Law Enforcement-Involved Fatal Encounters (LEIFE)

Key Findings

- In Montana, there were 79 LEIFE cases identified from 2019-2023.
- A new CSTE surveillance definition allowed this study to identify over twice as many cases compared to past surveillance practices.
- Eighty five percent of LEIFE deaths were caused by firearms.
- In half of the identified LEIFE cases, law enforcement was attempting to apprehend a crime suspect or respond to a report of crime or suspicious activity.

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Law Enforcement-Involved Fatal Encounters (LEIFE) in Montana, 2019-2023

Introduction

Each year in the United States, there are approximately 1,000 deaths associated with law enforcement encounters.[1,2] In injury surveillance, deaths are classified by mechanism (the energy transfer that caused the injury) and intent (whether the injury was purposefully caused and, if so, by whom). Intent categories include unintentional (injury occurred without intention of causing damage), suicide (intentional self-harm), homicide (intentional injury inflicted by another person), and legal intervention (intentional injury inflicted by law enforcement).

In the past, Montana Department of Public Health and Human Services and Public Health and Safety Division (PHSD) used the legal intervention intent category to report on deaths associated with law enforcement encounters. Recognizing that the "legal intervention" intent category alone was not sufficient to describe the full spectrum of deaths associated with law enforcement encounters, the Council of State and Territorial Epidemiologists (CSTE) introduced an additional label, law enforcement-involved fatal encounters (LEIFE) in 2022, designed to capture all community member deaths associated with a law enforcement encounter regardless of the injury intent.[3] Applied alongside the standard injury intent category, the LEIFE case definition (Figure 1) is a more accurate measurement of law enforcement-involved fatalities. This is important because it can help drive the development and evaluation of evidence-based public health strategies to prevent future deaths.[4] The purpose of this report is to determine LEIFE death occurrences in Montana from 2019-2023 and describe the LEIFE identification process.

Figure 1. Law enforcement-involved injuries and fatal encounters (LEIFE) case definition and injury intent categories

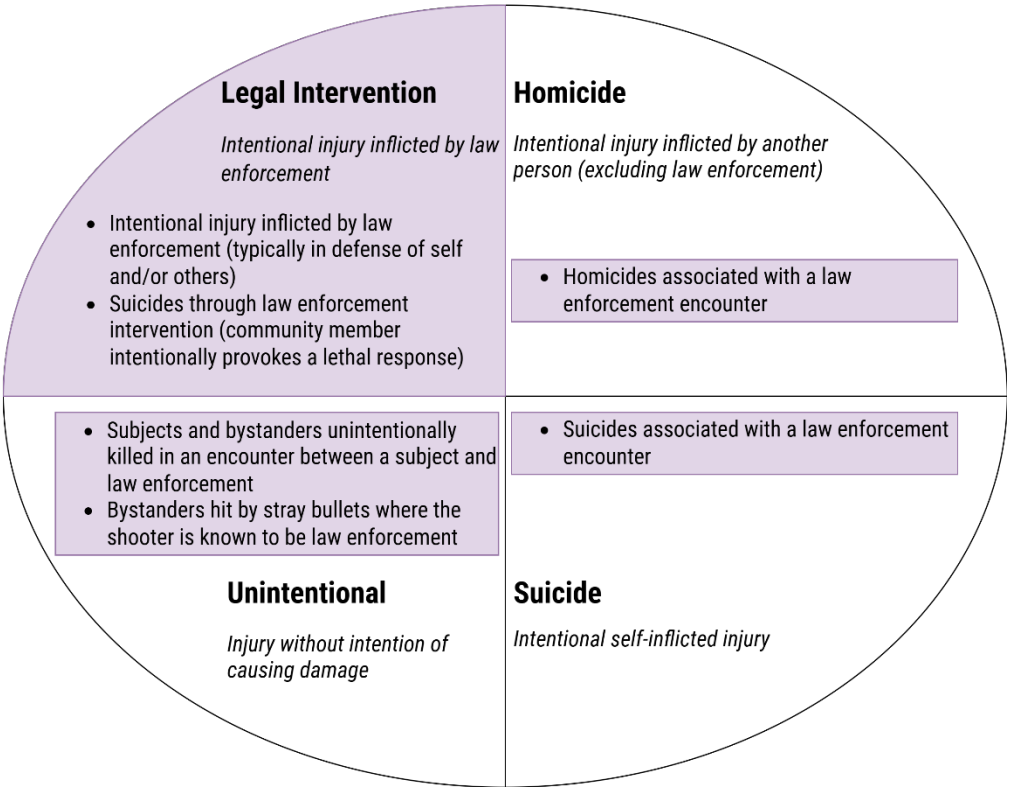
Law Enforcement Involved Injuries and Fatal Encounters (LEIFE) shown in purple

Excluded from LEIFE:

- Deaths occurring to people who are incarcerated (held in a prison, jail, or detention center)
- Legal executions
- Deaths occurring to law enforcement personnel

Additional Definitions:

- Subject: Person who is suspected of possible criminal activity or is of interest to law enforcement during the encounter
- Bystander: Person who is present but not substantively involved in contributing to or causing the encounter
- Law Enforcement Personnel: Police officers, sheriffs, state troopers, active military, correctional officers, state/federal agents, and private security guards who, whether on- or off-duty, are acting in a law enforcement capacity



Note: In 2023, Montana amended 46-4-205, MCA to allow coroners, juries, or prosecutors to consider evidence suggestive of suicide through law enforcement intervention, and to disclose such information either by jury verdict or prosecutorial discretion.

Methods

The Montana Department of Public Health and Human Services utilized several data sources to identify LEIFEs that occurred in Montana from 2019-2023, including:

- Death certificates from the Office of Vital Records[5] were searched for the presence of any underlying or contributing cause of death, ICD-10 code of Y35.0–Y35.4, Y35.6-Y35.9. Legal execution (Y35.5) was excluded. Death certificate free-text fields (cause of death description and injury description) were also searched for the presence of terms related to law enforcement[a], prison[b], and other related concepts[c].
- Montana Violent Death Reporting System (MT-VDRS)[6] records were searched for any death with "abstractor death manner" of legal intervention.
- Open-sourced surveillance databases aggregated by independent researchers (Fatal Encounters[7] and Mapping Police Violence[8]) were searched for any cases occurring in Montana.
- Montana Crime Lab autopsies performed were searched for in-custody deaths with "police presence" (deaths where the injury was not directly inflicted by law enforcement). The Crime Lab obtains information about police presence from coroner reports.

After ascertaining and merging potential LEIFE cases from these data sources, each case was reviewed to determine whether it met the CSTE LEIFE case definition. False-positive cases were removed from the analysis, thus obtaining the total number of LEIFEs. Each data source was analyzed to determine its effectiveness for identifying LEIFE. The demographics of the decedents were analyzed, along with the injury mechanism, intent, and other circumstances surrounding the death. Age-adjusted mortality rates with 95% confidence intervals (CIs) by race were calculated to identify disparities.

Results

79 LEIFEs were identified in Montana from 2019-2023. Table 1 shows deaths by decedent sex, age group, race/ethnicity, and year. Over 90 percent of the decedents were male, and over 90 percent were aged 18 to 64 years. About two-thirds were white, non-Hispanic individuals (N=53), while just under one-third (N=22) were American Indian or Alaskan Native (AI/AN) individuals. Other racial groups made up a small percentage (N=4).

The overall age-adjusted LEIFE mortality rate was 1.6 per 100,000 residents (95% CI 1.3-2.0). Age-adjusted LEIFE mortality among the AI/AN population was 7.1 per 100,000 (95% CI 4.4-11.3), which was significantly higher than among the white population (1.2 per 100,000, [95% CI 0.9-1.6]) (Figure 2).

Fifty percent of LEIFEs fell under the legal intervention intent category (N=40), one-third were suicides (N=26), 11 were unintentional, and 2 were homicides (Table 1). Firearms were the most common mechanism of injury, accounting for 85 percent of LEIFEs (N=67), followed by motor vehicle crashes (Figure 3).

[a] Law enforcement, police, cop, sheriff, sherriff, officer, MHP, patrol, LEO
[b] Prison, inmate, convict, detain, criminal, jail, custody, probation, parole
[c] Guard (excluding guardrail and guard rail), vice, bystander, suspect, security, teargas, tear gas, manhandl, arrest (excluding cardiac/respiratory arrest), pursuit, armed, baton, handcuff, riot, taser, tazer, excited delirium, agitated delirium

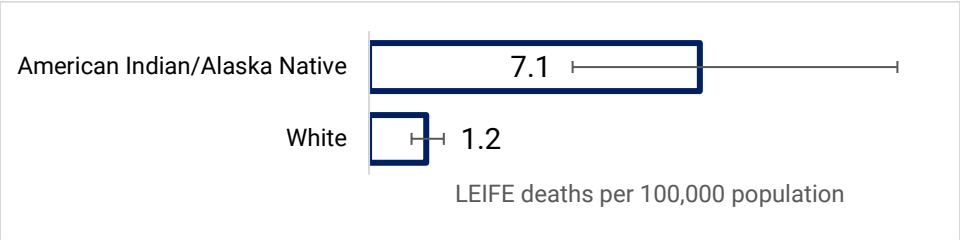
Table 1. Demographic characteristics of LEIFE decedents by intent category, Montana occurrences, 2019-2023

	Legal Intervention		Homicide		Suicide		Unintentional		Total	
Group	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
All Deaths (% of total)	40	50.6%	2	2.5%	26	32.9%	11	13.9%	79	100%
Sex										
Male	38	95.0%	0		25	96.2%	10	90.9%	73	92.4%
Female	2	5.0%	2	100%	1	3.8%	1	9.1%	6	7.6%
Age										
0-17	0		0		0		3	27.3%	3	3.8%
18-24	4	10.0%	1	50.0%	5	19.2%	1	9.1%	11	13.9%
25-44	26	65.0%	1	50.0%	10	38.5%	3	27.3%	40	50.6%
45-64	9	22.5%	0		9	34.6%	3	27.3%	21	26.6%
65+	1	2.5%	0		2	7.7%	1	9.1%	4	5.1%
Race*										
White	24	60.0%	2	100%	21	80.8%	8	72.7%	53	67.1%
AI/AN	13	32.5%	0		4	15.4%	3	27.3%	22	27.8%
Other	3	7.5%	0		1	3.8%	0		4	5.1%
Year										
2019	7	17.5%	1	50%	4	15.4%	3	27.3%	15	19.0%
2020	11	27.5%	0		6	23.1%	2	18.2%	19	24.1%
2021	7	17.5%	1	50%	5	19.2%	3	27.3%	16	20.3%
2022	7	17.5%	0		3	11.5%	2	18.2%	12	15.2%
2023	8	20.0%	0		8	30.8%	1	9.1%	17	21.5%

Note: Intent displayed in this table is based on manual review.

**Bridged race methodology used for 2020 and earlier, single race methodology used for 2021 and later.*

Figure 2. Age-adjusted LEIFE mortality rate per 100,000 population by race, Montana occurrences, 2019-2023



Note: Error bars indicate 95% confidence intervals. Bridged race methodology used for 2020 and earlier, single race methodology used for 2021 and later.

Figure 3. Number of LEIFE Deaths by injury mechanism, Montana occurrences, 2019-2023

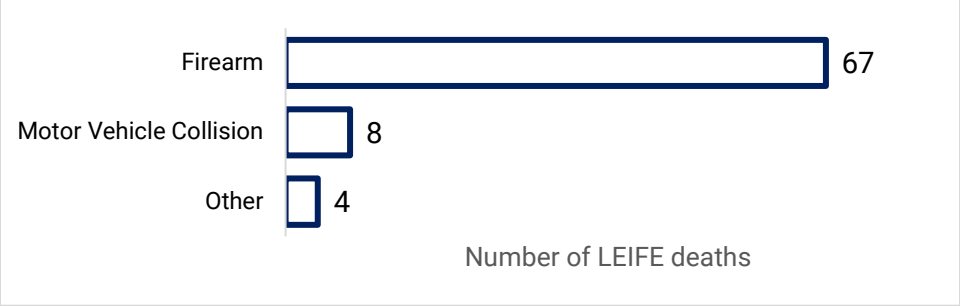


Table 2 shows selected circumstances surrounding LEIFEs according to MT-VDRS and open-sourced databases. The most common reason for law enforcement was "attempt to apprehend a crime suspect" (27%). The decedent used a weapon in 88 percent of legal intervention LEIFEs. In 28 percent of cases, the decedent had a current diagnosed mental health condition or other mental health issue. In 71 percent of cases, the decedent's toxicology report identified substances present.

Table 2. Circumstances surrounding LEIFE deaths, Montana occurrences, 2019-2023

	Legal Intervention		Other Intent		Total	
Circumstances					**N**	**%**
Reason for law enforcement response						
Attempt to apprehend crime suspect	14	35.0%	7	17.9%	21	26.6%
Response to a report of crime or suspicious activity	13	32.5%	6	15.4%	19	24.1%
Attempt to conduct a traffic stop	4	10.0%	10	25.6%	14	17.7%
Response for welfare check or mental health crisis	4	10.0%	8	20.5%	12	15.2%
Attempt to serve arrest or search warrant	3	7.5%	4	10.3%	7	8.9%
Other/unknown	2	5.0%	4	10.3%	6	7.6%
Decedent Used Weapon						
Yes	35	87.5%	0		35	44.3%
No	5	12.5%	39	100.0%	44	55.7%
Mental Health Circumstances						
No documented mental health-related circumstances	34	85.0%	23	59.0%	57	72.2%
Current diagnosed mental health condition	2	5.0%	9	23.1%	11	13.9%
Current depressed mood	1	2.5%	5	12.8%	6	7.6%
Other mental health-related circumstances	3	7.5%	2	5.1%	5	6.3%
Toxicology						
Substances identified	34	85.0%	22	56.4%	56	70.9%
No substances identified or no toxicology report	6	15.0%	17	43.6%	23	29.1%
Total	**40**	**100.0%**	**39**	**100.0%**	**79**	**100.0%**

Note: 'Decedent used weapon' is coded as yes for any legal intervention if the decedent was armed with a weapon and used it either to attack another person or to defend against another person during the incident.

No single data source captured all LEIFE cases (Table 3). Open-sourced databases identified the most cases (67%) out of any data source. Past PHSD surveillance practice of searching death certificates for legal intervention ICD-10 codes identified 43 percent of LEIFE deaths. Data source effectiveness varied by intent. The Crime Lab was most effective at identifying LEIFE deaths not categorized as legal intervention, including homicide (50%), suicide (92%), and unintentional (73%).

Table 3. Confirmed LEIFE fatalities by intent captured by each data source, Montana occurrences, 2019-2023

Group	Legal Intervention		Homicide		Suicide		Unintentional		Total	
	N	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
All Deaths	**40**	**100.0**	**2**	**100.0**	**26**	**100.0**	**11**	**100.0**	**79**	**100.0**
Data source										
Death Certificate – LI Code only*	33	82.5%	0		0		1	9.1%	34	43.0%
Death Certificate – LI code + text search	33	82.5%	1	50.0%	2	7.7%	4	36.4%	40	50.6%
Violent Death Reporting System	36	90.0%	0		0		0		36	45.6%
Open-Sourced Databases	38	95.0%	2	100.0%	10	38.5%	3	27.3%	53	67.1%
Crime Lab - Police Presence	2	5.0%	1	50.0%	24	92.3%	8	72.7%	35	44.3%

Note: Table 3 summarizes the effectiveness of using various data sources to identify LEIFE deaths. LI stands for legal intervention. (*) denotes past surveillance standard practice. Overall, open-sourced databases identified the most LEIFE cases (67.1%). Crime Lab identified the most suicide LEIFEs. Intent categories displayed in this table are based on manual review.

Discussion

This report expands on past DPHHS surveillance practices, which only included 43% of legal intervention deaths ascertained via death certificate ICD-10 codes (N=34). When looking solely at legal intervention deaths nationally, the state of Montana had the second-highest age-adjusted mortality rate (0.71 per 100,000) after New Mexico from 2019-2023. For comparison, the U.S. rate of legal intervention death was 0.23 per 100,000 (N=3,727) from 2019-2023 .[9]

By implementing the LEIFE surveillance definition across various data sources, we discovered over twice as many LEIFE cases compared to past surveillance practice, highlighting how reliance on any single data source is not sufficient for complete case ascertainment. Additional LEIFE cases (compared to past surveillance practices) that this project identified include:

- 26 (33%) suicides where law enforcement was present when the decedent died by suicide
- 10 (13%) deaths where the decedent unintentionally suffered fatal injuries during a pursuit with law enforcement or when law enforcement was present
- Two (3%) homicides where the decedent was killed by a subject that was being pursued by law enforcement
- Seven (9%) legal intervention deaths that were incorrectly coded on the death certificate

The 26 LEIFE suicides comprised over half of the 46 additional LEIFEs identified and represented 1.6% of all suicides in Montana from 2019-2023. Montana consistently has one of the highest suicide rates in the U.S., and this analysis shows an intersection between suicide and law enforcement presence that has not been previously explored and could represent an opportunity for suicide prevention.

A recent study published in the American Journal of Public Health, which looked at fatal and nonfatal injuries inflicted by law enforcement personnel, found that injuries associated with physical threats or threat-making behavior, behavioral health needs, and welfare checks were most likely to have a fatal outcome.[1] We found that 15 percent of LEIFEs (N=12) were preceded by a law enforcement response for welfare or mental health checks. Of those, four ended in a legal intervention death (two decedents used a weapon and had a current diagnosed schizophrenia, and two did not use a weapon), and eight ended in suicide or unintentional death. This highlights a potential opportunity for LEIFE prevention through alternative approaches such as diversion to mental health services or police and mental health co-response models.

Limitations

We do not know whether we have identified all LEIFE cases. The analysis was limited by data quality issues within the various data sources, including:

- Death certificates: lack of detail in free text fields, inaccurate coding
- MT-VDRS: varying quality of data abstraction across staffing changes
- Open-sourced databases: Fatal Encounters database ceased to operate after 2021

Nonfatal injuries were not inlcuded in the analysis.

Prevention Strategies

This analysis has identified previously unknown circumstances that contribute to deaths in the presence of law enforcement. With these insights, law enforcement agencies in partnership with behavioral health experts can develop or revise prevention strategies.

Law enforcement agency culture & training

- Align use-of-force policy, practice, and culture
  - Ensure that best-practice training is reinforced throughout an officer's career and is reflected in day-to-day agency culture. This includes use-of-force scenario-based training in alignment with department policy and local/state/federal laws, while keeping up with current trends and national policy designed to guide departments at all levels of community interaction.
- Support officer wellbeing
  - Establish peer support networks, routine mental-health checkups, and stress management resources.
- Strengthen recruitment
  - Hire top-quality individuals with intensive background investigations, even amid staffing challenges.

Mental health services access

- Reduce stigma
  - Offer workshops, school programs, and public campaigns to normalize help-seeking.
- Expand suicide prevention efforts
  - Run awareness campaigns and promote 988 as a front-line resource.

Alternative response pathways

- Improve dispatch triage protocols
  - Create clear dispatcher guidelines and decision trees to identify non-criminal welfare or mental health check calls.[10]
- Integrate non-police mobile crisis units
  - Build capacity to deploy public health-informed alternative response teams for calls diverted away from law enforcement.[10,11]

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