

2001-
2022

WORKPLACE VIOLENCE IN MONTANA



Analysis and
Interpretation
of Workers'
Compensation
Data

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LABOR & INDUSTRY

Every year, the Montana Department of Labor & Industry (DLI) receives hundreds of reports of injuries caused by acts of violence. The incidents that lead to these injuries vary substantially; they include law enforcement officers apprehending suspects, nurses restraining combative patients, teachers disciplining unruly students, coworkers escalating arguments into fights, and so forth. Regardless of what causes the injury, the result is overwhelmingly negative for the worker, their workplace, and their community. However, despite the importance of understanding how violence occurs and what can be done to prevent it, little research has been published on the issue, especially at the state level.

This report examines the prevalence of workplace violence in Montana from data on workplace injuries reported to DLI between 2001 and 2022. While not a comprehensive analysis of workplace violence, it develops an understanding of how violent incidents occur and result in harm to workers using quantitative data. Specifically, this report finds:

- Injuries from workplace violence comprise a small percentage of all reported workplace injuries, but both the number and the percentage of workplace injuries caused by violence increased in recent years.
- Roughly 90% of injuries from workplace violence were recorded by healthcare professionals, social workers, educators, police officers, and corrections officers.
- Less than 10% of injuries from workplace violence resulted in workers' compensation payments for time missed from work.

The goal of this report is to raise awareness about workplace violence for the benefit of various groups affected by it. For policymakers, the data analysis should assist in making decisions to improve reporting and response policies. For workers and employers, the findings of this report can help improve workplace safety practices. Ultimately, the information provided should help decrease the prevalence and severity of violence in Montana workplaces.

Background & Analysis Design

The U.S. Occupational Safety and Health Administration (OSHA) defines workplace violence as “any act or threat of physical violence, harassment, intimidation, or other threatening disruptive behavior that occurs at the work site.”¹ This definition is useful for workers and employers to recognize all the potentially harmful interactions that can occur in workplaces. However, it makes collecting comprehensive data on workplace violence very difficult, as many workplaces lack the capacity to record all violent incidents. Therefore, data on workplace violence is often limited to the most severe incidents; for example, OSHA cited research from the U.S. Bureau of Labor Statistics (BLS), which found workplace violence accounted for the third-greatest cause of workplace fatalities in their 2021 Census of Fatal Occupational Injuries.²

All First
Reports
of Injury

Injuries
from
Workplace
Violence

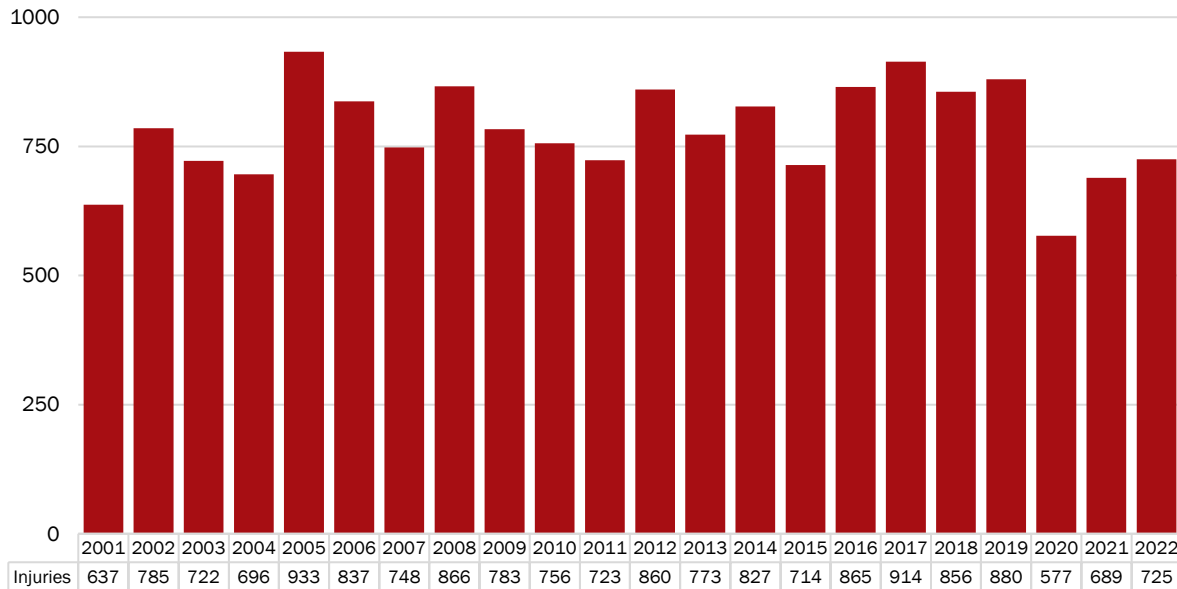
All Acts of
Workplace
Violence

To examine the issue of workplace violence in Montana, DLI took a similar approach to OSHA and used available data on workplace injuries to capture a subset of instances of workplace violence. DLI gathered data from the

Montana Workers' Compensation Administration Network (WCAN) using a query of keywords which indicated violence had occurred to cause the injury. This information was supplemented with federal and state data to examine details including injury rate, industry / occupational injuries from violence, and presumed injury severity.

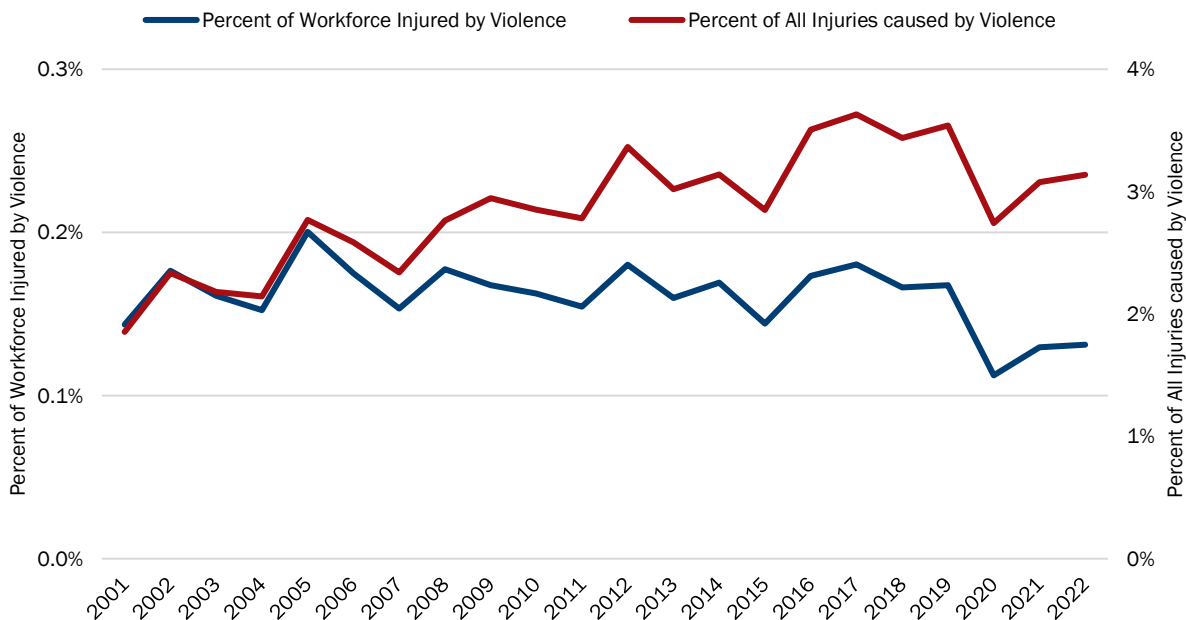
Findings

Figure 1: Count of Injuries from Workplace Violence by Year



Since Montana began using WCAN to record injuries in 2001, DLI has received notice of over 17,000 workplace injuries caused by acts of violence. Figure 1 displays annual counts of injuries from violence, indicating several hundred incidents each year. DLI recorded a gradual increase in violent injuries offset by a drop in 2020, an outlier year during which the Covid-19 pandemic impacted employment and workers' compensation substantially.³

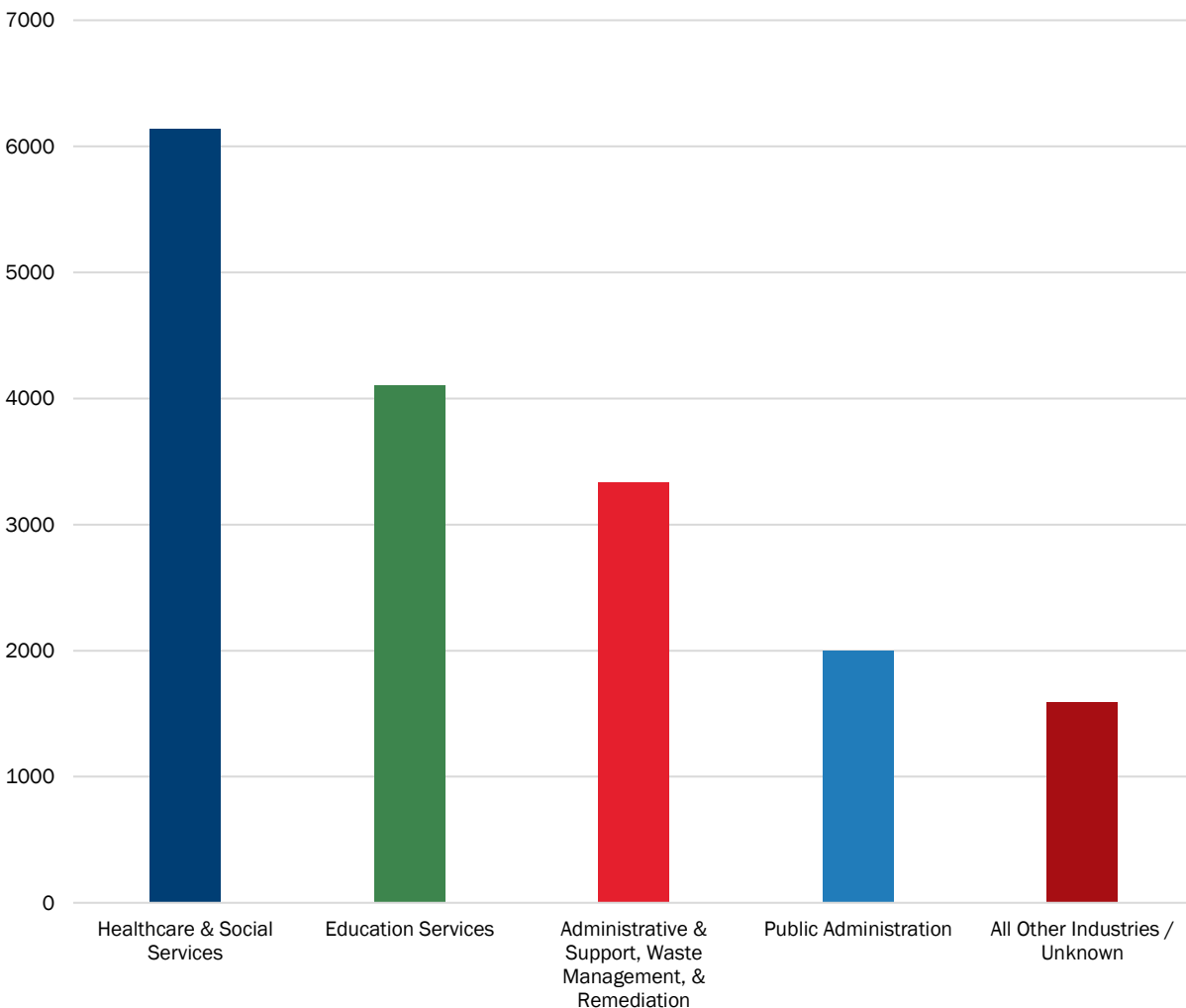
Figure 2: Rates of Injury from Workplace Violence



The count of workplace injuries caused by violence can also be examined as a rate using other data such as the number of workers (which generally increased during these years) and the number of workplace injuries from all causes (which generally decreased during these years).

Dividing violent injuries by these numbers creates the two trendlines in Figure 2. The first, injuries from violence per worker, indicates 1-2 injuries from violent acts occurring per 1,000 workers. This rate also gradually decreased from 2001 to 2022, as employment in Montana increased nearly 20% while the number of injuries from violence remained mostly unchanged.⁴ However, the second trendline shows injuries from acts of violence increased as a percentage of all injuries, rising from under 2% of injuries in the early 2000s to over 3% in the late 2010s and early 2020s. Prior DLI research has established that workplace injuries are becoming less frequent in Montana, but this trend did not occur for injuries from violence, resulting in the increased percentage of all workplace injuries attributable to violence.⁵

Figure 3: Injuries from Violence by Industry




The threat of workplace violence varies most significantly when examining occupational information. Sorting all workplace injuries from acts of violence according to industry classification, DLI found that a few specific industries accounted for most injuries from violence. Figure 3 provides a count of injuries from violence by North American Industry Classification System (NAICS) code, identifying four industries that account for over 90% of injuries caused by workplace violence: healthcare and social services, education, administrative and support services, and public administration.

Even within these industries, specific occupations experience workplace violence at greater rates than others. DLI used information on job title and employer to identify which workers reported the most instances of workplace violence, presented in the infographic below.

OCCUPATIONS MOST AFFECTED BY WORKPLACE VIOLENCE

HEALTHCARE AND SOCIAL SERVICES

Nurses and long term care assistants were most affected by workplace violence in healthcare, while group home or charity workers experienced the most workplace violence for social services.

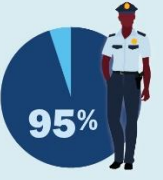



EDUCATION

95% of workplace violence in education targeted teachers and paraeducators in public K-12 schools. The remaining 5% included other K-12 staff, such as nurses, janitors, secretaries, and administrators.

ADMIN. & SUPPORT, WASTE MANAGEMENT AND REMEDIATION

Nearly all support staff impacted by workplace violence had job duties similar to those of the other 3 major industries. In particular, over 85% worked supporting healthcare workers in group-home settings.




PUBLIC ADMINISTRATION

Police or correctional officers accounted for 95% of the workplace violence injuries in public administration. The remaining 5% was mostly firefighters or paramedics.

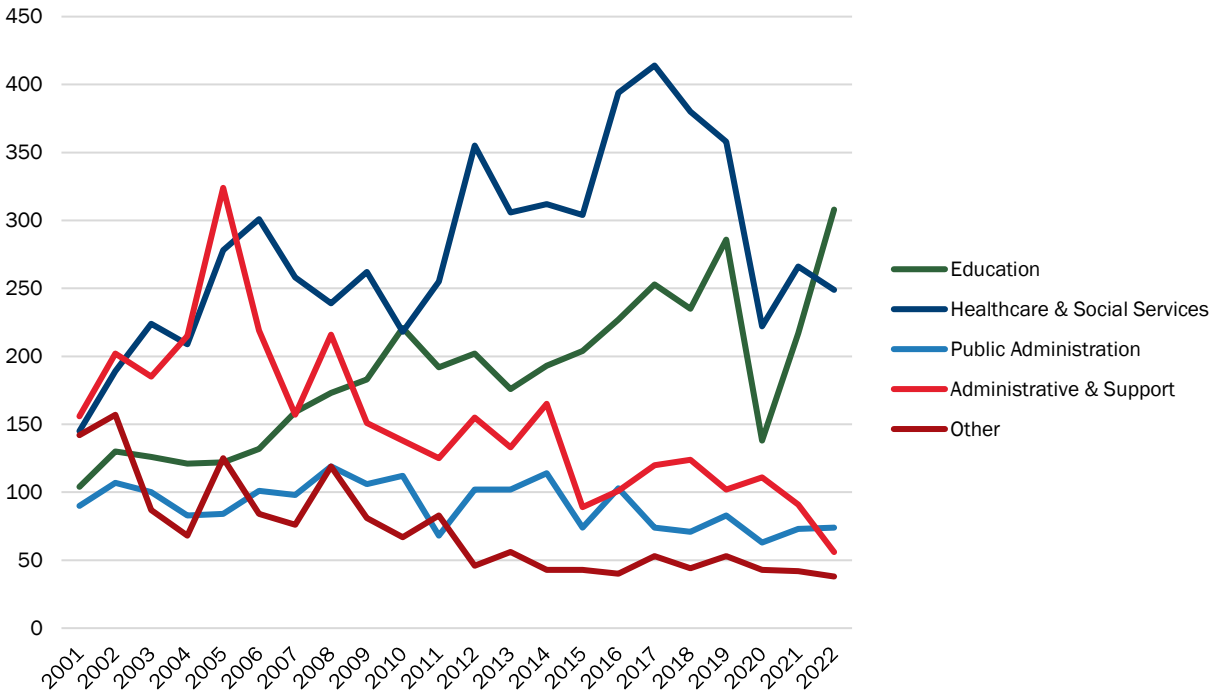
ALL OTHER & UNKNOWN

Other occupations more likely to experience workplace violence include food service workers, hotel staff, retail associates, and construction workers. Also, 1 in 4 injury reports did not include sufficient occupational information.



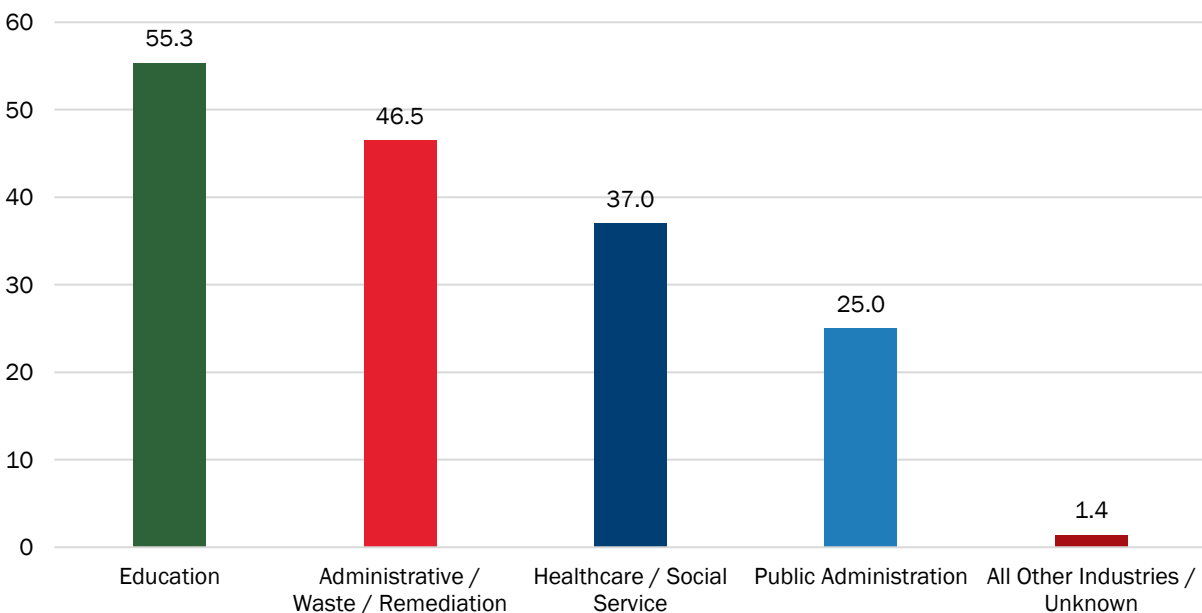
The prevalence of violent injury has changed over time in these industries, as illustrated in Figure 4. Specifically, injuries from violence have increased in education as well as healthcare and social services. By contrast, injuries from violence have decreased slightly for workers in public administration and substantially for workers in administrative and support services.

Figure 4: Injuries from Workplace Violence by Industry, 2001 - 2022



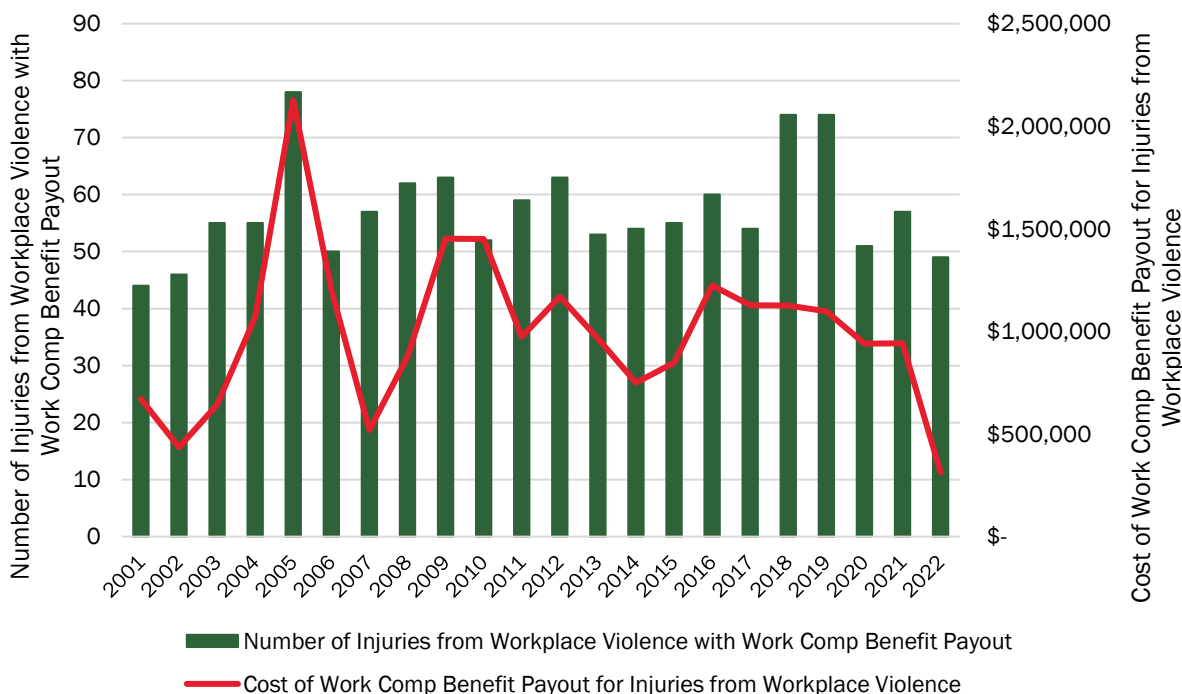
Additionally, the number of workplace injuries from acts of violence can be compared to total employment to better understand the rate of injury. Figure 5 provides these rates for each major industry in 2021, the first year with comprehensive public-sector employment data available. While these rates are still fairly low and need to be counted per 10,000 workers to be easily conceptualized, the rate analysis illustrates the discrepancy between high-risk industries and all others, with high-risk industries all experiencing injuries from workplace violence at over 10 times the rate of other industries.

Figure 5: Injuries from Violence per 10,000 Employees (2021)



Finally, workers' compensation data can provide some information on costs associated with workplace violence, specifically the payments made to workers injured severely enough to require time away from work. Figure 6 provides information on these injuries and their cost-to-date (cost figures are subject to change over time). Only about 7.3% of injuries from acts of violence resulted in a workers' compensation lost-time payout, slightly lower than the ~11.2% of all workplace injuries that result in this form of payout.

Figure 6: Work Comp Costs for Injuries from Workplace Violence



Discussion

The results of this analysis are mixed, providing some concerning insights alongside more encouraging ones. First, when considering the scale of the issue, Montanans should be aware of the increasing role workplace violence plays in leading to workplace injury, particularly in occupations and industries identified as high-risk. However, these fears should be kept in check by the low number of reports of workplace violence compared to other causes of injury, along with the understanding workplaces are generally becoming less hazardous.

Montanans also should recognize the declining risks of workplaces are largely due to the focused efforts of employees, employers, insurers, and government to reduce threats to worker health and safety; just as the hazards posed by heavy machinery, fall prevention, and proper handling of materials have led to safety awareness efforts in the past, workers today can reduce the threat of workplace violence through hazard mitigation. These efforts will include an analysis of the factors that precede violent incidents, the techniques for avoiding violent incidents or controlling them should they occur, and the necessary steps to take after an incident for care and documentation.

In examining the industries most affected by workplace violence, one factor stands out: many professions seeing higher numbers of injuries from workplace violence work closely with customers whose behavior can be difficult to predict. These individuals include short- or long-term patients, students, and inmates. Regardless of whether these individuals intend to cause

harm, the proximity of workers to these individuals can easily cause behavioral episodes to harm workers. Additionally, some of the injuries from violence were attributable to factors identified by OSHA as preceding workplace violence, including working with people under the influence of drugs or alcohol, handling cash in the course of work, conducting work in isolated environments, and working at night. By determining if these factors are present in the workplace, employers and employees can begin to recognize where the danger of workplace violence is great enough to require specific attention.

Finally, considering information on the cost of workplace violence (which can also be seen as an indicator of injury severity), the low percentage of violent injuries requiring workers' compensation benefit payout also has positive and negative ramifications. The small number of injuries resulting in missed time from work ideally means most instances of violence are not causing substantial physical harm to workers. However, this ignores the psychological impact of stress on both human health and occupational desirability. Highlighting the comparatively low "official cost of workplace violence" creates a risk of forgetting even no-cost incidents of violence disrupt work and demoralize workers.

While this report helps advance public understanding of the impact workplace violence has, there are numerous limitations to the data and the analysis, including:

- Workers' compensation data only captures injuries from workplace violence, as compared to instances of violence which did not result in injury to the worker;
- Workplace injuries are believed to be underreported⁶, as some workers believe reporting an incident will not help them and may result in negative repercussions;
- Workers' compensation reports frequently contain omissions or errors, including over 10% of reports lacking an accident description and therefore lacking context, as well as an unknown number of injury reports which fail to include words in the keyword description but still document violence in other language;
- The accident description of each workplace injury is highly subjective, providing only the perspective of the injured worker or their representative, and it is difficult for DLI to independently verify whether an injury occurred as a result of intentional harm versus accidental harm.

These limitations result from imperfect reporting of workplace injury and workplace violence, and there is little chance either process will ever be fully perfected. However, some changes to the process- in statute and in administration- can help reduce data loss, enhance the analysis, and improve the outcome in both understanding the issues and responding to them:

- In the Spring of 2023, the Montana Legislature passed HB 590, which required workplace violence in the healthcare sector to be reported to the Montana Department of Justice.⁷ Montana and other states could consider elevating workplace violence reporting to the same level as workplace injury by designating an agency which will receive all reports and compile the associated data, as expanding this reporting to include other industries would help provide a better understanding of the scope of workplace violence.
- Agencies could consider developing more straightforward and accessible reporting forms for workplace injury and workplace violence. Currently, reports of workplace injuries can be submitted electronically or physically, but depending on who is completing the report and how it is filled out, errors can occur. These errors impact the timeliness of insurers accepting claims and providing compensation and can also prevent analysis from being accurate. Migrating to an easy-to-use online reporting

system with resources on completing the form would help improve the data available for analysis while also helping injured workers. Once this is done for workplace injury, it could be easily replicated for a workplace violence reporting form. Montana has already begun consolidating its forms to a single public website, so this change can hopefully be accompanied in the near future.

- Lastly, government researchers should consider using more powerful data analysis and interpretation tools. Electronic databasing and querying have streamlined the process, helping store massive quantities of data in small spaces and making it easy to collect data according to determined variables. Recent developments in artificial intelligence and machine learning have opened the possibility of speeding up the cognitive element of analysis, as computers can filter data and produce conclusions in short spans of time, helping researchers arrive at conclusions that might otherwise take weeks. However, several obstacles are preventing the use of artificial intelligence, specifically concerns about whether artificial intelligence will compromise private data and whether machine learning algorithms are advanced enough to perform the desired analysis.

Workplace violence poses a challenge to every workplace, but as with all other sources of hazard in the workplace, the threat can be managed through preparation and training. By preemptively identifying areas where risk is high and taking steps to either reduce risk or to prepare for violent incidents, employers ensure their staff will be better prepared to respond quickly and effectively, helping prevent harm to employees and others and perhaps even successfully de-escalating the incident. When violence occurs, employers should plan on quickly reporting the incident and prioritizing the recovery of the worker. These steps will help make Montana a safer place for everyone to work.

The Montana Department of Labor & Industry believes every reasonable safeguard against threats to worker health and safety is worth considering. Below, DLI has compiled information on programs and organizations that can help provide Montana workers with greater protection against or skills to respond to the threat of violence in their workplace:

- The Montana Department of Labor & Industry's SafetyFest provides free training to all Montana citizens on various workplace safety topics. [See details on past and upcoming SafetyFests here.](#)
- The website of the Occupational Safety and Health Administration provides workplace violence prevention and training publications. [See OSHA's resources here.](#)
- The National Safety Council is dedicated to improving safety for Americans in their workplace and on the road. Their website includes numerous articles and datasets explaining the impact of workplace violence, along with outlining preventative steps. [See NSC's resources here.](#)

Additionally, many workers' compensation insurers have safety training resources specific to the needs of the industries they insure. If you are an employer, consider contacting your workers' compensation insurer about the resources they have for improving the safety of your workplace.

References

- 1 From OSHA, "[Workplace Violence](#)"
- 2 From BLS, "[Census of Fatal Occupational Injuries Summary, 2021](#)"
- 3 From MT DLI, "[Workers' Compensation during the Pandemic: Observations from Montana's Experience with Covid-19](#)"
- 4 From BLS, "[Montana Economy at a Glance](#)", Employment Calculated from 2001 to 2022
- 5 From MT DLI, "[Workers Compensation Annual Report 2023](#)" and "[ERD Research Hour](#)"
- 6 From Galizzi et. al., "[Injured Workers' Underreporting in the Health Care Industry: An Analysis Using Quantitative, Qualitative, and Observational Data](#)"
- 7 From the Montana Legislature, "[HB 590](#)"