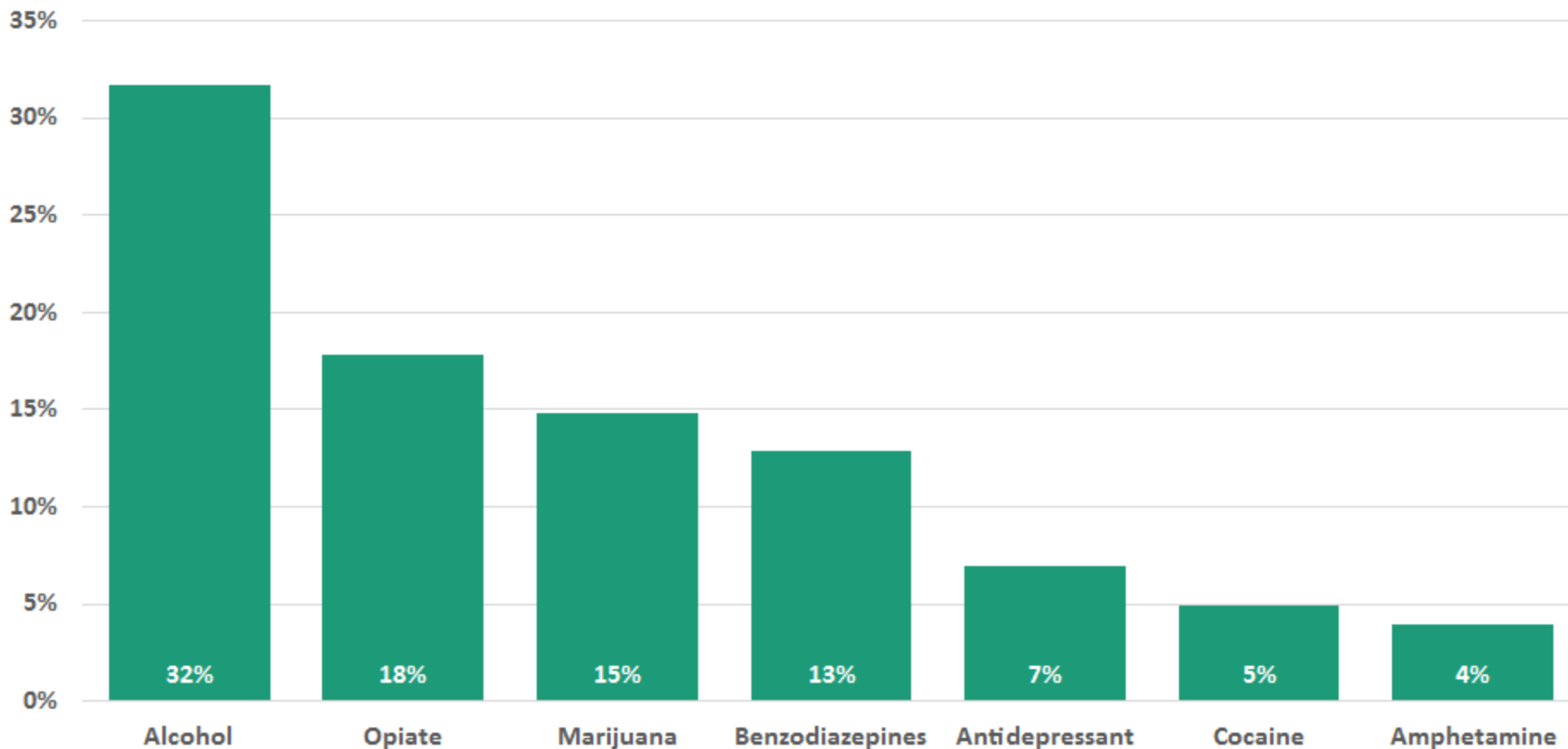
Number of Wounds - Homicide Decedent

	Minnesota	Ohio	Indiana	Michigan	Illinois	TOTAL
1	1	10	7	5	2	25
2	3	2	7	5	5	22
3+	6	12	6	7	5	36
Multiple, Unspecified	0	1	0	3	5	9
Unknown/Not applicable	2	3	2	1	3	11
Most common number of wounds	3+	3+	1-2	3+	2+	3+

Toxicology – Victim-Suspect Decedent

	Minnesota	Ohio	Indiana	Michigan	Illinois	TOTAL
Alcohol	5	10	2	9	6	32
Marijuana	1	4	4	4	2	15
Opiate	3	3	6	5	1	18
Benzodiazepines	1	3	4	3	2	13
Amphetamine	1	2	1	0	0	4
Antidepressant	2	2	1	0	2	7
Cocaine	1	1	1	2	0	5
Antipsychotic	0	0	0	0	0	0

Percent of Victim-Suspect Decedents Testing Positive for Various Substances



N=101

BAC – Victim-Suspect Decedent

	Minnesota	Ohio	Indiana	Michigan	Illinois	TOTAL
Less than 0.079	0	5	0	3	4	12
0.080 - 0.159	3	2	1	3	1	10
0.160 and greater	2	2	1	3	1	9
Unknown	0	1	0	4	0	5

Victim's Relationship to the Suspect

	Minnesota	Ohio	Indiana	Michigan	Illinois	TOTAL
Current or former intimate partner	10	17	14	15	14	70
Child	2	4	1	0	2	13
Parent	3	2	2	3	1	10
Other	1	6	4	3	2	17
Unknown	0	1	1	1	1	4
% intimate partner	63%	57%	64%	68%	70%	61%

Circumstances

	Minnesota	Ohio	Indiana	Michigan	Illinois	TOTAL
IPV- Related	10	21	15	15	13	74
Argument During Injury	0	11	1	3	4	19
Argument Before Injury	1	2	0	0	0	3
Jealousy	1	1	1	3	1	7
Divorce		6	7	2	3	
Financial Problem		0	1	2	1	
Job Problem		2	1	1	1	
% IPV-Related		75%	75%	71%	72%	



Common
Themes

Most incidents
involve intimate partners

Most victim/suspects are
male

Prevention

This type of event is complex and rare

Focus on homicide-only or suicide-only prevention

Can we intervene after the homicide before the suicide?

Focus on domestic violence prevention



Panel Questions

Thank you!