2018 SAFETY STRATEGIES FAIL TO ADDRESS FUTURE TRENDS

Although safety managers are focusing on the basics of workplace safety, many of their safety strategies do not address emerging hazards. According to research conducted by Marsh Risk Consulting, organizations are more likely to address employee safety expectations and leadership challenges than emerging risks, such as human factors, predictive metrics, and interactions between humans and robots. As we pay tribute to the American workforce this Labor Day week, it is critical to underline the importance that employers focus not only on safety basics, but on emerging risks and the steps needed to address them.

Earlier this year, *EHS Today,* a leading trade publication for safety professionals, identified several emerging risks that employers should be addressing. While safety professionals agree that we are in the midst of monumental changes in how work is performed and the risks that accompany those changes, few organizations are proactively including emerging risks in their safety strategies.

Marsh's survey data reflected this shortcoming. According to the survey of 68 senior safety leaders from a variety of industries, the following "hot topics" are rarely included in corporate employee health and safety (EHS) strategies:

5% **Ergonomics and the use of wearables for data collection and injury prevention.**

6% **Use of robotics to replace/supplement humans for high-hazard risk.**

9% **Workplace violence prevention and management, including mental health.**

9% **Changing workplace demographics and physical demands, including fitness for duty testing.**

9% **Managing temporary workers and the subsequent risks they are exposed to.**

9% **How humans interact with robotic helpers.**

These trends should be among the top concerns for employers — and failing to address them could result in significant safety incidents.

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Ergonomics and Wearables

Ergonomic factors are generally one of the top three causes of workplace injuries. That's not new, but advances in technology, such as wearables and exoskeletons, are changing how we manage these risks.

Wearables have the potential to significantly reduce ergonomics-related injuries because they can measure body stresses better than any other tools previously available. This allows for highly targeted changes to workplace setups and job tasks.

Similar to how telematics have helped reduce driving risks, wearables can provide data, alerts, and real-time monitoring to modify behavior. This can be as simple as an audible warning when a worker exerts too much strain or approaches a hazardous work area, or as complex as regular data analysis and management reports that are reviewed with employees to improve behaviors and management to appropriately modify jobs.

Aside from providing a platform for injury reduction and behavioral changes, wearables also make available a rich data set for potential engineering and productivity improvements — for example, modifying equipment, adjusting work cell configuration, and changing table heights. Ultimately, wearables can yield significant opportunities to reduce some of the most frequent injuries across industries. Unfortunately, however, less than 16% of surveyed companies currently integrate ergonomics into their safety strategies, and only 5% specifically mention wearables.

Workplace Violence

According to the Bureau of Labor Statistics, there were 500 workplace homicides in 2016, an increase from 417 in 2015. OSHA notes that "[in] its most extreme form, homicide is the third leading cause of fatal occupational injury in the United States."

Despite the assumption that most employers have provided training on "run, hide, fight" as a way to react to workplace violence, less than 10% of organizations surveyed by Marsh are looking to increase their workplace violence prevention efforts. These efforts may include training, response plans, policies, or drills. Only 10% of surveyed employers include mental health programs in their strategies. The intent of these programs is to positively impact the mental health of individual employees and thereby reduce workplace violence.

Workplace violence solutions and their implementation are difficult, as they rely on managers and employees to make better use of wellness benefits like Employee Assistance Programs (EAP) and other mechanisms without fear of retaliation. Preventing workplace violence also potentially requires leaders to recognize the signs of mental health issues and possible threats of violence, both of which are easier to spot post-incident.

For more information on workplace violence and the implications for your organization, read Marsh's report, "Anatomy of Workplace Violence: Identification, Prevention, and Response."

Robotics and Drones in the Workplace

Automation, robotics, digitization, digital self-services, distributed digital advice and sales, and robo-advisors could result in a 60-70% reduction in the workforces of service providers, from financial services to telecom, according to a study by Oliver Wyman. Manufacturers have already seen such reductions, although for the time being these are at a lower level.

The growing use of robots is associated with a corresponding increase in the potential for robot-associated injury. For instance, an auto manufacturing company employee recently died from blunt force trauma after entering a work cell with a robot. While the root cause is complicated, the rise in industrial automation is increasing the threat of harm from human and robot interaction.

Risks to people working with or near robots may include unexpected movement of equipment, failure of robots to recognize human activity, sensor failures, programming flaws, human error caused by design flaws, behavioral errors, risks from maintenance workers entering automated work cells, and side by side "co-location" of robots and human workers, where both humans and robots work in the same cells.

The multitude of risks makes it surprising that despite the fast growth rate and adoption of robotics in the workplace, less than 7% of responding employers (including a number of manufacturing, energy, and transportation companies) identified robotics as a component of their EHS strategy. Organizations employing robots in the workplace should focus on improved design reviews, pre-startup safety reviews, programming rigor, employee training, and assurance that fail-safe devices on robotics are in working order.

While robotics can introduce new risks, they can also mitigate others. Indoor and outdoor drones, for instance, have the potential to reduce risk by removing the human factor from dangerous jobs. They could be used to replace or transform labor-intensive jobs, particularly for inspection and monitoring of pipelines, rail infrastructure, chemical plants, and construction sites. By 2020, there could be 1.5 million working drones in the US, according to *Harvard Business Review*. However, only 8% of companies surveyed by Marsh include drones as part of their EHS strategies, despite their potential to dramatically change how work gets done safely.

Temporary Workers

Temporary workers have become a seemingly permanent and vital element in today's workforce, mainly used to manage surges in demand or as a screening process to hire employees through "temp-to-perm" programs. Whether they're primarily freelancing, working temporary jobs, or cultivating a set of side gigs, the contingent workforce is a substantial one. Yet only 10% of surveyed companies address this component in their 2018 safety strategies.

Temporary workers present unique risks, which may be addressed through hiring, screening, onboarding, and training. Compliance issues are complex due to the transient nature of the employees. The evolving duty of contracting companies to notify agencies and contractors of risks present in the workplace further complicates this. Keeping temporary workers safe on the worksite poses a constant challenge, including providing adequate training, eliminating risk behaviors, and simply managing inexperienced staff working in hazardous environments. Many employers provide training, "buddy systems," and visual identification — for example, new hires may be required to wear unique colored vests or shirts so other employees know to "look out" for them.

Improving Safety Today While Keeping an Eye on Tomorrow

There is a growing frustration among safety managers about their employers' shortsightedness when it comes to safety management. In a recent *EHS Today* article, a safety manager said one thing he would change about his job would be "getting the executive suite to stop thinking that ideas from 10 years ago that have failed will work."

While it is not a surprise that most employers are focused on managing implementation of existing safety policies and practices, this is not enough. Relying on continued implementation of old policies will not effectively protect your organization against the emerging risks that are already causing issues in the workplace. While safety leaders should continue to improve existing practices, emerging risks must be addressed as well.

2018 Strategic Safety Imperatives
Which of the following safety topics is your organization addressing in 2018?
Top 4

Communications — Improving visibility and understanding of safety expectations	71%
Leadership — Improving the organization's safety leadership capabilities	62%
Operational Excellence —Improving existing initiatives	49%
Behavioral Safety — Using behavioral safety programs	46%

To learn more about this topic, please contact your local Marsh representative or:

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