

# Higher Education Trends



## PMA Study Identifies Leading Loss Drivers in Higher Education

by Heather Smith, ARM, Senior Strategic Consultant and Robert Bowman, Regional Risk Control Manager, PMA Companies

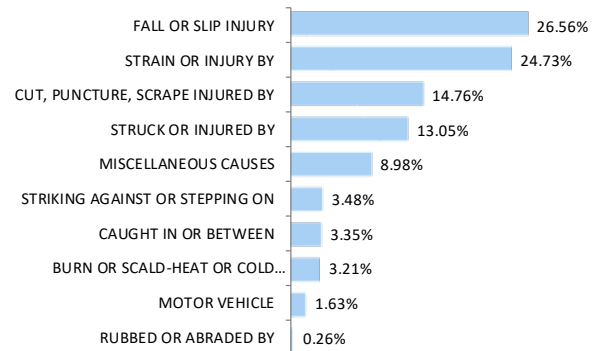
PMA Companies is a leading provider of risk solutions for the higher education field. Our annual *State of the Education Industry* report outlines the challenges facing our higher education clients. It plays a key role in understanding the historical loss performance of the industry, identifying key loss drivers and assisting in the development of a strategic approach to reduce risk for post-secondary education clients.

The PMA study examined workers' compensation claims from 2012 through 2016 for more than 75 higher education clients located throughout the United States. The study revealed some overall performance trends, including:

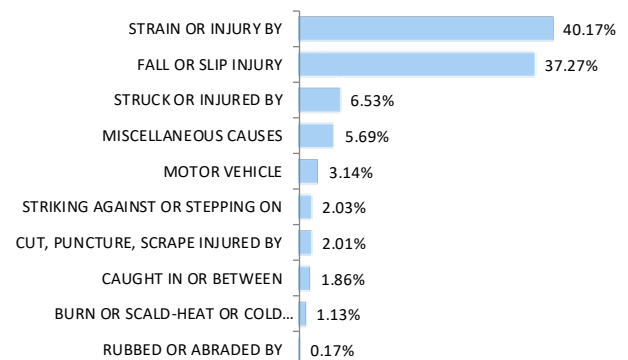
- a 6% decrease in the Total Claim Frequency Rate
- a 20% decrease in Lost Time Claim Frequency Rate; and
- a 44% decrease in the Loss Rate for fully developed claims.

Of particular interest is the finding that the average cost of a *lost time* claim is 2.7 times greater than the median cost. This differential illustrates the impact of severity and how high-cost claims skew the average cost.

### Total Claim Frequency Loss Leaders



### Total Claim Severity Loss Leaders



Above are the frequency and severity loss leaders for the higher education industry from PMA's study for years 2012-2016. Fifty-one percent (51%) of higher education claims and 77% of total incurred costs originate from two specific areas—strains and slips/falls. Strains and slips/falls also account for 75% of the higher education lost time claims and 79% of the lost time claim costs.

## PMA Study Identifies Leading Loss Drivers in Higher Education *(continued)*

The study also shows that 51% of higher education claims and 77% of total incurred costs originate from two specific areas – strains and slips/falls. Strains and slips/falls also accounted for 75% of the higher education lost time claims and 79% of the lost time claim costs. However, from 2012-2016, we’ve seen approximately a 10% decline in both the strain and slip/fall total claim frequency rates. Notably, the frequency rate of strains and slips/falls resulting in lost time decreased by 39% and 3%, respectively.

The study further revealed strain and slip/fall

*Custodian, Housekeeping and Janitorial positions experience the most strain and slip/fall claims in higher education.*

loss source trends. The most common cause of strains involves lifting (34%). In addition, the greatest number of strain claims occur between the months of August through October, which aligns with the new academic year. Regarding slip/fall claims, 31% of claims were not classified with the second leading cause involving falls on same level (19.8%). The highest occurrence of slip/fall claims historically occur between January and February (inclement winter weather in many areas) and also between August and October. Forty percent (40%) of the claims occurring between January and February are attributed to ice and snow. Custodian, Housekeeping and Janitorial positions experience the most strain and slip/fall claims in higher education.

Employee factors, regarded as non-occupational factors, were also evaluated in the study. The results indicate that the percentage of total claims and costs both increase with the employee’s length of service

These heat maps demonstrate that employees between the ages of 50-64 with over 10 years of tenure experience the most frequency (23%) and severity (33%) of claims in higher education.

*Tenure and Age of Employee at Accident -  
Number of Claims Reported*

|             | 15-24 | 25-39  | 40-49  | 50-64  | 65+   | Total   |
|-------------|-------|--------|--------|--------|-------|---------|
| < 1         | 4.95% | 6.43%  | 1.88%  | 1.97%  | 0.18% | 15.41%  |
| 1-2         | 2.92% | 7.86%  | 2.76%  | 2.63%  | 0.18% | 16.35%  |
| 3-9         | 1.20% | 10.09% | 6.71%  | 9.46%  | 0.98% | 28.44%  |
| 10+         | 0.07% | 3.49%  | 9.29%  | 23.34% | 3.61% | 39.80%  |
| Grand Total | 9.14% | 27.88% | 20.64% | 37.40% | 4.95% | 100.00% |

*Tenure and Age of Employee at Accident -  
Total Incurred Dollars*

|             | 15-24 | 25-39  | 40-49  | 50-64  | 65+   | Total   |
|-------------|-------|--------|--------|--------|-------|---------|
| < 1         | 0.94% | 1.89%  | 2.19%  | 2.54%  | 0.14% | 7.70%   |
| 1-2         | 0.56% | 3.59%  | 2.35%  | 3.44%  | 0.48% | 10.43%  |
| 3-9         | 0.34% | 6.35%  | 6.55%  | 13.50% | 2.24% | 28.98%  |
| 10+         | 0.01% | 3.21%  | 11.29% | 33.36% | 5.02% | 52.89%  |
| Grand Total | 1.85% | 15.04% | 22.38% | 52.85% | 7.88% | 100.00% |

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and age. Specifically, employees between the ages of 50-64 with over 10 years of tenure experienced the greatest frequency (23%) and severity (33%) of claims in higher education. While there are some complexities to the aging workforce issue, investments in injury prevention are geared to help all workers. As such, an emphasis on mitigating the leading loss sources (strains and slips/falls) identified in this study is a great starting point. Since industry research has shown the time it takes to heal from an injury generally increases with age, injury avoidance can also impact claim severity. A best practice approach should include these targeted injury prevention efforts as well as an effective return to work program to maximize the impact on the organization's total cost of risk.

Have a question or need assistance with your safety



or risk management programs? PMA's nationwide education specialist team has an average of over 20 years of higher education expertise. The team has a proven track record of success collaborating with academia clients to create and implement effective risk management solutions in such areas as return to work, workplace violence and strain and slip/fall exposure mitigation. Email us at [heretohelp@pmagroup.com](mailto:heretohelp@pmagroup.com) to find out more.



*Heather Smith, ARM, is a Senior Strategic Risk Control Consultant for PMA Companies specializing in education risk management. She has over eleven years of experience in both industry and insurance occupational safety and risk management. Her expertise involves working with organizations to collaboratively mitigate the total cost of risk through holistic and innovative risk management approaches. She serves as practice leader of PMA's Education Focus Group and is co-author of the white paper "Best Practices in Risk Management for Higher Education." Ms. Smith is a graduate of Drexel University with a Bachelor of Science in Chemistry and minor in Biological Sciences.*



*Robert Bowman is a Regional Risk Control Manager for PMA Companies. During his 36-year career in occupational health and safety, he has focused on helping clients cultivate safe workplace environments and implement effective safety cultures. He serves as chairman of PMA Companies' Organizational Improvement Group, Education Focus Group, and Decision-Based Safety Management Assessment Team. He is the author of the white paper "Workplace Violence: Are You Prepared?" Mr. Bowman is a graduate of Plattsburgh State University with a B.S. in Health Education and he holds a Master's degree in Occupational Health & Safety Management from Indiana State University.*

# Preventing Workplace Slips, Trips and Falls in Higher Education

by Heather Smith, ARM, Senior Strategic Consultant and Robert Bowman, Regional Risk Control Manager, PMA Companies

The average person takes between 3,000 and 5,000 steps a day. That's over one million steps a year! It makes sense, then, statistically speaking, that a person would eventually experience a fall at some point in his or her lifetime—with the possibility that it could occur at work. However, what if your workplace is a college or university that requires you to traverse an expansive campus and massive building complexes, walking over varying surfaces and changing elevations—in all weather conditions? Your chances of a fall might increase. This is exactly why slips, trips and falls are a leading loss driver for workers' compensation injuries in post-secondary institutions.

## Who Is Most at Risk for Slips/Falls?

Specifically, slips/falls most commonly occur to employees in the Facilities/Grounds, Public Safety, Dining and Housekeeping departments; however, this may vary since some of these services are commonly outsourced. Facilities/Grounds and Public Safety employees typically move about campus (interior and exterior areas) continually and the exposure is exacerbated by variable weather conditions. At many institutions, the Facilities department is also the first to respond to inclement weather, applying deicing chemicals and clearing snow from walking surfaces. Dining and Housekeeping employees are often working on or around interior wet and dirty floor surfaces. In addition, Housekeeping employees often travel significant distances between buildings based on the cleaning schedule and location of trash dumpsters. In order to mitigate slips/falls on campus, it is important to understand what causes them and their contributing factors.

## What Causes Slips/Falls?

In basic terms, a slip and fall often results from lack of friction between the sole of the shoe and the walking surface. The National Safety Council attributes up to nine million disabling injuries each year to slip and fall incidents. There are many factors that influence both interior and exterior slip and fall incidents. They include: type of flooring/walking surface materials, floor/walking surface finish, floor/walking surface construction and preventative maintenance, type and condition of the footwear being worn, liquid/debris on the floor/walking surface (water, soil, oil, food, ice, snow, etc.), lighting, handrails, etc.



## How Can Slips/Falls Be Prevented?

PMA successfully employs a logical and practical approach to reducing the likelihood of injuries related to slips and falls in the higher education field. This begins with a focused approach to educate and engage management in the slip/fall loss leading departments. We then share the loss trends and impact to the institution's overall cost of risk. Finally, we engage them in a best practices discussion about interior and exterior slip/fall preventive measures and practical solutions. These measures and solutions

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also have the added benefit of reducing overall slip/fall risk on campus to both students and visitors as well. Following are the topics covered in a “best practices” discussion and/or plan:

1) **Identify and evaluate your floor and walking surfaces.** This is the foundation of an effective slip/fall prevention program. Formal periodic walking surface inspections throughout campus should be conducted to proactively identify slip/fall hazards. In addition, for those located in areas that experience extreme winter weather and temperatures, an additional inspection should be done with Facilities in late fall after a recent rain event to identify areas where water and ice accumulate. This information will assist in adequately purchasing and prioritizing placement of proper deicing chemicals. Lastly, a “push pin” map of prior slips/falls on campus is also an effective tool in prioritizing mitigation efforts.

2) **Evaluate and determine proper methods of cleaning and maintaining all floor surfaces.** Training in proper cleaning procedures (and treatment chemicals) must be provided to all employees responsible for floor cleaning. Kitchen and dining areas often require increased concentration of cleaning chemicals and the use of a brush to scrub floors. Different cleaning tools should be used in the dining area so that kitchen contaminants are not spread to the dining floor, causing it to become more slippery. Also, use of microfiber mop heads yields many benefits, including improved removal of floor contaminants, use of less cleaning product and less liquid volume applied to the floor.

3) **Utilize engineering controls.** This involves selecting floor or work surface materials that are appropriate for the conditions that will be present. New flooring



*The use of a microfiber mop yields many benefits, including improved removal of floor contaminants, use of less cleaning product and less liquid volume applied to the floor.*

or worksurface materials can be tested in advance using a tribometer to measure the product’s coefficient of friction of sliding (when wet and dry) against recommended standards.

4) **Use administrative controls.** Facilities should review cleaning procedures to verify they are having the desired impact on the walking surfaces. Consider the frequency of cleaning, adequacy of the cleaning procedure, quality and compatibility of cleaning products, use of wet floor signs, and prompt reporting and cleaning of spills. A formal spills policy should also be developed and reviewed with employees upon hire and annually. It should include: who to call, how to protect a spill, location of wet floor signs and spill clean-up supplies as well as how to properly clean up spills.

5) **Implement a footwear policy.** A footwear policy should include the institution’s dress code requirements, specific department footwear

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requirements and the importance of wearing the appropriate footwear for the job and weather. The prevalence of slips/falls from administrative type staff who often wear dress shoes has increased during the past several years. Frequent reminders help maintain slip prevention awareness.

Slip-resistant footwear has increasingly become a tool for slip prevention. As indicated in the CDC Research Rounds, “Slip-Resistant Shoes Reduce Food Service Workers’ Compensation Claims,” slip-resistant footwear was shown to reduce the risk



of slips and falls on liquid/grease by 80% for food service workers. Many shoe manufacturers now make slip-resistant footwear in varying styles that are specifically designed for wet or oily conditions. As a best practice, slip-resistant shoes should be required in the higher education departments of Dining, Housekeeping, Facilities and Public Safety to positively impact slip/fall risk. Over-the-shoe traction cleats, such as Yak-Trax® or STABILicers® are also effective tools to reduce slips/falls on ice and snow.

6) Utilize other viable solutions. Some other viable solutions include:

a.) The use of visual devices that provide adequate warning of freezing surfaces such as IceAlert®, a system of signs that change color when the temperature is low enough to cause freezing. These sign systems can be placed strategically at locations identified with potential slip/fall risk or prior slip/fall frequency.

b.) Yet another solution is the proper and correct use of signage to provide warning and protection of wet floor situations. Some innovative products have been developed. One product is the Hurricane™, a floor sign that dries the floor with a built-in high velocity fan. There are also signs with flashing lights, contrasting color schemes and signs with the capability of being linked together, creating a barricade.

c.) A final suggestion is low profile temporary adhesive mats, such as the New Pig Grippy Floor Mat®, an effective control in reducing slips/falls from liquids or debris on floors. These mats are especially effective in the following areas: entrances/exits, water fountains, sinks, ice machines, buffet or beverage self-serve lines and also hand dryers in bathrooms. The mats come in pre-cut sizes or on a roll and the edges can be trimmed with wear extending the use of the mat.

Need help with implementing these slip and fall “best practices” within your organization? We are positioned to partner with you to reduce risk and help minimize the financial impact of accidents. For more information, email us at [heretohelp@pmagroup.com](mailto:heretohelp@pmagroup.com).

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