Emphasizing Safety in Montana Workplaces

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Emphasizing workplace safety by reinforcing conditions and practices which reduce the risk of workplace accidents and injuries is a vital part of the approach of the Montana Department of Labor & Industry (DLI) to facilitating the employment relationship. The DLI safety programs, each designed to provide training for workers or to inspect workplaces, may be helping an observed trend in workers' compensation; recent publications from DLI (Work Comp Claim Frequency in Montana) and national organizations (Frequency and Severity Results by State 2022 and the Survey of Occupational Injuries and Illnesses) agree workplaces around the country are getting safer, and Montana is no exception. While determining the impact of DLI safety outreach on workplace injury trends is no easy feat, examining what safety programs the Department administers provides the basis for better understanding how employers might be seeing changes as a result of the emphasis on safety.

This report analyzes the past few years of DLI safety outreach efforts. It explains the multi-faceted approach the Department takes to general safety education, specific training programs, and direct examination of hazards in workplaces. It uses internal data to provide an understanding of how many Montana workers and businesses benefit from each program. It concludes that DLI safety programs, along with those offered by federal and private-sector partners, have likely contributed to the observed decline in workplace injuries, and outlines steps for determining the extent to which safety emphasis has resulted in safer workplaces.

Background

Workplace safety has always been a goal of DLI, although it frequently has been viewed as a sub-issue of workers' compensation. From 1915, when the Montana workers' compensation system was created, until the 1990s, DLI lacked any explicit statutory authority for creating a safety program. It was still in the interest of the Department, workers, and employers to ensure workplaces were operating safely, but the motivation for safety was cost avoidance. Workplace safety emphasis increased following the passage of the Occupational Safety and Health Act in 1971, which created the Occupational Safety and Health Administration (OSHA) and the Mine Safety and Health Administration (MSHA) as federal oversight authorities. It would not be until the 1980s and 1990s that a series of legislative reforms would modernize the Montana workers' compensation system to emphasize prevention of workplace injuries, with the most notable being the Montana Safety Culture Act (MSCA) of 1993.

The sections of the act, found under MCA 39-71-15, require both DLI and employers to take steps to promote safety in the workplace. The Department is tasked with implementing the following programs:

- Public safety trainings with the support of both private and government entities
- Safety education for students, provided in high schools and colleges
- Various consultation services, including both correspondences and visits, to assess worksite safety
- Safety inspection oversight for public-sector employers

The Safety and Health Bureau and Safety Outreach teams of DLI have handled the administration of these programs in the years since the MSCA passed. The law gave DLI the ability to decide how to best oversee workplace safety in Montana, which the Department exercised by creating a special training and inspection program for mining operations. Each of these programs collect annual data, which are included along with a program overview in the following section.

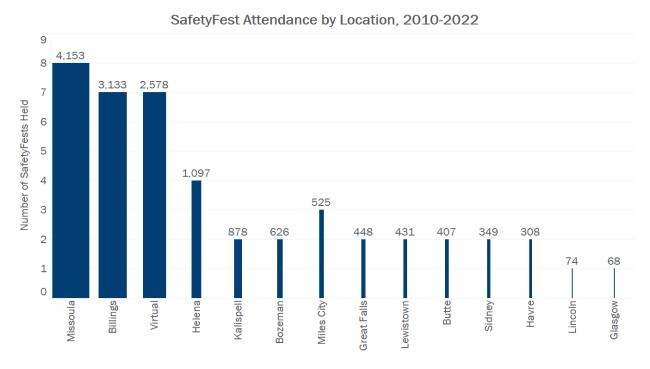
(Please note some data is sorted by fiscal year rather than calendar year. Fiscal years run from July 1 to June 30, such that FY 2022 includes data from July 1, 2021, to June 30, 2022.)



Overview of Safety Programs

SafetyFest

SafetyFest is DLI's free safety training series for workers. Each year, the Department organizes several in-person or virtual events, each with dozens of classes on safety topics. These include OSHA courses, first aid certifications, and numerous informational sessions. SafetyFest has been held almost 50 times in the past 13 years, with a total attendance of over 15,000. The number of events and total attendance by location is below.



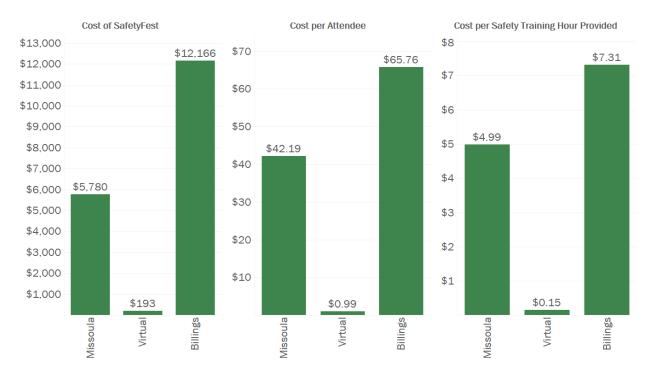
While the attendance figures are impressive, a headcount alone is not the most accurate way to determine the safety knowledge provided by SafetyFest. Recently, DLI has begun using attendance sheets in SafetyFest classes to gain a better understanding of how many classes attendees take. Below are the hours of safety training provided in the 2022 SafetyFests, as well as the average hours per attendee.



This indicates the average attendee of in-person SafetyFests in 2022 received 8-9 hours of training, compared to 6.5 hours for virtual attendees. This is likely due to virtual SafetyFest occurring a week after the Missoula

SafetyFest and not including OSHA trainings, which are longer than informational sessions and often fill to capacity. In future SafetyFests, the Department plans to include OSHA training, so this trend may be isolated to 2022. Online SafetyFests also make it easier for attendees to select classes entirely based on interest, instead of selecting a full day of classes. While this results in attendees potentially signing up for fewer classes, it also reduces the time investment needed to attend SafetyFest, making it more accessible.

Lastly, SafetyFest's effectiveness can be understood in terms of the cost to the Department, the state, and Montana taxpayers. Since neither attendees nor exhibitors pay for SafetyFest, DLI funds the program with revenue from workers' compensation assessment fees. The funding is almost entirely used to reserve a venue large enough to seat hundreds of attendees; Department staff are not reimbursed for their roles beyond their regular wages, and most trainers are volunteers. Expenses vary greatly, with in-person SafetyFests usually costing the Department several thousand dollars while virtual SafetyFests only cost several hundred dollars. The figure below includes total cost, cost per attendee, and cost per training hour provided for the 2022 SafetyFests.



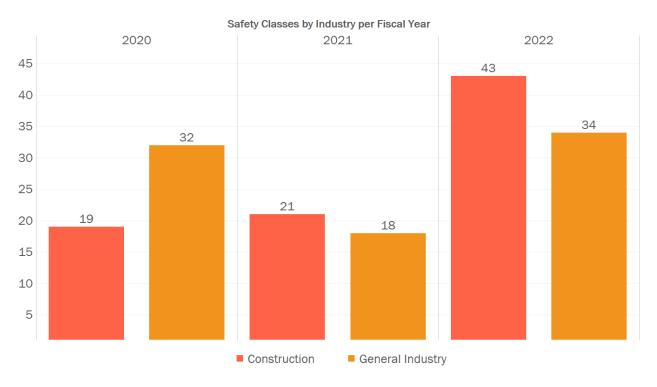
The cost figure immediately illustrates the value of online training options. At roughly \$1 per attendee and a mere 15 cents per hour of training provided, virtual SafetyFests offer tremendous value at a low cost. Of course, there is still great value to in-person SafetyFests, especially for hands-on training, demonstrations, and networking opportunities. The in-person options also enhance the accessibility of SafetyFest to workers who prefer in-person learning or lack easy access to the internet. Another noteworthy part of the cost figure is the difference between the cost of training in Missoula (held at Missoula College) and Billings (held at the Billings Hotel and Convention Center). The Department prioritizes holding SafetyFest at regional colleges since they are more cost-effective and attract more participants. However, the 2022 Billings SafetyFest was the result of Department practices predating the Covid-19 pandemic, and an outstanding contract required the Department to hold SafetyFest there. Therefore, costs of in-person SafetyFest will likely resemble the Missoula SafetyFest going forward.

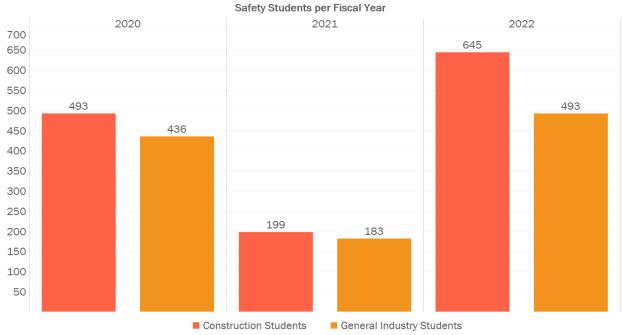
SafetyFest has provided Montana workers with much valuable training in the past decade and will continue to do so, with plans for virtual and in-person events continuing to be made. DLI will continue to emphasize accessibility and effectiveness, ensuring trainings are free, easy to access, high in quality, and at the best possible cost to Montana taxpayers. In addition to continuing trainings, the Department hopes to survey attendees on the impact of safety training on workplace safety to see if engagement with classes leads to fewer accidents and injuries. This research could confirm that safety training promotes safer behaviors and ultimately results in tangible value to all of Montana.



Group Safety Trainings

While the safety trainings at the heart of the MSCA are meant for all Montanans, workplace safety education for those hoping to enter the Montana workforce is a top priority. To handle this, a small team of Department trainers conduct dozens of trainings at schools, colleges, and correctional facilities every year. These on-site trainings provide 10-hour OSHA certifications for either construction or general industry topics. The goal of both programs is to provide participants with knowledge to join the workforce with a safety-oriented mindset. Below are figures of the total number of classes taught and total number of students instructed in the last three fiscal years.

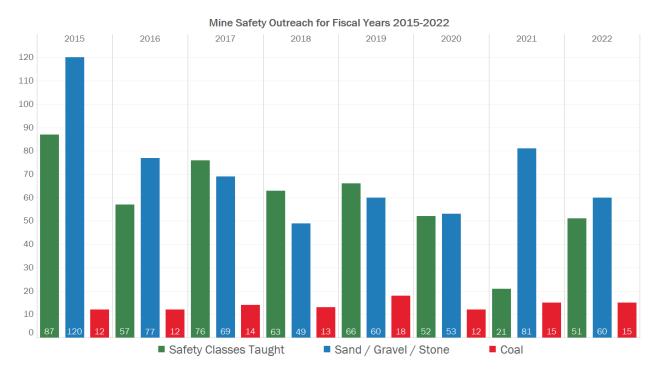




In the past few years, over 2,000 participants have received an OSHA certification from classes led by the Safety and Health Bureau. Both the number of classes held and the number of students attending grew in FY 2022 compared to prior years, with FY 2021 lower than usual due to a mix of pandemic-related restrictions and staff turnover at DLI. The increase in the number of classes has helped maintain low class sizes, with an average of 15 students per class in FY 2022. It is the belief of the Department that this combination of in-person learning and low student-to-teacher ratios helps ensure students learn the most in these trainings and develop skills that will make them safer workers when they enter the workforce.

Mine Safety Training

A two-person team provides trainings and inspections in coordination with MSHA. While MSHA sets the safety standards and conducts inspections multiple times per year, the mine inspectors provide the trainings created by MSHA and conduct inspections to help bring surface-level mines (sand, gravel, and dimensional stone quarries as well as coal mines) into safety compliance. Trainings include both the extensive 32-hour initial training and periodic 8-hour refresher trainings, for both surface and underground miners, taught both in-person and online. The Department offers all types and lengths of training both virtually and in communities around Montana, particularly in cities with large numbers of miners. The number of classes and inspections for fiscal years 2015 through 2022 are featured on the figure below.

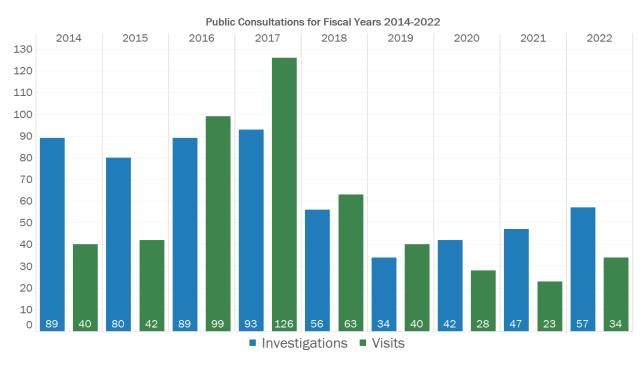


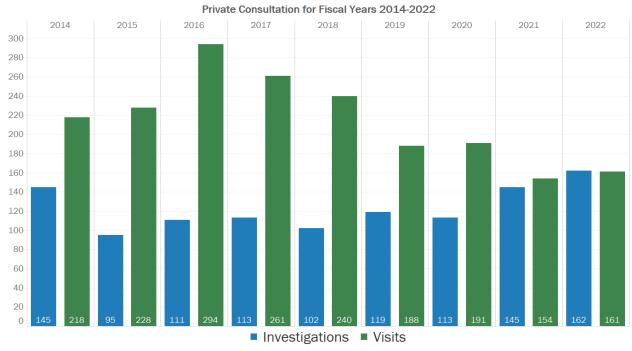
The number of MSHA classes has declined slightly but mostly resembles the safety training provided by DLI, with FY 2021 lower than average as a result of pandemic restrictions. For inspections, DLI has seen a small increase in the number of coal mine inspections while the number of sand, gravel, and dimensional stone mines has fallen slightly. The number of inspections performed is enough to keep all mines inspected at 50% of the MSHA rate (which is the Department's goal). A final note: the mine safety team comprised of 5 members in FY 2015, so raising inspection numbers back to that level would be possible with additional resources.

Consultations

The MSCA outlines a requirement for employers to work either with their workers' compensation insurer or DLI to conduct safety consultations. These consultations are reviews of the workplace, in which qualified safety consultants review work practices and identify potential hazards, then work with the employer to develop plans to manage risks and ensure the safest possible operations. Consultations are appealing as a no-cost safety

assessment: DLI does not charge employers for consultation services, and the Department will not assess penalties for safety hazards identified, allowing employers to avoid costly fines. Consultations include interventions (safety assessments or planning not including on-site presence) and visits (safety assessments which include a walkthrough of the worksite). The following two figures show consultations sorted for both public and private employers for fiscal years 2014 through 2022.





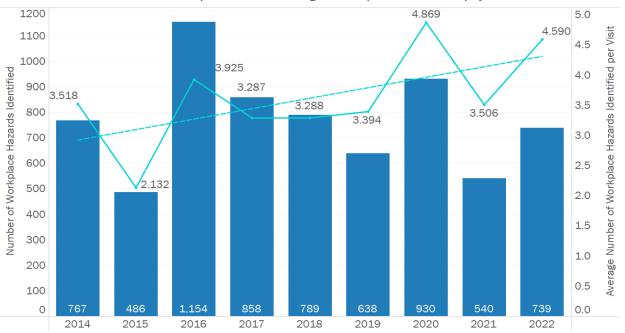
The figures shows a greater number of consultations occur for private employers, but the ratio of public consultations to private consultations (roughly 1:3 in recent fiscal years) is very similar to the ratio of public employees to private employees. The figures also show a decline in visits and an increase in interventions in recent years for both public and private employers. Reasons for this include the difficulty in taking time away



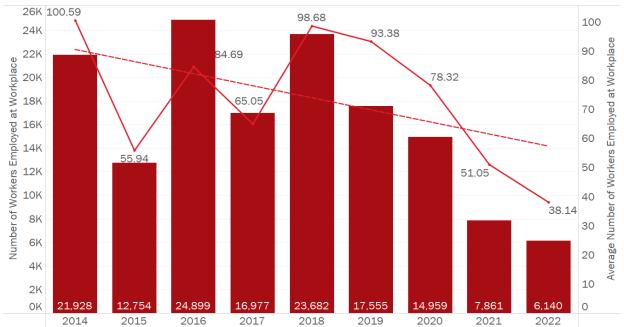
from work to conduct walk-through consultations, staff shortages, and the development of easier methods of conducting assessments without sending a consultant on-site.

For private sector employers, DLI also records the number of hazards identified in all consultation activities and the total number of employees working at the workplace receiving the consultation. The totals for both these measures, along with an average, is provided below for fiscal years 2014 through 2022.





Number of Workers at Workplace & Average Number of Workers at Workplace, Private Employers

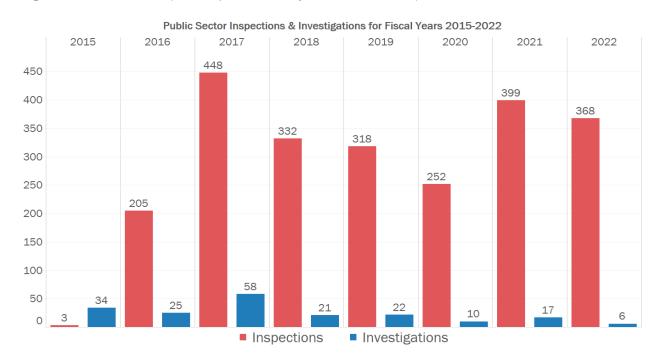


The first figure above shows an increase in the average number of hazards found per visit. Fortunately, this does not mean workplaces are becoming more dangerous, but rather workplace hazard identification has become more comprehensive. Improved guidance from OSHA, along with changes in DLI practices to encourage more indepth consultations with multiple safety consultants, has resulted in the increase in hazards identified in the average consultation. DLI also attributes the increase to more companies getting consultations for the first time, as initial consultations usually identify a higher number of hazards than subsequent consultations.

The second figure shows a decline in both the total and average number of workers employed at workplaces receiving DLI consultations. This is partly due to DLI altering the way it recorded workers impacted by consultation activities. While the Department previously recorded total payroll, it now seeks the most accurate count of workers employed at the specific facility being consulted. It also reflects greater DLI emphasis on small businesses (understood as those with fewer than 250 employees on site and fewer than 500 for the entire company). These companies are less likely to possess the robust internal safety consultation programs larger companies can afford; DLI prioritizes these companies to ensure all workers can enjoy the safest working conditions possible.

Inspections & Investigations

In Montana, the regulation of workplace safety is handled by different agencies depending on whether the employer is public or private. Private employers and federal agencies fall under the jurisdiction of OSHA, while the remaining public employers have been regulated by compliance specialists from DLI's Safety & Health Bureau since 2015. Oversight consists of either inspections (unannounced on-site walkthroughs of workplaces to identify hazards and issue warnings) or investigations (safety reviews in response to a complaint, accident, or fatality in a workplace). The MSCA sets DLI inspection standards to match OSHA specifications and empowers the Department to enforce them. All public sector organizations are inspected at least once every five years, but organizations with more reported injuries are likely to receive more inspections.



Data on Department safety oversight of public-sector employers suggests DLI will provide roughly 350 inspections per fiscal year, enough to ensure all organizations are inspected at least once every 5 years. The number of investigations has declined, which indicates a decline in employee safety complaints as well as accidents and workplace fatalities.



Conclusion

The Montana Department of Labor & Industry believes the studies cited at the beginning of this report, which suggest workplace injuries are becoming less common in Montana, are cause for celebration. Workplace accidents that injure workers can cause irreversible harm to Montana citizens at great cost to employees and employers alike, so the data suggesting injuries are becoming less common is welcomed by DLI. Understanding what factors are responsible for the decline in the number of workplace injuries will provide both the Department and employers with a strategy to continue driving this trend downward. The workplace safety programs administered by DLI are a possible, and likely, driver of this trend. These programs are designed to provide education on matters of workplace safety, assist employers with the development of safety plans, and ensure safe work standards are being upheld. The desired result of the safety emphasis is a decrease in the number of workplace injuries, which Montana has observed in recent years. This correlation alone cannot lead to the conclusion that DLI's safety programs are responsible for the result, since the presence of the outcome does not automatically mean the programs are responsible for that outcome. Nevertheless, it stands to reason the DLI safety programs are at least partially responsible for this outcome, and further research could help determine the degree to which the Department influences this outcome, as well as what other factors are responsible.

Moving forward from this report, the Department will seek evidence of a causal relationship between safety programs and workplace injuries. One way to accomplish this would be surveying. Sending surveys to employers who participate in different DLI safety programs could provide insight into how knowledge from these programs translates into safety-mindful work practices, which in turn lead to fewer accidents and injuries. Such a survey would ask questions about the safety programs the responding organization participated in and the impact of the programs on the organization's safety practices. The answers to the survey may provide DLI with a better understanding of the effects of safety training on workplaces, as well as tips on how to improve Department safety training going forward, hopefully leading to a continuing decline in the frequency of workplace injuries.

Resources

The Safety & Health Bureau of the Montana Department of Labor & Industry continues to provide the services outlined in this report for the benefit of Montana businesses and organizations. Visit the <u>Safety & Health Bureau Website</u> or call 406-444-6543 to learn more about SafetyFest, safety trainings, consultations, or inspections.

Sources:

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