

The State of Workplace Safety Training

A Comprehensive Analysis of Methods, Effectiveness, and Surmountable Deficiencies



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Executive Summary

The Workplace Safety Training Study is a benchmarking tool for companies, particularly those in manufacturing and other labor-intensive industries, to assess and compare their safety training programs to industry peers. The survey provides companies with valuable data to support training resources that meet evolving training needs and identify gaps in their own learning organizations.

The data is compiled from a survey of nearly 1,100 respondents representing over 4,400 worksite facilities. (See pages 42 and 43 for a complete breakdown of respondent demographics by job role, size of company, and industry sector.)

This report, ***The State of Workplace Safety Training***, compiles expert analysis of research data gathered in the survey. It includes 45 charts and tables presenting thousands of data points.

Key findings include:

- **66%** of companies believe, despite their best efforts, they still have employees who don't follow workplace safety protocols on the floor
- Companies providing at least 20 hours of annual safety training are 68% more likely to have employees following safety protocols on the floor
- Companies using site-specific photos or videos in training courses are two times more likely to have employees "very engaged" in their safety training
- **38%** of companies use paper and/or spreadsheets alone to document and manage their training program
- Companies using a learning management system (LMS) provide **30%** more training refreshers and reinforcement
- Companies using interactive audience response training technology are **58%** more likely to verify if a specific employee understood their training
- **29%** of leaders believe productivity would rise by at least **50%** if workers followed their workplace safety program consistently

The report opens by dissecting the biggest challenges to delivering an effective workplace safety training program. Further analysis will uncover the root cause of these challenges and identify actionable best practices for overcoming them.

The most basic questions to answer when gathering and understanding information are: Who? What? When? Where? Why? How? We will explore these foundational questions through the perspective of workplace safety training responsibilities, methods, and outcomes.

Finally, this report will provide a compilation of best practices illuminated by the research as a guidepost to drive improvements in workplace safety training programs.

The large sample size of this survey allows for greater analysis by demographic variables (company size, industry, job role, or training techniques and technologies). More often than not, the results and trends are consistent across these variables. But there were a few instances when these data slices uncover sizable or significant differences based on the demographic variables. This report will call out these instances to provide greater insight that could otherwise be obscured by the cumulative data.

PROLOGUE **The Biggest Challenges for Workplace Safety Training**

Every data point in this report is impacted by a wide set of extenuating factors that exist within any facility. Developing and administering the world's best workplace safety training program wouldn't be as daunting if there were no time constraints, no budget concerns, no turnover, and no production quotas. But of course, that would be a fairy tale.

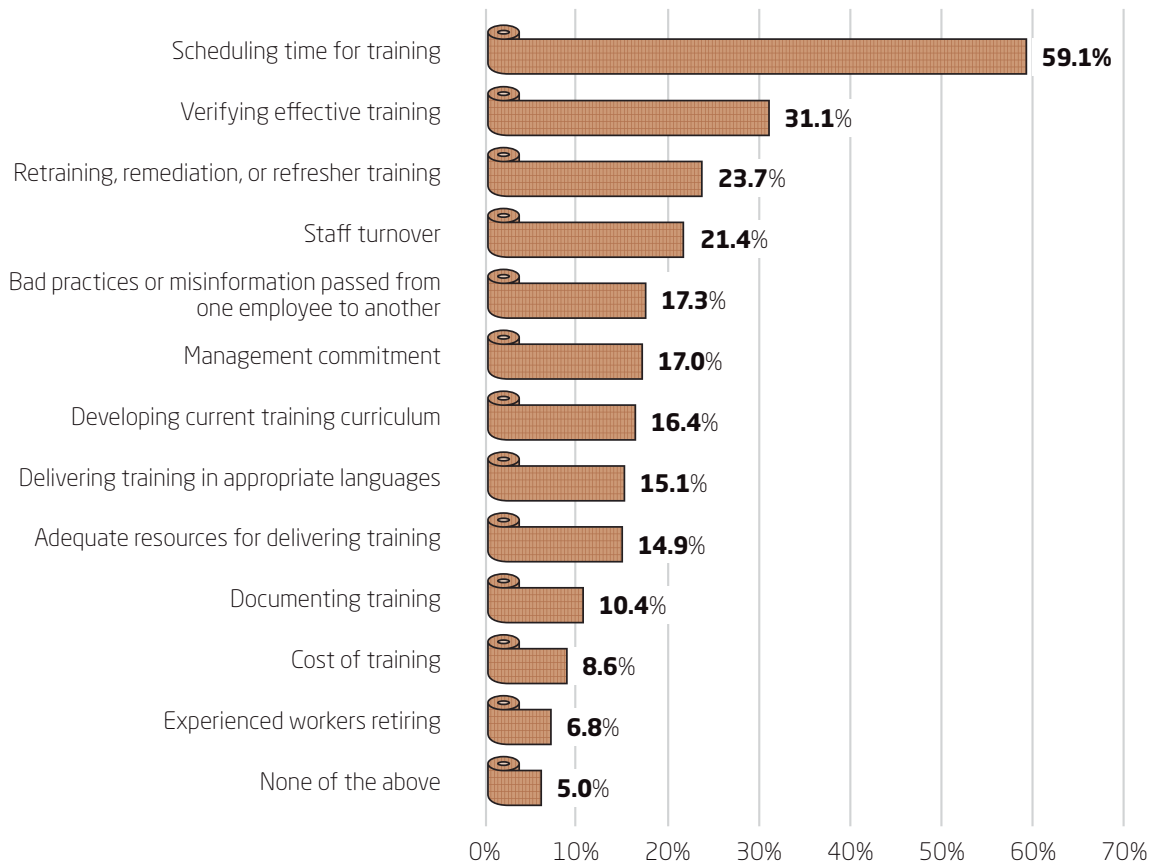
As such, it's a good starting point to measure the challenges leaders face when developing workplace safety training. Survey takers were presented a long

list of common challenges but were allowed to pick only three as their most troublesome [Figure 1].

The top three workplace safety training challenges (with percent of companies citing as a top challenge) are:

- Scheduling time for training (**59%**)
- Verifying effective training (**31%**)
- Retraining, remediation, or refresher training (**24%**)

Figure 1: What are your organization's biggest workplace safety training challenges? (Select your top 3)



#1 Challenge: Scheduling Time for Training

This challenge shouldn't surprise any professional in manufacturing or other labor-intensive industries. It can often seem there is an inherent conflict between productivity goals and the time required to adequately train and motivate employees. After all, companies are ultimately measured by output, supporting a long-held belief that every minute an employee is clocked in should be spent working on the line. But a safety training program will never be its best without training and practice. Given the extraordinary expense and operational disruption of

workplace injuries, it is in a company's best interest to ensure their workforce is adequately trained and practiced.

The fact that "scheduling time for training" is clearly the top challenge indicates training and safety leaders need to prove training benefits a company's bottom line. Having the ability to connect training content to the company's business goals helps ensure training can effectively address safety risks and production needs.

#2 Challenge: Verifying Effective Training

Nearly a third of companies struggle to verify the effectiveness of their training program; this is worrisome. But in a glass-half-full analysis, at least this demonstrates a desire and commitment to do so. A worst-case scenario would be training simply to check a compliance box and move on regardless of its effectiveness. But this doesn't seem to be the case based on this survey. The problem lies in the ability to verify effectiveness (or lack thereof), which requires the right tools and processes.

To fill the glass all the way, *The State of Workplace Safety Training Study* illuminates specific technologies and best practices many companies use to overcome the verification challenge. This report will cover these methods and results in detail. After all, training verification is critical to preventing wrong behaviors from being used on the floor and spread to other employees.

#3 Challenge: Retraining, Remediation, or Refresher Training

A one-and-done approach to training is a surefire way to scuttle efforts to build a strong safety culture. As the famous Ebbinghaus Forgetting Curve states, as much as 80% of training material can be forgotten within 30 days if not reinforced.

It is again encouraging that companies recognize this by pinpointing refresher training as a top priority, even if it's a struggle. On this topic as well, this report sheds light on how many companies are able to provide more training reinforcement.

One Size Does Not Fit All

When looking at the data by company size, we can see a few big variances [Figure 2] in training challenges:

- Companies with fewer than 500 employees are nearly 10 percentage points more likely to struggle finding time for training
- Smaller companies are doubly challenged in developing curriculum compared to larger companies
- Larger companies are doubly challenged by multiple languages, in fact “delivering training in appropriate languages” is the third largest challenge for companies with more than 1,000 employees
- Management commitment to training is a more significant hurdle for companies with more than 500 employees
- Staff turnover is a bigger problem in middle-sized companies, nearly **10** percentage points higher than both the smallest and largest companies

Figure 2: Top Challenges by Company Size

	Number of Employees			
	Less than 100	100-500	501-1,000	Over 1,000
Scheduling time for training	60.4%	62.6%	53.2%	54.0%
Developing current training curriculum	20.9%	16.7%	12.9%	12.2%
Delivering training in appropriate languages	10.4%	12.1%	15.8%	26.8%
Management commitment	17.6%	11.9%	21.6%	23.9%
Staff turnover	16.5%	26.3%	23.0%	16.9%

The challenges remained quite consistent across all industries, with one exception. “Delivering training in appropriate languages” is the third biggest challenge in food manufacturing, with a quarter of food manufacturers including it among their top three training challenges [Figure 3]. Comparatively, it ranks eighth-highest overall. In fact, nearly every other industry ranks it either last or second-to-last (light manufacturing is one exception, where it ranked ninth at **16.1%**).

Likewise, sentiments remained mostly consistent across job roles. While scheduling time for training was the unanimous #1 challenge, it is notably less unanimous among operations leaders.

Operations personnel cite this challenge around **17** percentage points lower than other job functions [Figure 4]. This hints to the push-and-pull struggle between production demands and training needs, with operations leaders the most responsible for meeting production quotas.

Conversely, operations personnel doubled or tripled everyone else in citing “experienced workers retiring” among their biggest challenges [Figure 5]. This again highlights the nature of the role being tightly tethered to the output of the workforce.

Figure 3: Cite “Delivering Training in Appropriate Languages” as Top Challenge, by Industry



Figure 4: Cite “Scheduling Time for Training” as Top Challenge – by Job Role

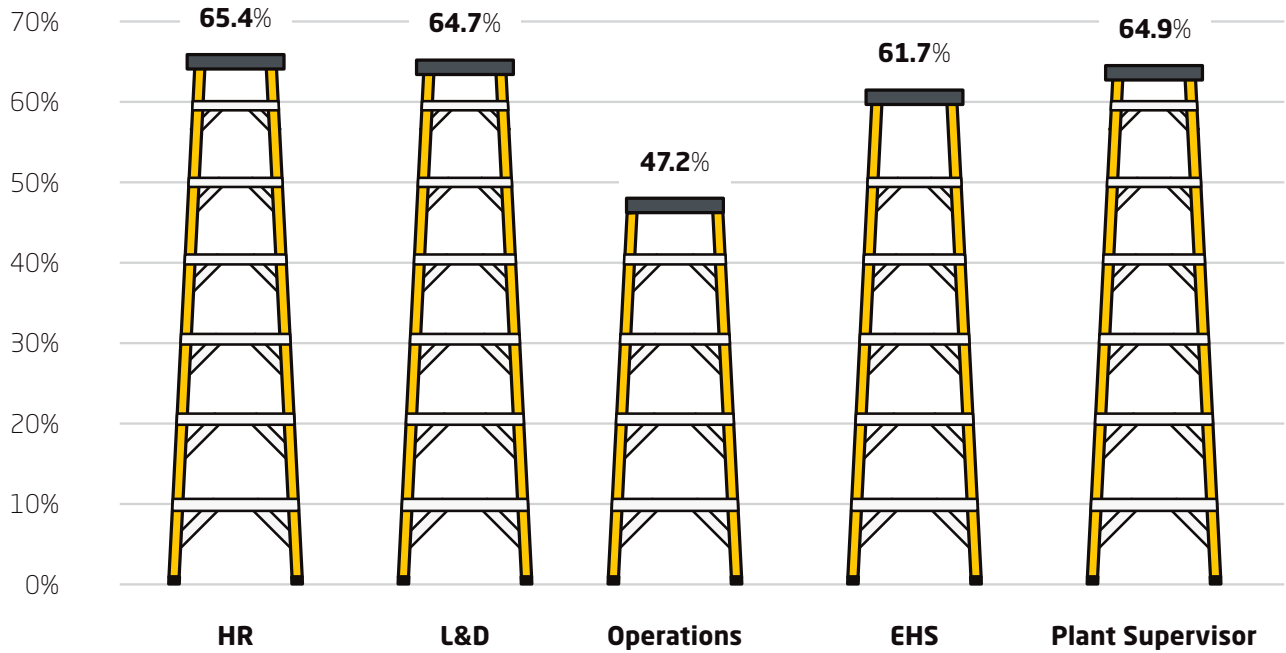
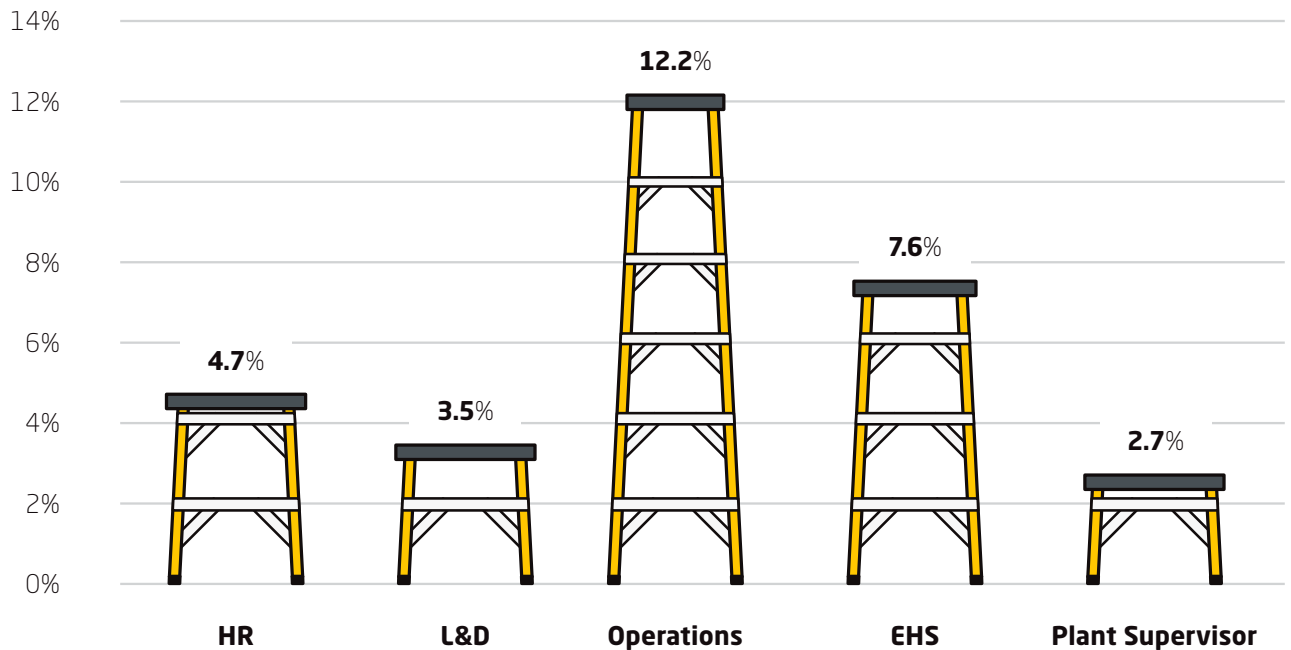


Figure 5: Cite “Experienced Workers Retiring” as Top Challenge – by Job Role



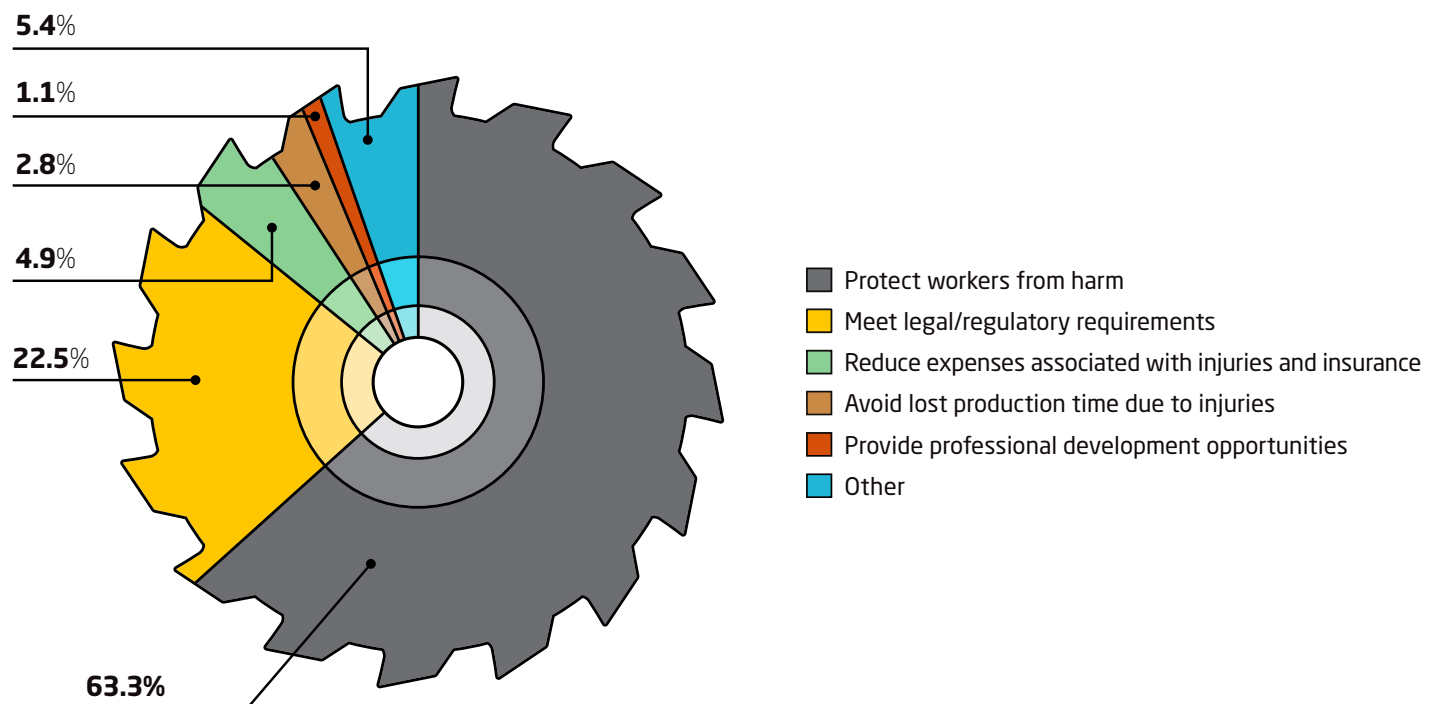
WHY

Motivations for Safety Training, and Why It's Not Always Followed

Asking why workplace safety training is provided might seem perfunctory at first. After all, the point is to prevent injuries. But often the professionals responsible for safety programs are measured by numbers on paper, injury costs, and insurance premiums. So much so that the human element can, at times, be overshadowed by fiscal, regulatory, and production pressures.

As such, it's encouraging that when asked, "What is the primary motivation for scheduling and completing workplace safety training," **63%** of respondents selected to "protect workers from harm" [Figure 6]. Meeting legal or regulatory requirements registered significantly at **23%**. Reducing expenses, increasing productivity, and professional development barely registered.

Figure 6: What is the primary motivation for scheduling and completing workplace safety training?



When examining responses by job role, plant supervisors are fixated the most on worker safety (by **13** percentage points on average). They know the workers most intimately on a personal level, so this is not surprising. Similarly expected, HR and EHS leaders are a little more attuned to regulatory requirements [Figure 7].

Of course, there’s no denying there are business implications to workplace safety as well. An injury sustained during a shift can halt production of at least one person. This also creates ripple effects on other workers during the shift, not to mention long term effects on morale.

On this topic, nearly **30%** of survey respondents believe their company’s productivity could grow by at least **50%** if employees consistently adhered to their workplace safety program [Figure 8]. About **45%** felt the productivity boost would be less than **50%**. Surprisingly, **25%** of respondents said they do not believe a safer workforce would impact productivity.

Figure 7: Training Motivation by Job Role

	HR	L&D	Operations	EHS	Plant Supervisor
Protect workers from harm	62.6%	67.1%	64.2%	63.1%	75.7%
Meet legal/regulatory requirements	23.4%	22.4%	18.7%	24.1%	13.5%

Figure 8: If our employees consistently adhered to our workplace safety program, our company could improve productivity by:



Figure 9: If our employees consistently adhered to our workplace safety program, our workers' comp costs could drop by:



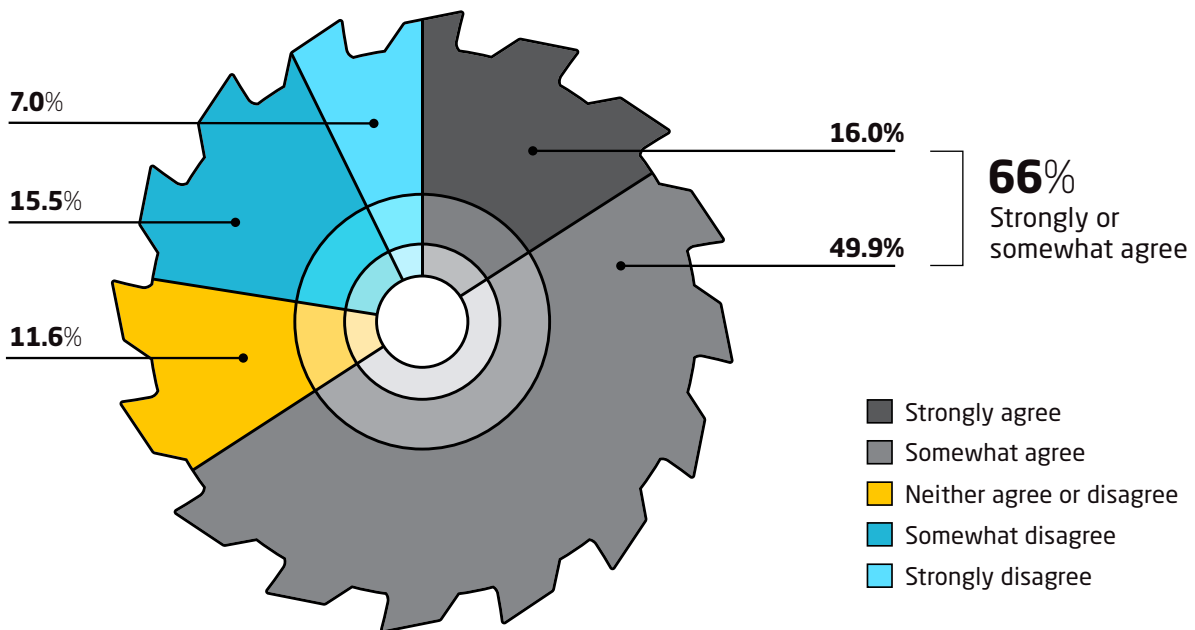
This demonstrates that many industry leaders — even those in charge of workplace safety — don't recognize the impact of a strong safety culture. Fewer injuries mean fewer disruptions, fewer stops in production, greater workflow continuity, and higher employee morale. It's hard to fathom how that could **not** correlate to greater productivity.

Similarly, nearly **30%** of respondents believe workers' comp costs could be reduced by at least **50%** with greater adherence to the workplace safety program, while **18%** believe there would be no impact [Figure 9]. On this point there was a sizable swing based on the size of the company. Only **13%** of companies with more than 100 employees believe there would be no impact to workers' comp costs. In comparison, companies with under 100 employees register that sentiment at **33%**.

Both of the preceding data points indicate some workers are not following workplace safety protocols. *The State of Workplace Safety Training Study* found **66%** of professionals feel that, despite their best efforts in workplace safety training,

employees are still not following safety programs and protocols on the floor [Figure 10]. In fact, only **22%** have confidence their employees consistently adhere to safety protocols. Another **12%** are neutral.

Figure 10: Despite our efforts in employee workplace safety training, we still have employees not following our workplace safety program and protocols on the floor

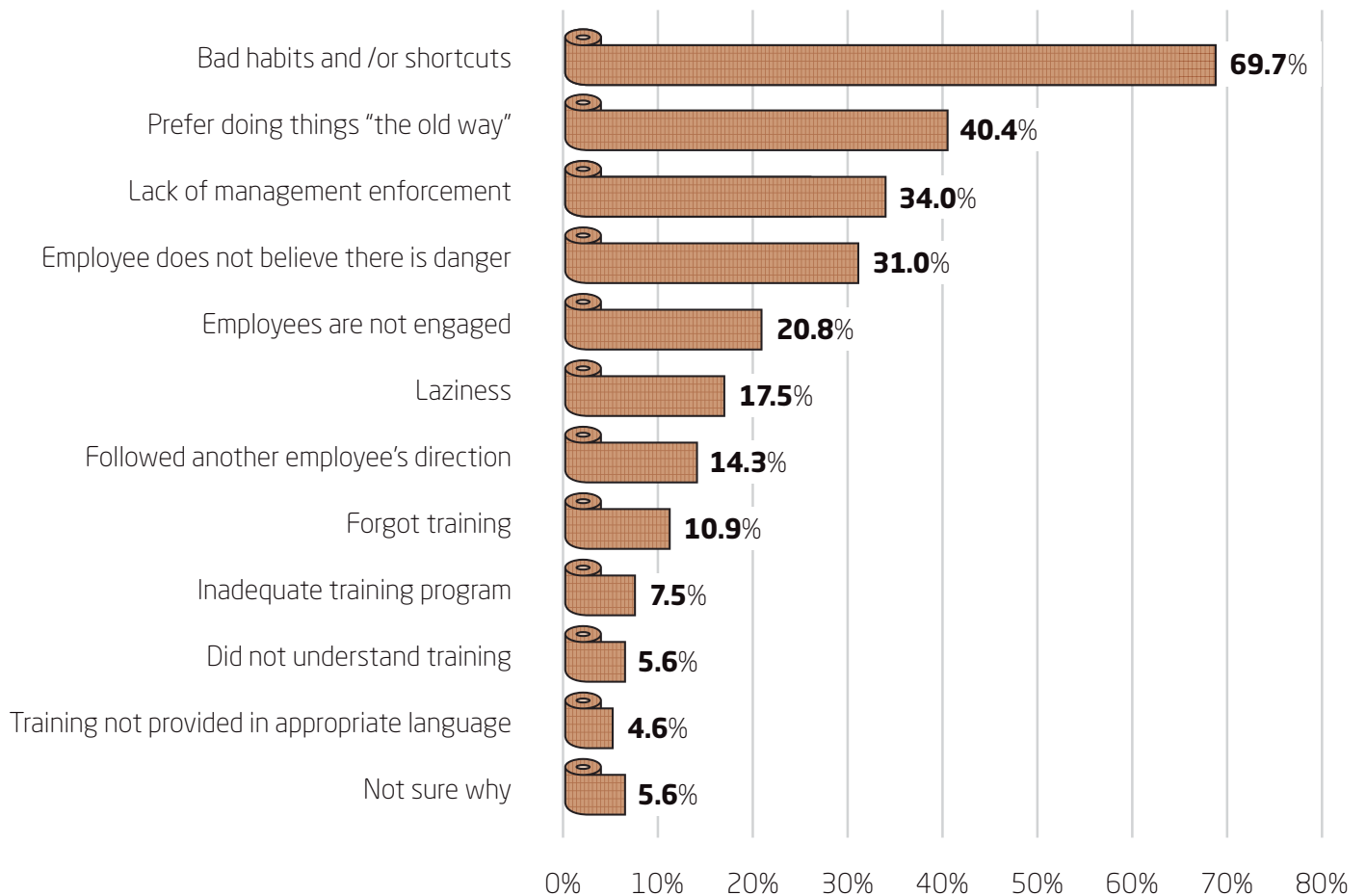


Yet again this begs the question: why? In this case, the survey asked, "Why don't employees follow your safety program consistently?" A dozen common culprits were presented; respondents were allowed to select what they felt were the top three.

According to those in charge, the top three reasons employees do not follow their safety program consistently are [Figure 11]:

- Bad habits and/or shortcuts (70%)
- They prefer doing things "the old way" (40%)
- Lack of management enforcement (34%)

Figure 11: Why do employees not follow your safety program consistently? (Select the top 3)



**Figure 12: Cite “Lack of Management Enforcement”
as Top Challenge by Job Role**

HR	L&D	Operations	EHS	Plant Supervisor
25.5%	35.3%	24.0%	41.0%	18.9%

Regarding “lack of management enforcement,” EHS leaders feel more strongly that greater management follow-through is needed. A full **41%** of EHS professionals cite “lack of management enforcement,” compared to **26%** average of all other job roles [Figure 12].

Ultimately though, leadership seems to blame the workforce for not following safety programs, with six of the top seven reasons implicating employees. Yet rounding out the list, nearly **30%** of responses are directly correlated to poor training, by combining “forgot training” (**10.9%**), “inadequate training program” (**7.5%**), “did not understand training” (**5.6%**), and “training not provided in appropriate language” (**4.6%**).

Furthermore, another perspective is that many of the employee behaviors implicating their culpability — such as taking shortcuts (**70%**), doing things “the old way” (**40%**), lack of engagement (**21%**), and especially not believing danger exists (**31%**) — could also be indicators of inadequate training. Ask any training leader and they will testify vigorously that the precise reason training exists is to curb these behaviors.

So, with that perspective, let’s take a closer look at the data on workplace safety training provided, starting with how it’s provided.

HOW

How Safety Training Is, Could, and Should Be Done

It's generally believed — and the research in this report supports — that better workplace safety training leads to better safety practices on the job. A lot of components make up a training program. In particular, the content of the training material is critical. Does it follow adult learning best practices? Does it utilize proven engagement techniques? Is it even accurate, current, and relevant to the employee

receiving it? These are matters of paramount importance, and those in charge of workplace safety training must assess them honestly.

But the highly qualitative nature of content quality is hard to quantify in a survey. *The State of Workplace Safety Training Study* **does** offer equally important insight into how safety training is delivered, managed, and reinforced.

Safety Training Delivery Methods and Their Impact

The survey presented eight common training methods, and respondents were asked to select all methods used at their facilities (Figure 13).

Printed materials, such as policy manuals and SOPs, are used for training at **71%** of companies, making them the most used training material. Unfortunately, most learning experts agree asking an employee to passively read lengthy material is the worst way to provide training. To be fair, it's unlikely this would be the only training method at any facility based on the cumulative survey responses.

On-the-job training (OJT) is also popular, with **56%** of companies utilizing a formal OJT program and **47%** citing "learning from co-workers as needed." There is a sizeable overlap with many companies providing both of the above. Though significant differences exist between formal OJT training compared to ad hoc approaches. One example is that nearly **20%** of companies lack confidence that employees will teach others how to perform job duties correctly [Figure 14].

Figure 13: How is workplace safety training delivered? (Select all that apply)

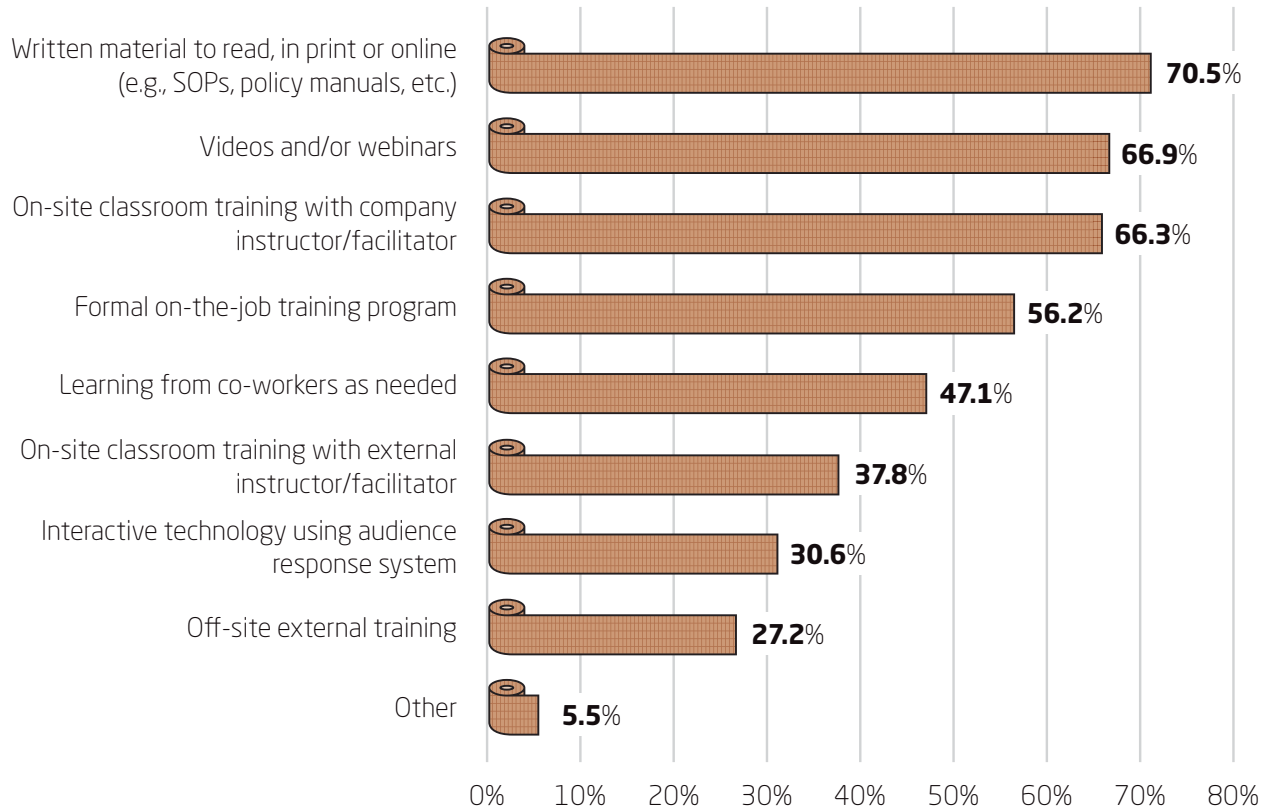
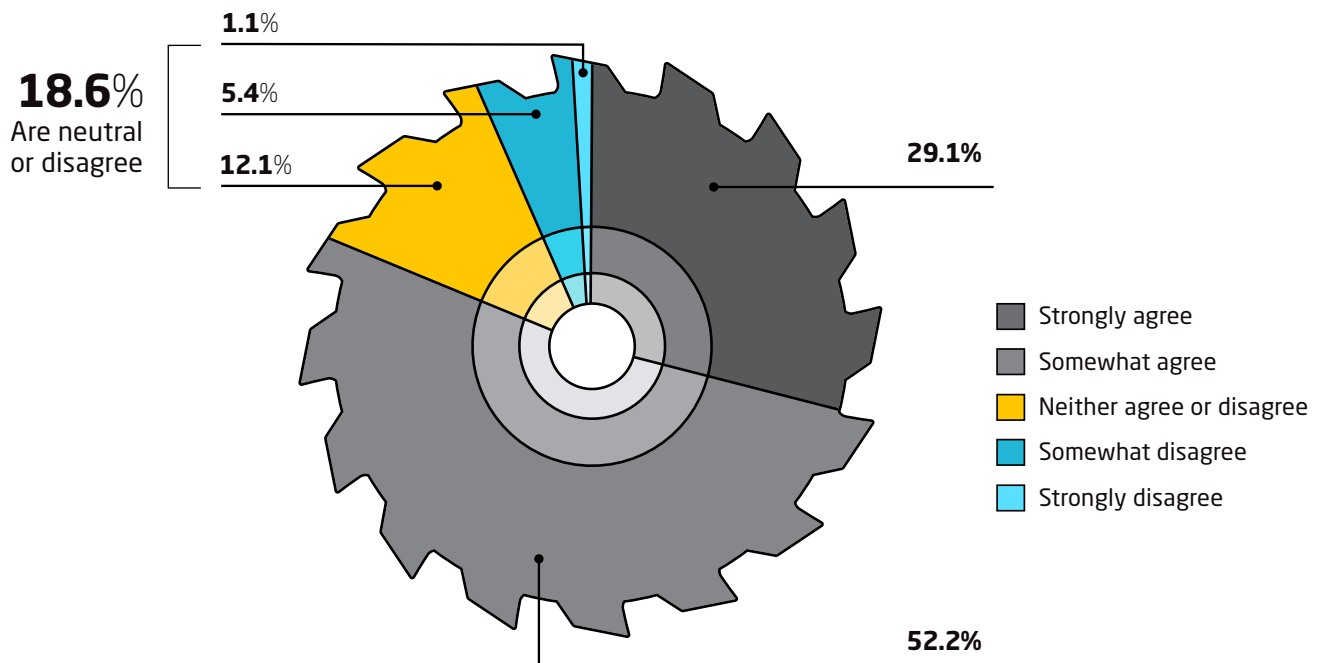


Figure 14: When one of our employees is showing another employee how to perform job duties, they are teaching them correctly and according to our safety policies



At first glance, **82%** agreement with this statement seems positive. But one must consider that the most basic requirement of any training is that it must be correct. In this light, it's troubling that one in five times an employee will teach an incorrect and/or unsafe way to perform a task.

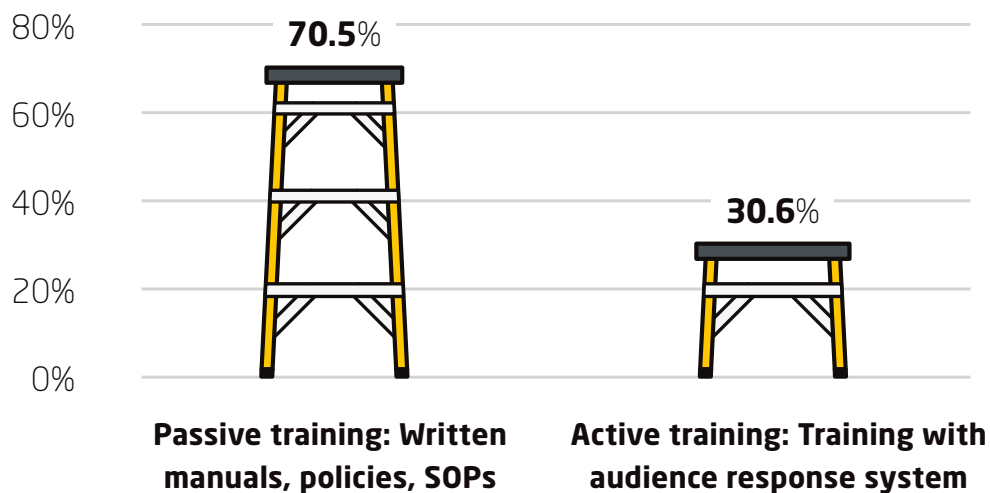
Group classroom training is also typical. Such training is popular because it can be efficient to train numerous employees at once. Additionally, almost any employee will be familiar and comfortable receiving training in this format. But to be effective with groups, the training has to hold everyone's attention. Training technology can help. In particular interactive technology using an audience response system¹ ensures every employee is actively engaged with the training material. This report will uncover several data points that identify this as one of the

most effective methods to ensure understanding and application of training. However, only **31%** of companies use this technology.

More succinctly stated: the least engaging method of training is in use at **71%** of companies, while one of the most engaging methods is only used at **31%** of companies [Figure 15].

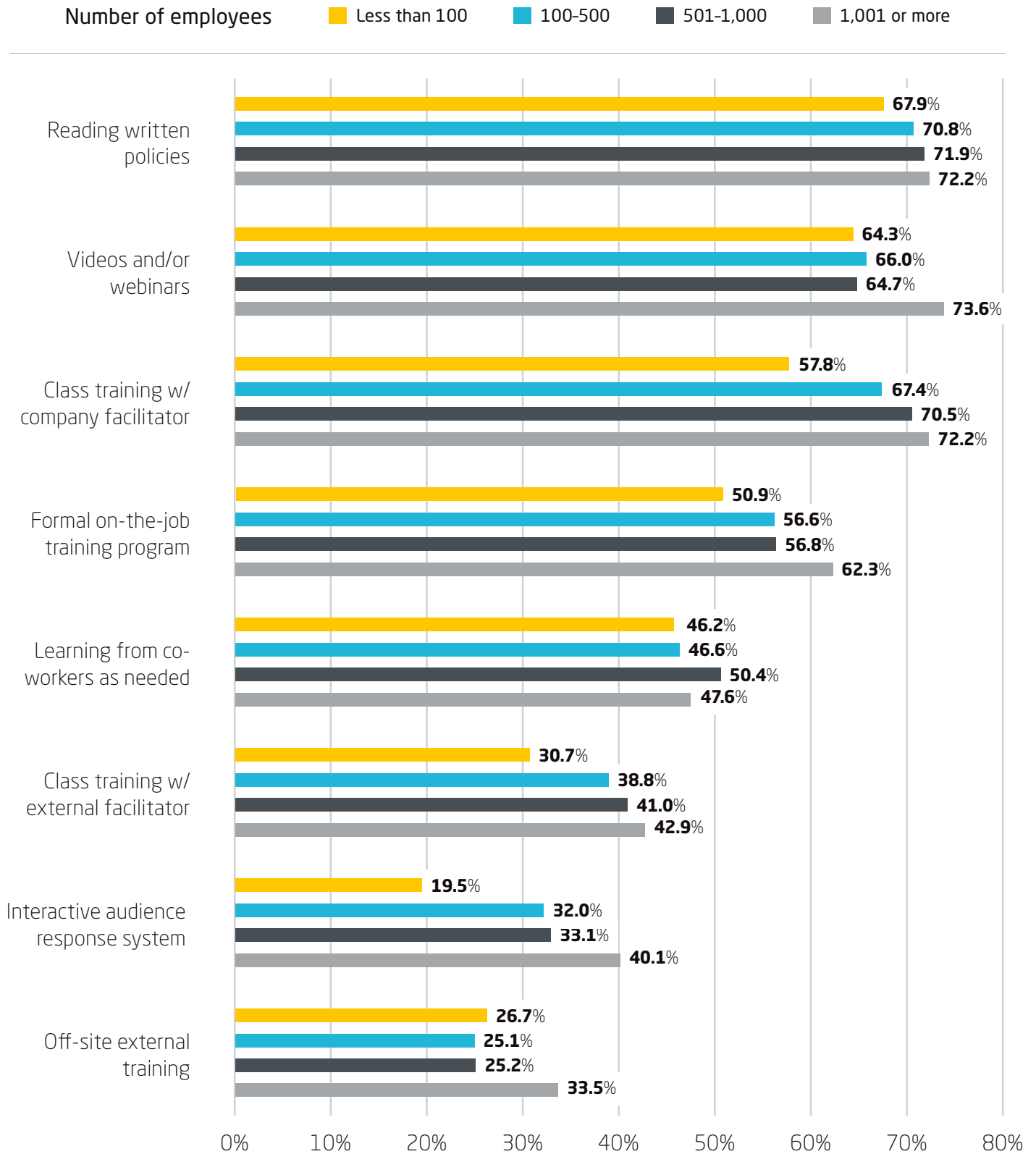
The size of an organization is a factor in how workplace safety training is delivered. Larger companies are more likely to utilize more training methods, and in particular, methods utilizing third parties that require funding [Figure 16]. While this is not surprising, it does accentuate the extra challenges faced by smaller companies, especially those with under 100 employees.

Figure 15: Use of Passive Training Compared to More Effective Engagement Technology



¹ *With 2/3 of companies not utilizing audience response systems, it's fair to presume many may not be familiar with the technology. It works by giving each employee their own remote control or clicker. The training material includes questions every couple of minutes, which employees answer using their clicker. The training continues once all responses are received, and the technology records each individual's responses. This allows a facilitator to discreetly see which employees are struggling with the content, providing an opportunity for further targeted training for those individuals. And it also proves invaluable during an audit or inspection, with instantaneous records of what training any employee received — along with verification they understood it.

Figure 16: How Safety Training is Delivered (by size of company)

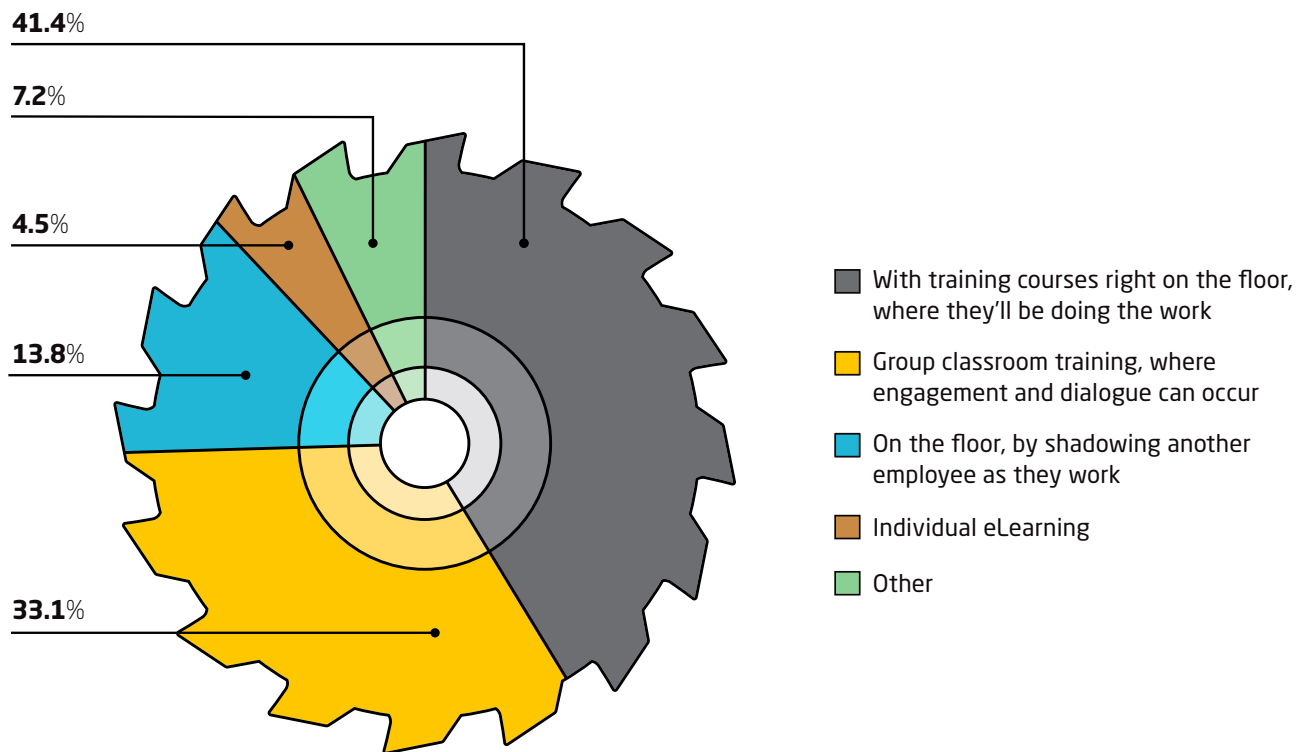


But what if there were no challenges to providing workplace safety training? How would safety and training leaders deliver it? Here we see that structured training courses right on the floor where the work will be performed is viewed as the best way for an employee to learn [Figure 17]².

This structured OJT training is considered far superior to a looser “buddy system” of shadowing another employee as they work (41% to 14%). This is another indication that without properly

mandated training, there’s a strong likelihood for employees to share and spread improper shortcuts, incorrect procedures, and unsafe habits. Also, of note, while the advancement of eLearning is typically seen as positive, it still represents a passive training experience forcing an individual to read and digest information on their own. This is likely why less than 5% of leaders feel this is the best way to learn, compared to 33% citing classroom training where dialogue and engagement can occur.

Figure 17: Which do you believe is the best way for an employee to learn?



² Interestingly, 6% of the entire survey group took the opportunity to write in some variation of “all of the above” even though it wasn’t option. It’s fair to assume a much larger share, likely even most, would have selected “all of the above” if it were an option, as this is likely the best answer. But the survey was designed to assess strengths and weaknesses of various training practices, hence the lack of “all of the above” as an option.

Training Management & Documentation: The Critical Role of Technology

If training delivery is the heart of a training program, the brain is the system to document and manage training activity. A successful training program relies entirely on the ability to successfully evaluate all training records in real time. This is invaluable to proactively close any training gaps or knowledge deficiencies before they lead to accidents.

This is why it's alarming that nearly **40%** of all companies rely on paper and/or spreadsheets alone to document and manage training records [Figure 18] versus **62%** that leverage a learning management system (LMS). Smaller companies are three times more likely to manage training in an entirely manual basis [Figure 19].

Figure 18: How Companies Document and Manage Training Records

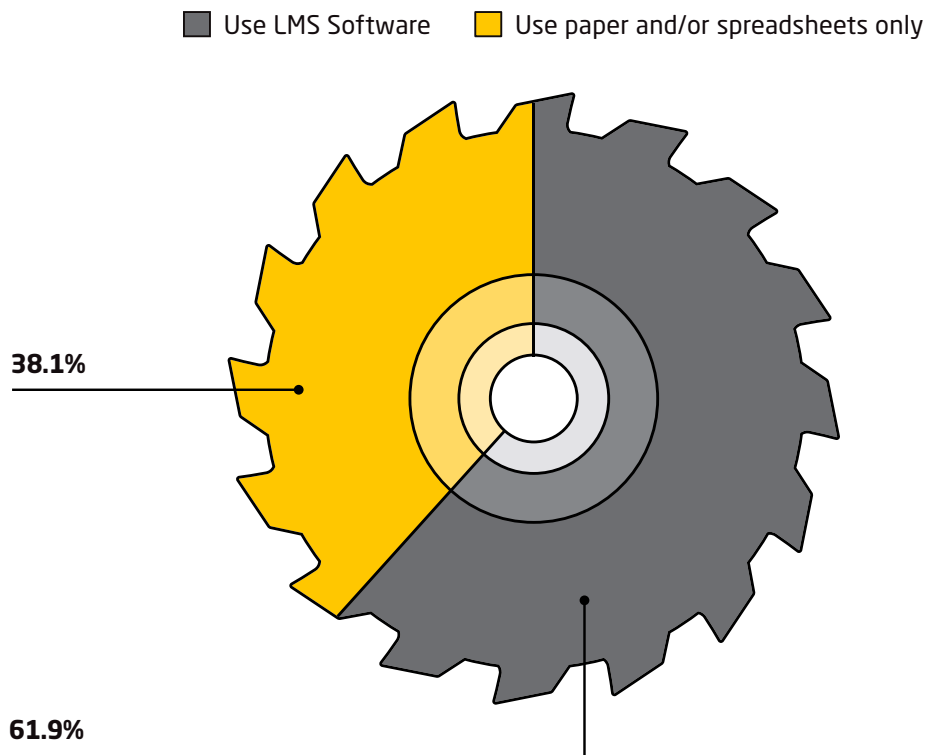


Figure 19: Using Paper and/or Spreadsheets Alone to Document & Manage Training Records



Of course, providing training is a moot point if the employees cannot understand what they are receiving. This is why experts prefer short courses with interactive audience engagement over dense written manuals. Regardless of the medium, the key is to not guess the results, but rather to verify that employees understand.

When asked to identify all the training methods used in their facility, 80% of companies reported utilizing some form of quiz or exam assessment [Figure 20]. This is good news. Not as good is that 67% lumped attendance with understanding. “Record of attendance” is of course important but is not a way to validate if an employee understood the training. The data suggest this is not the only measure many would use, which is encouraging. But this does indicate it could serve manufacturing companies well to introduce more engagement during the training.

Most troubling, however, is a glaring blind spot in evaluating training comprehension. “Documented behavior evaluation on the production floor” would be the best measure of training effectiveness, yet only **28%** of companies incorporate this method [Figure 20].

Further examination shows that companies incorporating technology do a better job of training assessments. Companies using audience-response technology score far higher on every positive measure [Figure 21], including:

- **22%** more likely to assess understanding via quiz or exam
- **25%** more likely to use on-the-job review
- **52%** more likely to use documented behavior evaluation

Figure 20: How does your organization assess the understanding of any training undertaken? (Select all that apply)

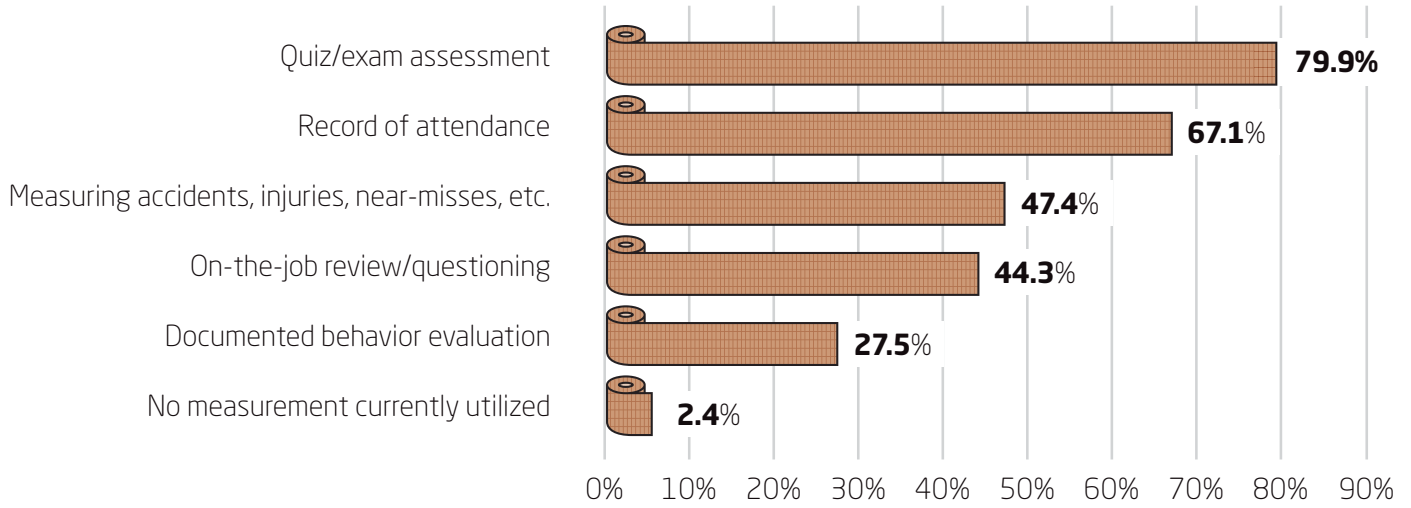
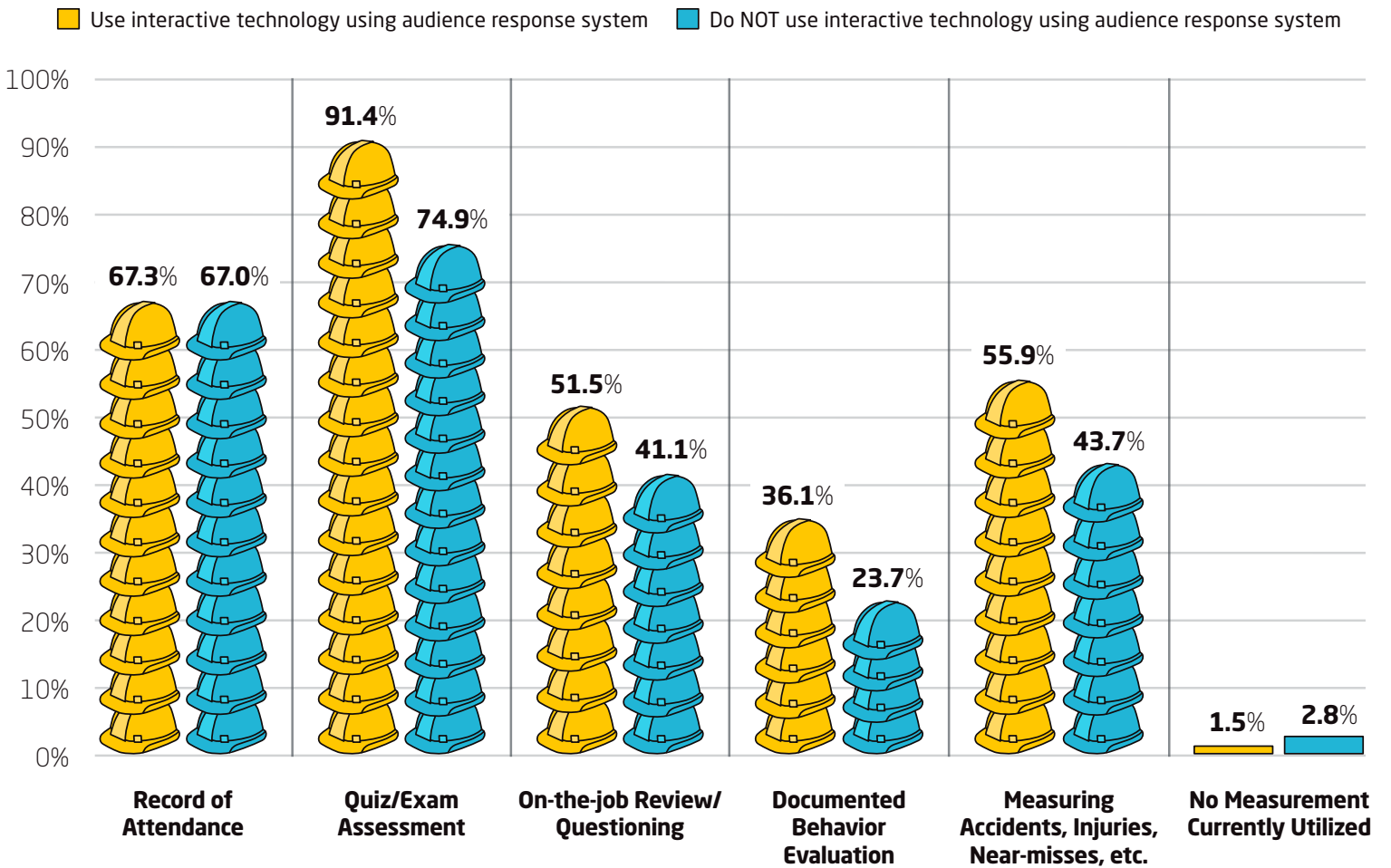


Figure 21: Technology Impact on Training Assessment



Creating a Continuous Learning Environment with Technology

Assessing training comprehension and validating behaviors on the floor are excellent ways to follow through on training. Another important follow-through is providing continual refreshers and reminders on key safety training. Here again we find the seismic impact technology utilization can have for an organization.

When asked, "How does your organization keep safety training top of mind?" survey participants could select all methods being utilized [Figure 22].

Comparing the results in groups that utilize LMS software versus those that do not, we can see that LMS users can provide more training reinforcement in every category [Figure 23].

In some cases, the variance is quite significant, and the data is practically mirrored when comparing companies that use audience-response technology during training versus those that don't. It is clearly evident from the

data that the efficiencies and effectiveness of LMS and audience-response technologies provide companies more bandwidth, time, and a sturdy foundation to support more training reinforcement.

When taking the average of all training reinforcement opportunities:

- Companies utilizing an LMS provide **30%** more training reinforcement than companies not using an LMS
- Companies utilizing interactive audience response training technology provide **31%** more training reinforcement than companies that do not

Figure 22: How does your organization keep safety training “top of mind” on a daily basis for floor employees? (Select all that apply)

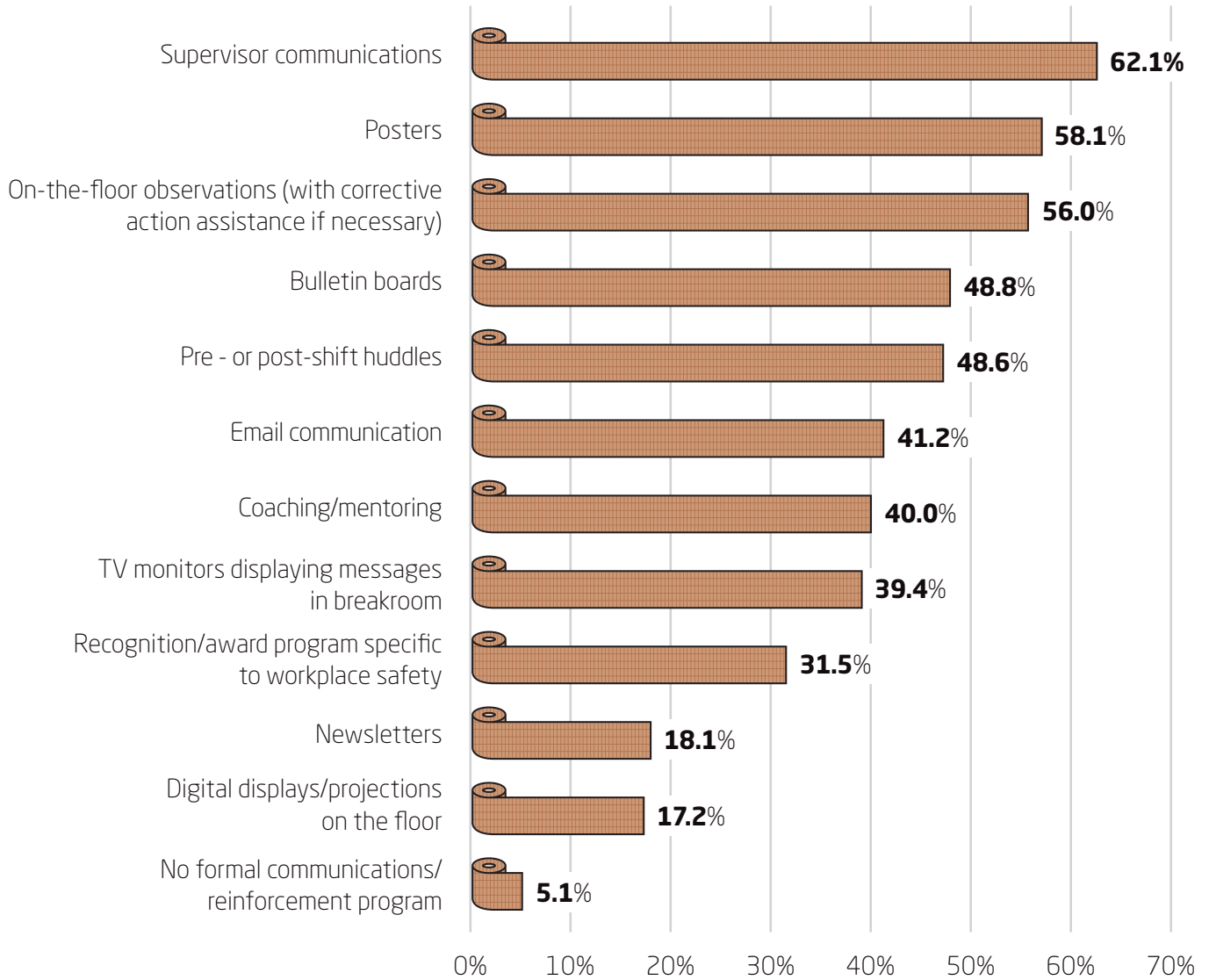
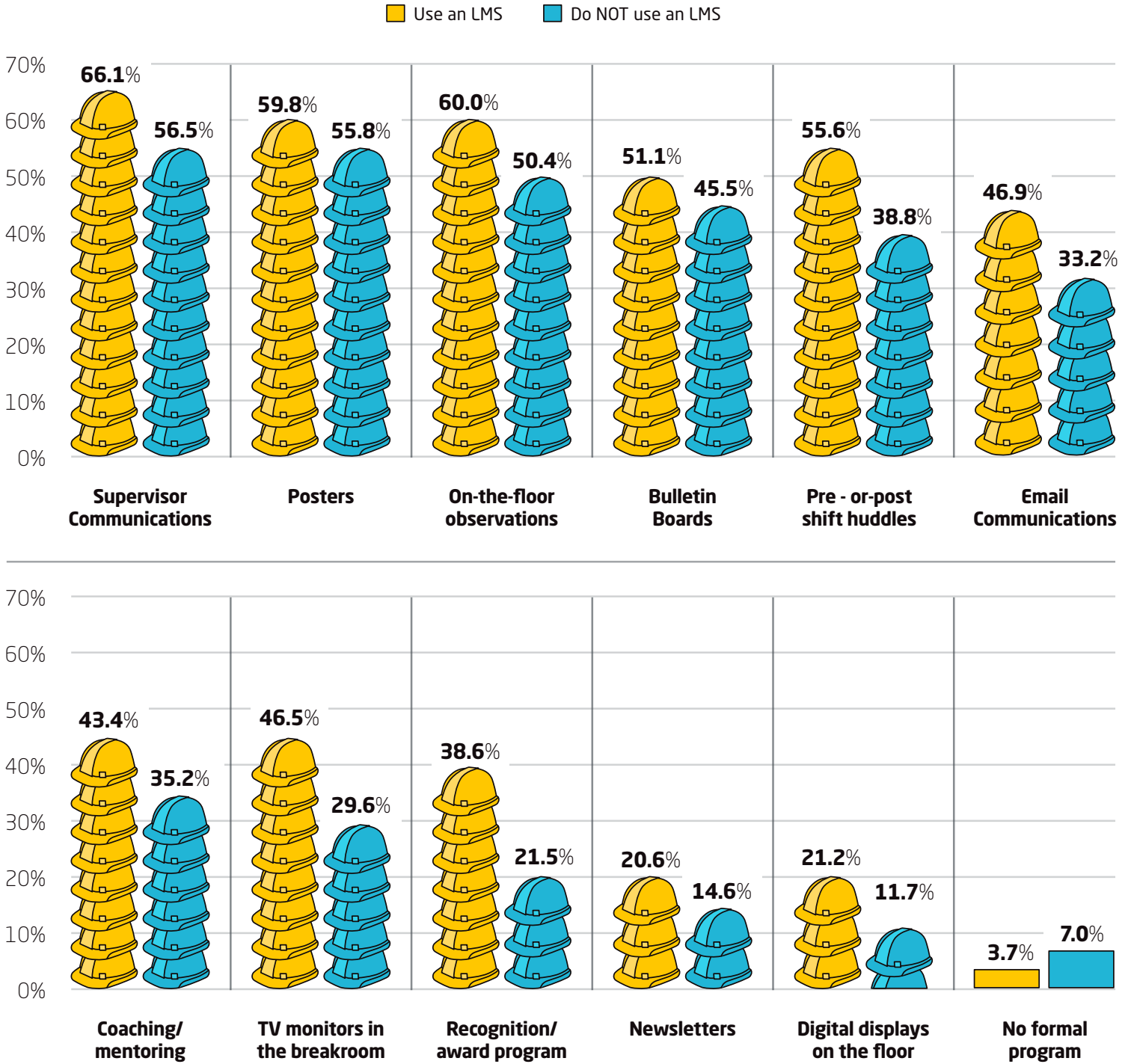


Figure 23: Ability to Do More Reinforcement & Coaching when Using an LMS



WHAT

What safety topics are trained? What's in the content? And what that means.

Many companies may find it interesting to see which safety topics their peers provide training for and compare it to their own training schedule. Figure 24 provides a breakdown on the percentage of companies providing training on the 20 most common safety training topics.³

For any topic a specific survey participant did not select as one they already provide, they were subsequently asked if they would like to add that topic to their training [Figure 25]. Here we see the three topics most desired to be added to a safety training program are:

- Arc Flash
- Ergonomics
- Hoists & Slings

It's a noteworthy indicator that nearly a third of respondents selected "none of the above." This could be a good sign that training programs are covering the topics needed. Or a bad sign that gaps and deficiencies are going unnoticed. The data cannot determine this; it can only point out the need to assess this within an organization.

³ The 20 most common safety training topics provided as the options in the survey were based on several million training records of Intertek Alchemy. Intertek Alchemy's workplace safety training library contains nearly 100 topics and is used in approximately 15,000 facilities, providing millions of training records on the types of safety training being delivered.

Figure 24: Which types of training do you provide to employees at least once per year? (Select all that apply)

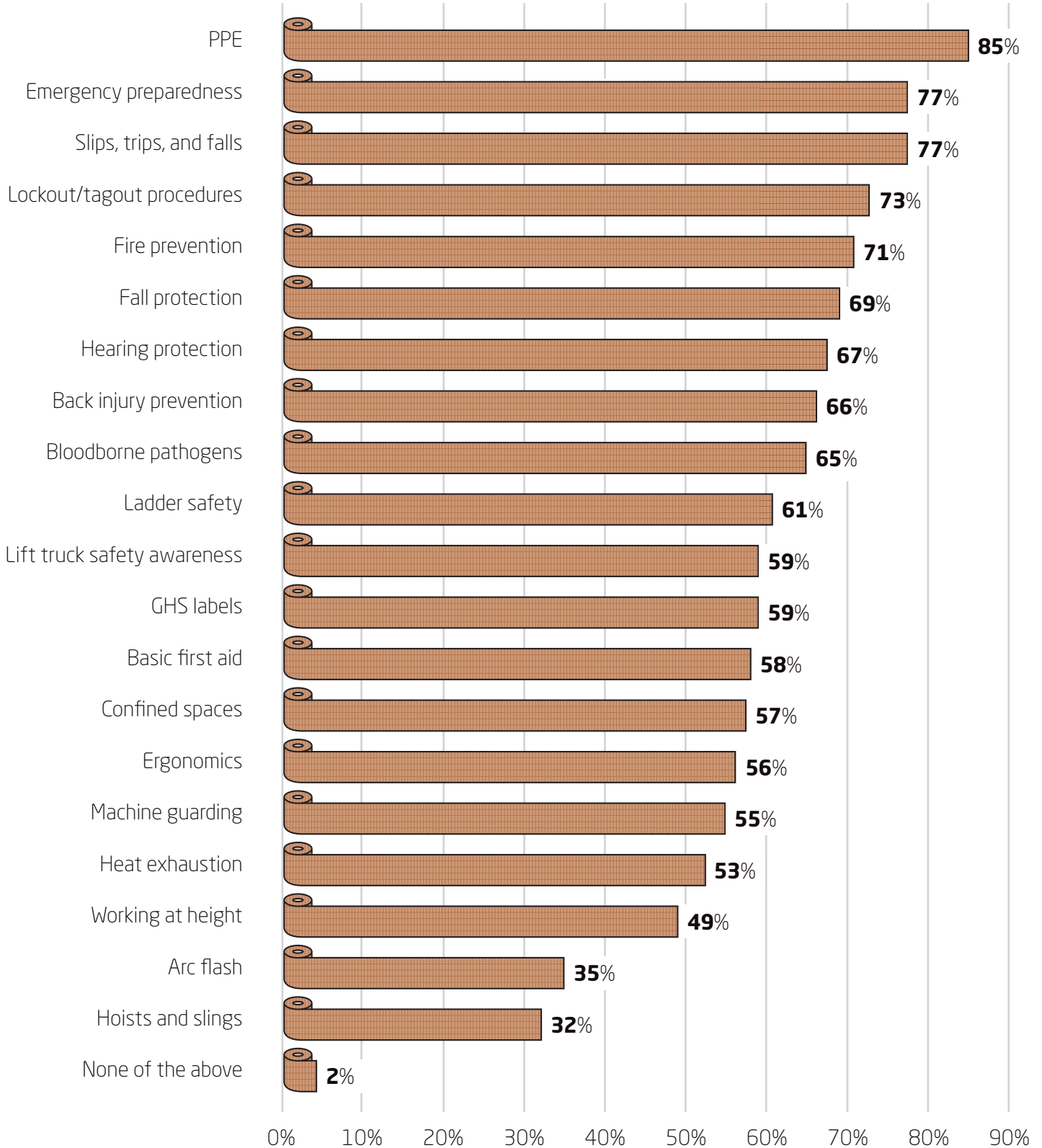
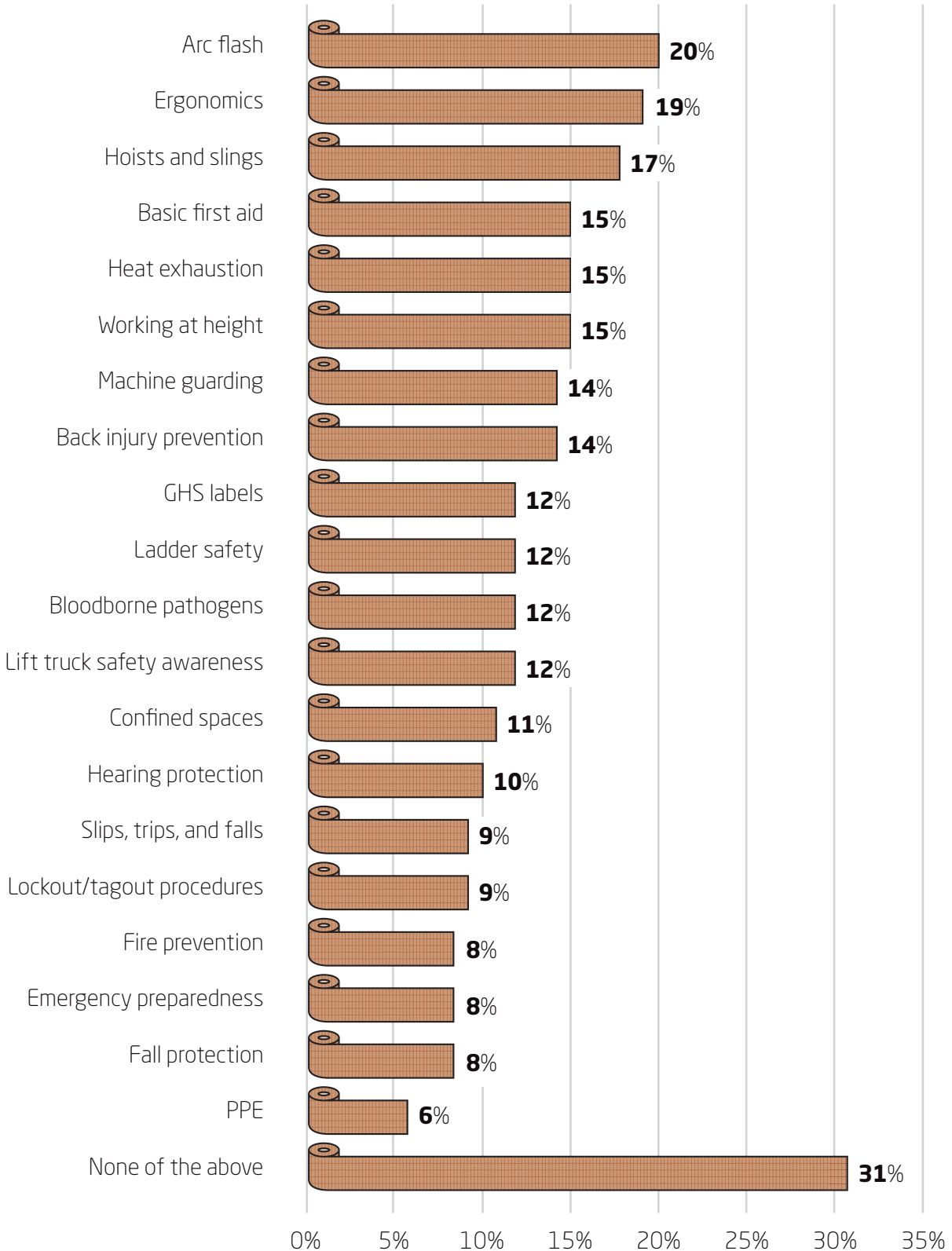


Figure 25: Which types of training do you NOT provide to employees at least once per year, but would like to add to their training? (Select all that apply)



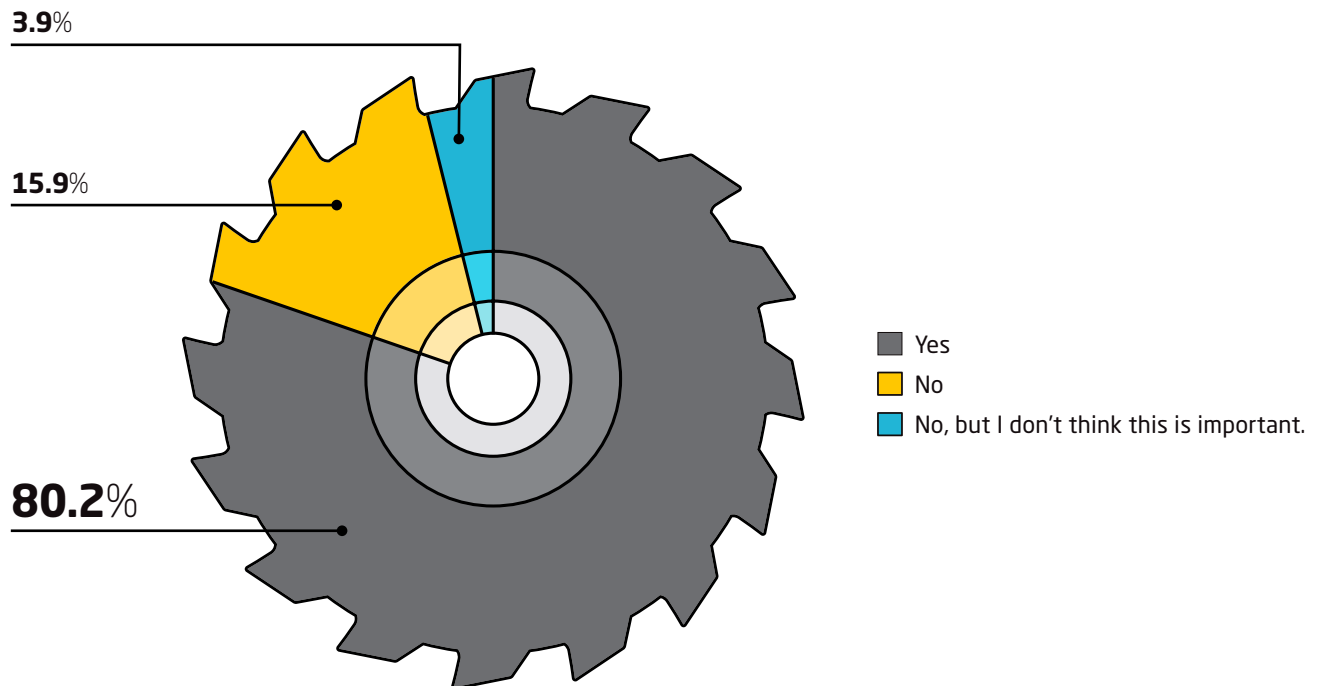
Site-specific Examples in Training Magnify Effectiveness

Among the survey participants, **80%** include photo or video examples of specific hazards and conditions from their facilities in their safety training [Figure 26].

Most would easily agree this is a good thing. Indeed, when specifically asked only **4%** of respondents didn't feel this is important. If anything were to

change their minds (and motivate even the truest believers to double down and ensure site-specific examples are in all training provided) it would be the following data from this research.

Figure 26: Does your safety training include photos/videos of specific hazards and conditions from your own facilities to be more relevant?



Companies using site-specific photos/videos in safety training are:

- More than two times more likely to have employees “very engaged” in their safety training [Figure 27]
- Two times more likely to have total confidence one employee can show another employee how to perform job duties correctly and safely [Figure 28], (and are **75%** more likely to have at least some confidence)
- **30%** more capable to provide evidence a specific employee understood their training [Figure 29]
- **124%** more capable to provide evidence of correct on-the-floor safety behaviors during an OSHA inspection [Figure 29]

Figure 27: Employee Attitudes Toward Safety Training: With and Without Site-specific Examples in Training

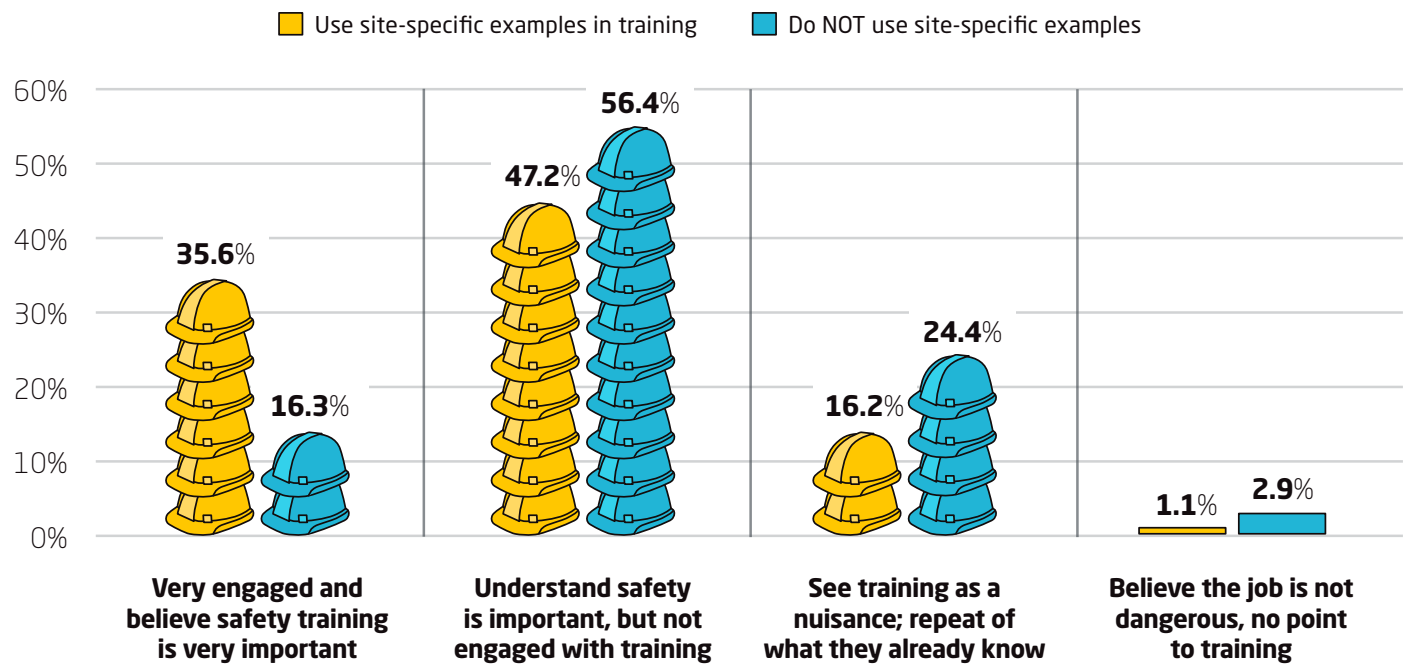


Figure 28: Have Confidence One Employee Can Show Another How to Correctly & Safely Perform Job Duties

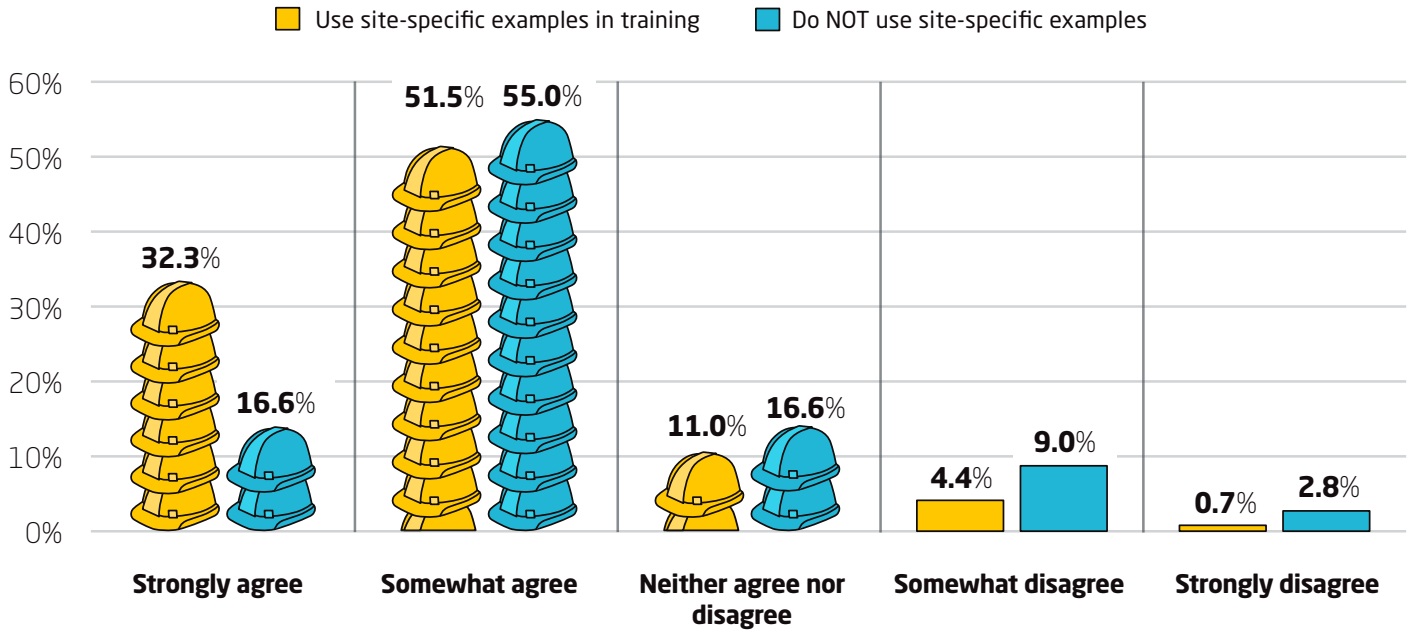
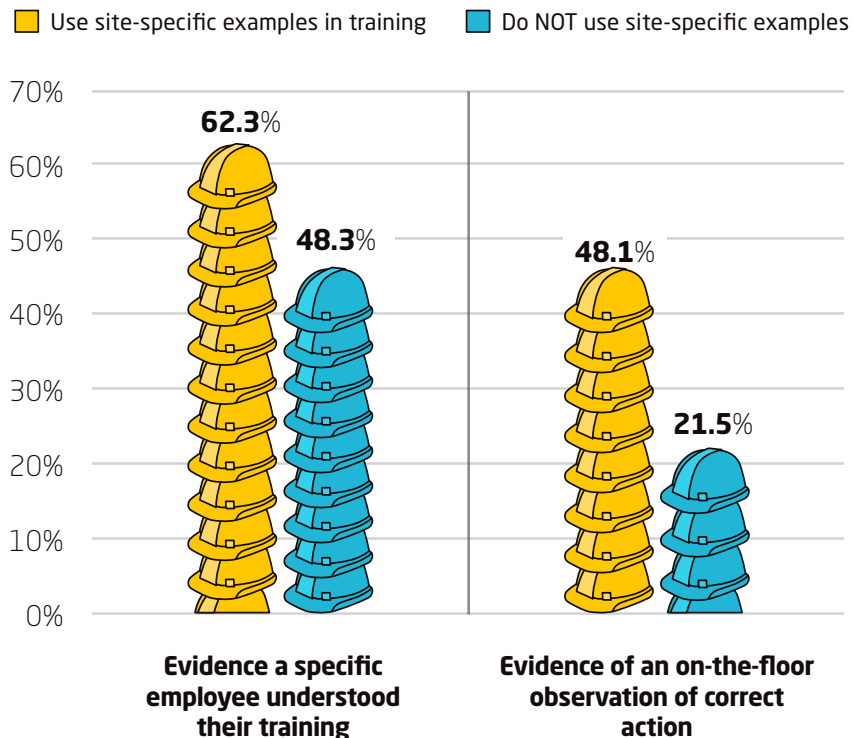


Figure 29: Ability to Provide During an OSHA Inspection: With & Without Site-specific Examples in Training



Technology's Impact on Training and Behavior Documentation

We've dissected what safety training topics are delivered and how the content can impact the effectiveness. Now let's investigate what kinds of training documentation companies are capable of providing. Most companies can provide reports on training topics delivered (**91%**) and even which employee attended the training (**89%**) [Figure 30].

But we've already determined attendance doesn't equate to understanding or application. And here, only **60%** of companies can verify which employees understand their training, and only **43%** can provide evidence of correct action on the floor [Figure 30].

Needless to say, this could easily lead to more injuries and certainly complicate matters during an OSHA inspection. Thankfully, again, technology can save the day. Companies using an LMS score better

in every category of training documentation and behavior assessment [Figure 31]. And companies are able to do better still by using interactive audience-response technology.

In the first two categories, even companies relying on manual systems perform fairly well. Though as we learned earlier, even those succeeding here are bogged down by the manual process and cannot deliver near the same scope and volume of training reinforcement and coaching. The more significant gaps exist as the task becomes more difficult. Companies using an LMS are **49%** more likely to be able to verify if a specific employee understood their training [Figure 32]. And companies using interactive audience response training are nearly another **10%** better than that (**8.8%** more likely than LMS users alone).

Figure 30: If your facility was to undergo an OSHA inspection tomorrow, which of the following would you be able to provide? (Select all that apply)

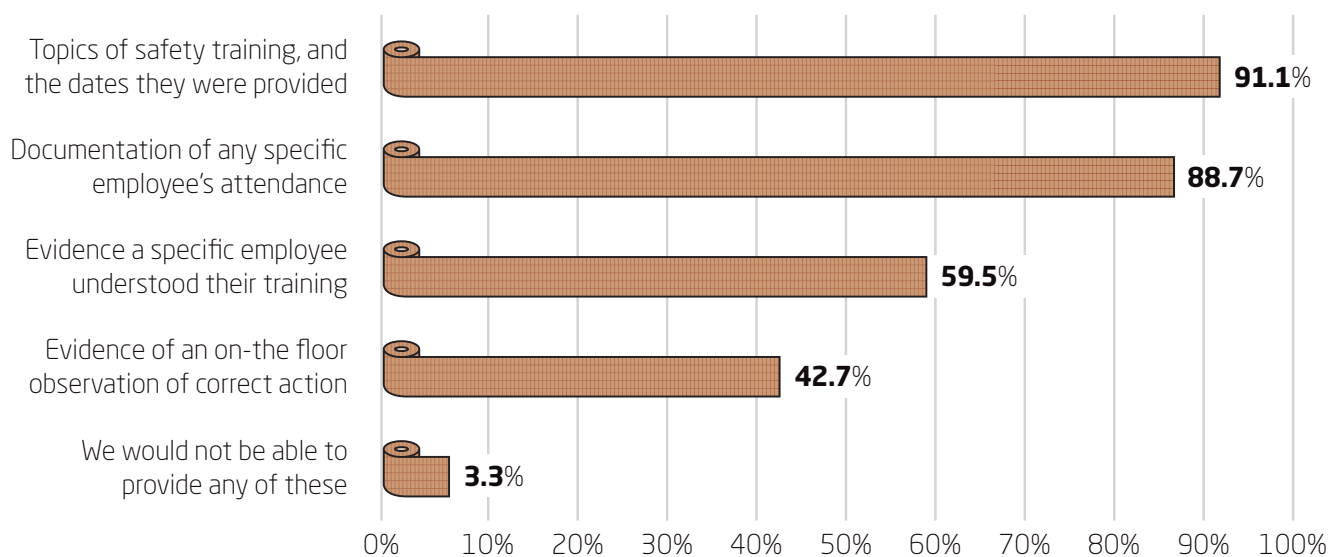
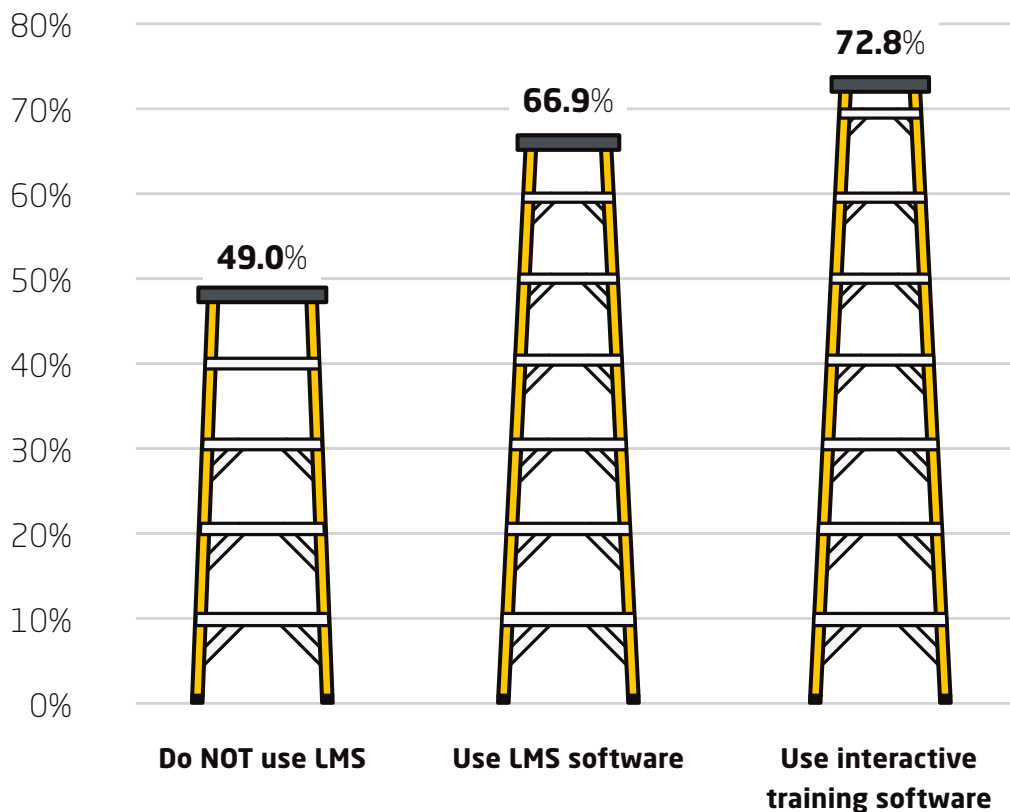


Figure 31: Technology’s Impact on Training & Behavior Documentation

Able to provide...	Do NOT use LMS	Use LMS	Use interactive training technology
Topics of safety training, and the dates they were provided	87.8%	93.4%	95.4%
Documentation of any specific employee’s attendance	83.7%	92.3%	93.2%
Evidence a specific employee understood their training	49.0%	66.9%	72.8%
Evidence of an on-the-floor observation of a correct action	39.1%	45.3%	44.1%
We would not be able to provide any of these	5.0%	2.1%	2.2%

Figure 32: Ability to Verify Specific Employees Understood Training by Technology Used



WHEN

When companies find more time for training, they reap the benefits

The question of when safety training is delivered, based on it being the overwhelmingly biggest safety training challenge, is more a question of when can companies find the time? How often safety training is provided is a great starting point for companies to compare their program to their peers. Looking further, the data shows the more safety training provided, the better the results on the floor.

More Safety Training Shows on the Floor

The largest share of companies provides between five to 10 hours of safety training per year [Figure 33], which is less than an hour per month. Extrapolating the breakdown, it appears at least half of companies provide at least an hour per month.

Taking a closer look based on the size of the company, there is less variance than one might expect [Figure 34]. This consistency is worth showcasing, as smaller companies often blame

the lack of more training on the lack of resources compared to their larger counterparts. Whereas larger companies point to the more rigid production demands and turnover challenges. Yet, all in all, the picture is relatively consistent. The largest delta is the **19%** of the smallest companies (less than 100 employees) providing less than five hours per year, roughly six percentage points higher than the rest.

Figure 33: Typically, how many hours of workplace safety training does each employee receive per year?

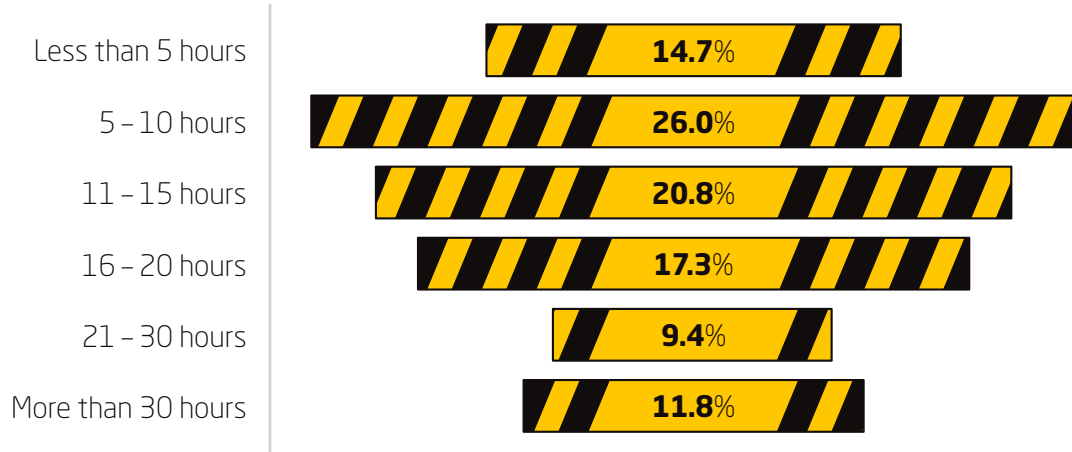


Figure 34: Consistent Training Quantity Across Company Sizes

	Number of Employees			
	Less than 100	100-500	501-1,000	Over 1,000
Less than 5 hours	18.8%	13.3%	13.8%	12.7%
5 - 10 hours	26.1%	26.3%	26.1%	25.5%
11 - 15 hours	20.3%	20.1%	23.9%	20.8%
16 - 20 hours	14.9%	18.3%	16.7%	18.9%
21 - 30 hours	9.8%	10.1%	6.5%	9.0%
More than 30 hours	10.1%	11.9%	13.0%	13.2%

Companies providing at least 20 hours of annual safety training are **68%** more likely to have employees follow safety protocols on the floor compared to companies providing less than 10 hours [Figure 35] at **30%** and **18%** respectively.

By natural extension, companies providing more safety training are better positioned to have one employee teach another employee. Companies providing the most annual safety training are **53%** more likely to have *total* confidence in an employee's ability [Figure 36]. And companies with the least amount of annual safety training are more than three times more likely to lack confidence in their employees' ability to train other employees correctly and safely [Figure 37].

Figure 35: Some or Total Confidence Employees Follow Safety Protocols on the Floor

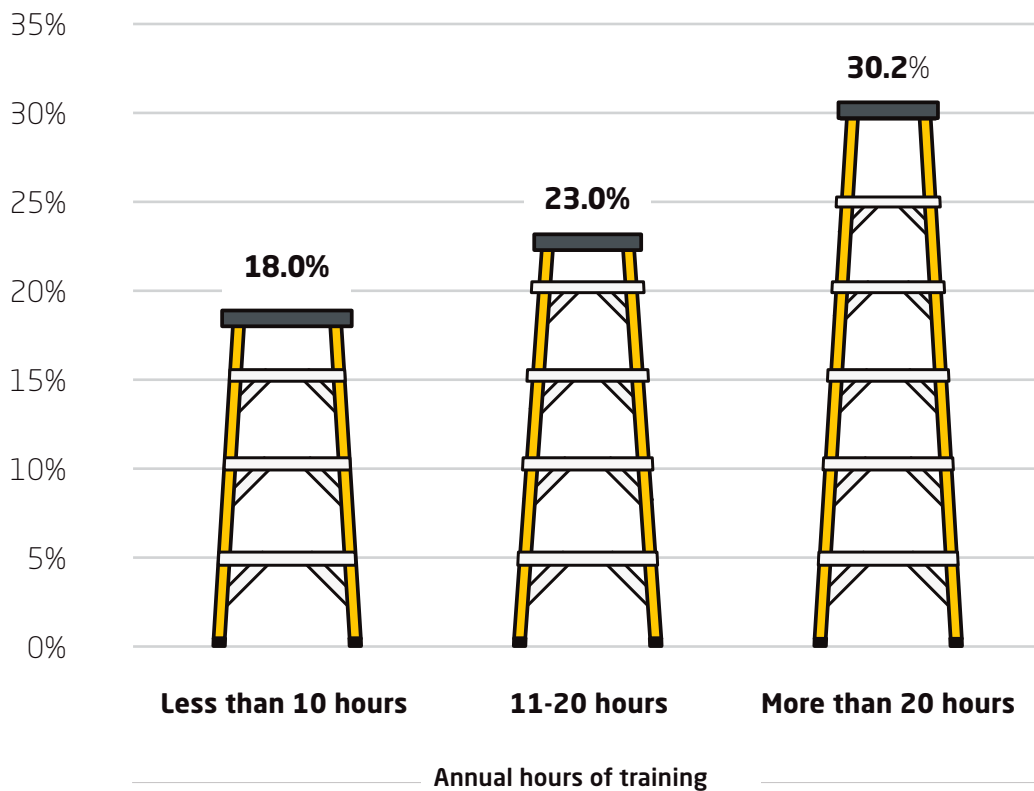


Figure 36: Strongly Agree One Employee Can Teach Another Employee Correctly

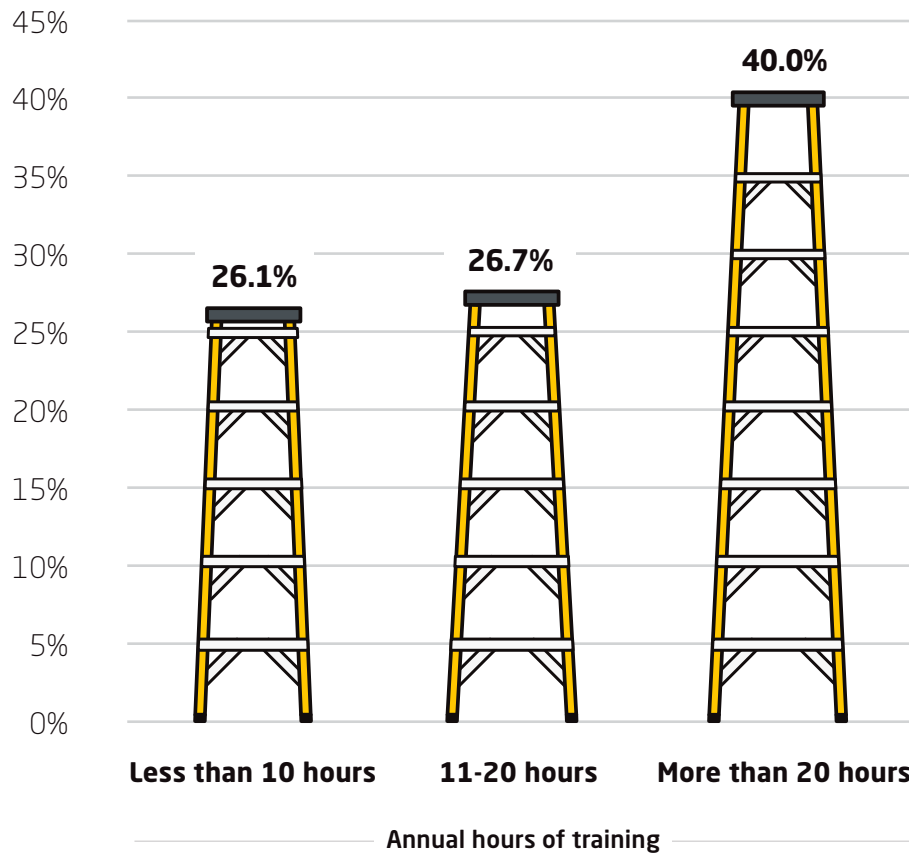
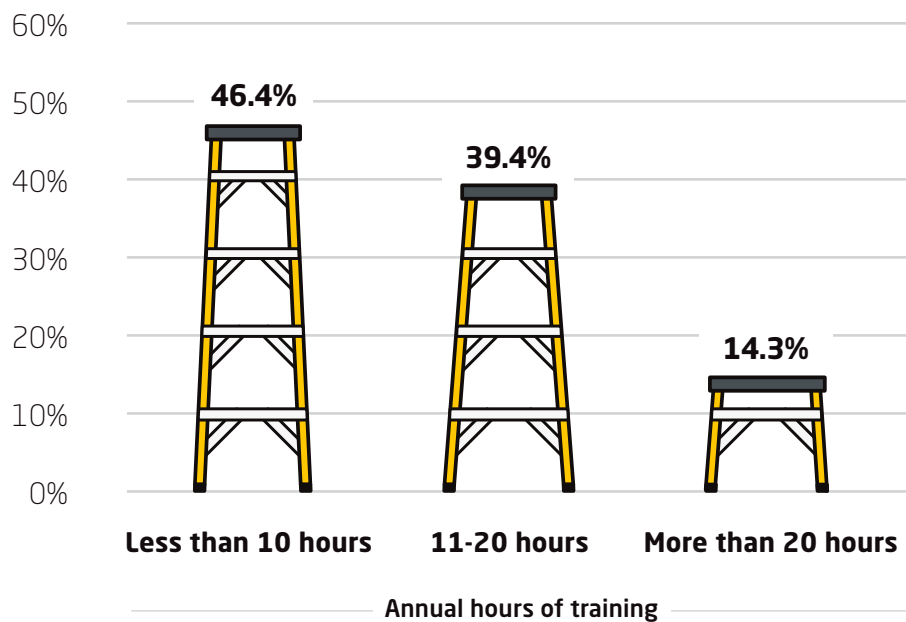


Figure 37: Lack Confidence Employees Can Teach Each Other Correctly

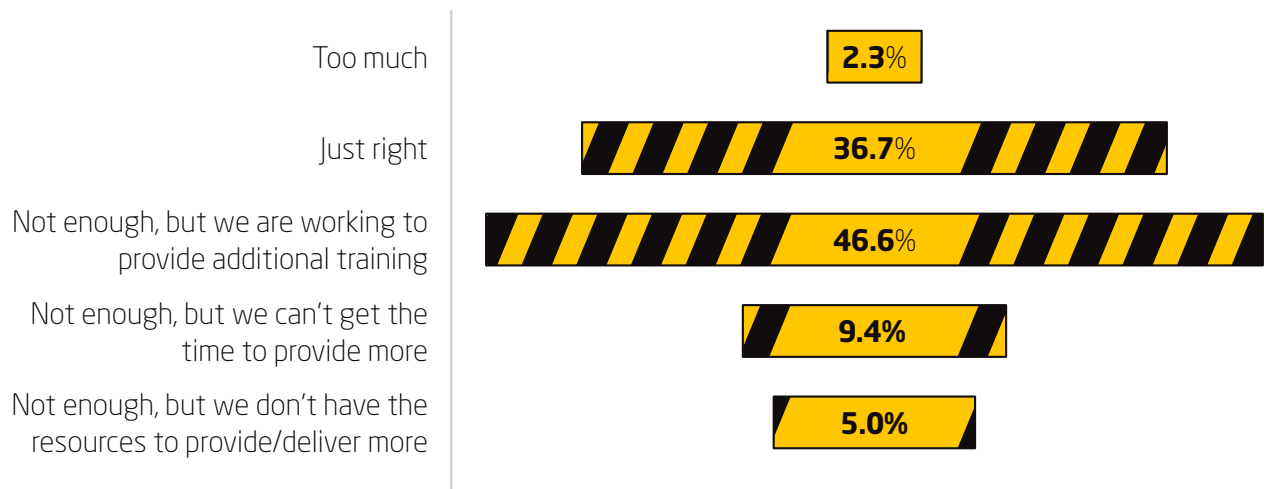


It would seem most leaders are aware of these trends, as evidenced by their desire to provide more workplace safety training. When asked to assess the amount of safety training their company provides, **61%** cited some version of not enough, with

the largest group (**47%**) adding they are actively working to provide additional training [Figure 38].

The good news is that, yet again, readily available training technologies can help provide the additional training desired.

Figure 38: The amount of workplace safety training you currently provide to employees is...



Utilizing Technology to Provide More Safety Training

Generally speaking, companies utilizing LMS software can deliver more safety training than those that do not. And companies using interactive audience response training can provide more training still [Figures 39 and 40].

- Companies are two times more likely to provide the least amount of training when not using an LMS, and three times more likely when not using interactive audience response technology
- Companies are **18%** more likely to provide at least 20 hours of annual safety training when using an LMS, and **31%** more likely when using audience response technology

Figure 39: Annual Safety Training Delivered: With & Without Using an LMS

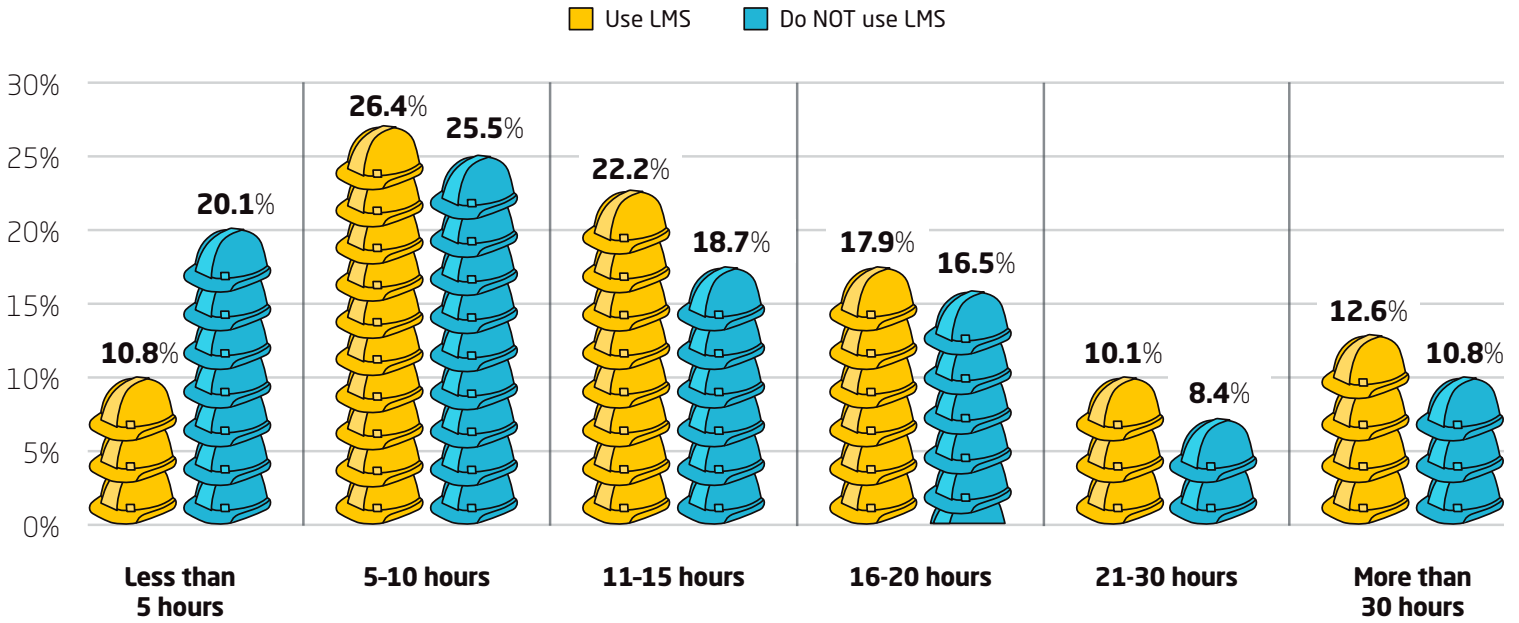
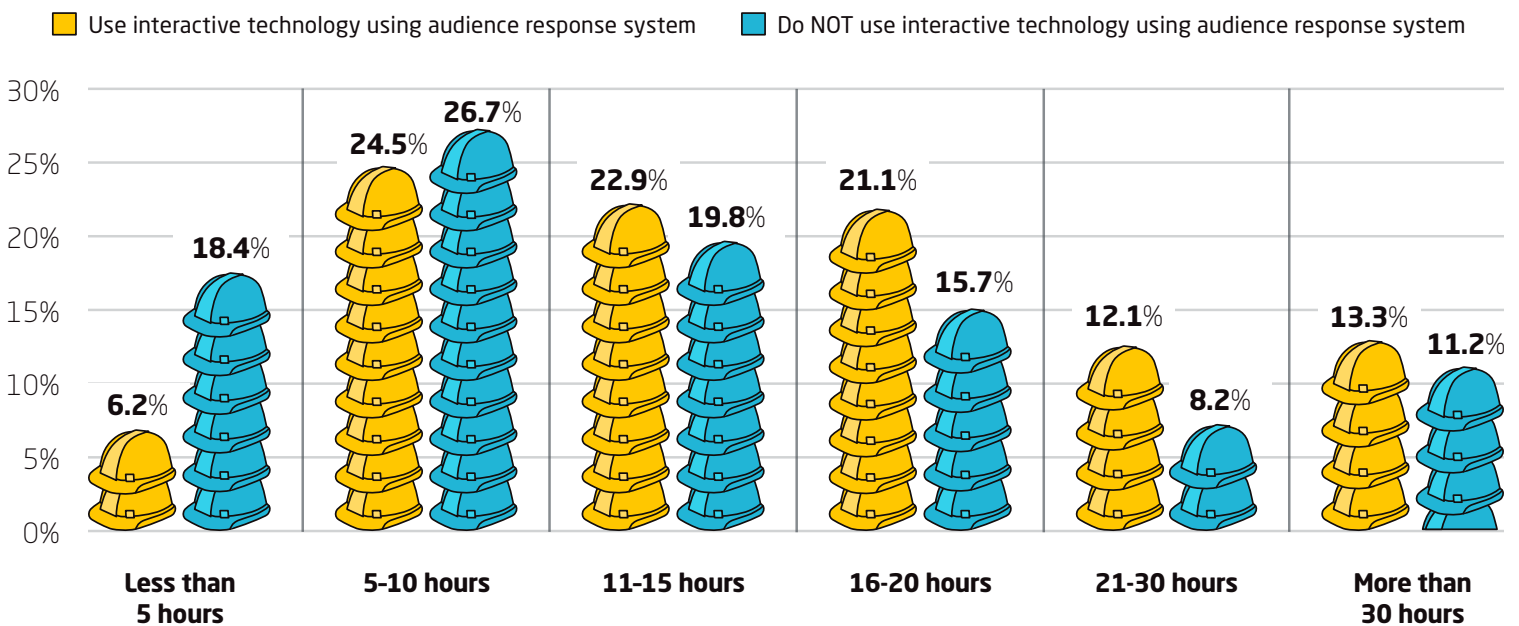


Figure 40: Annual Safety Training Delivered: With & Without Using Interactive Training Technology



WHO

Who is in charge of, and who receives, safety training?

Everyone thinks training is their responsibility, everyone else disagrees

Safety is everyone's responsibility. But for safety training, someone has to be in charge and take ownership of ensuring processes are defined and adhered to. When asked who is ultimately responsible for ensuring safety training is completed [Figure 41], EHS leaders are most likely to be responsible (**53%**). Combining HR and Learning & Development (L&D) nets **20%** for the next largest group.

Figure 41: Who within your organization is ultimately responsible for making sure workplace safety training is completed?

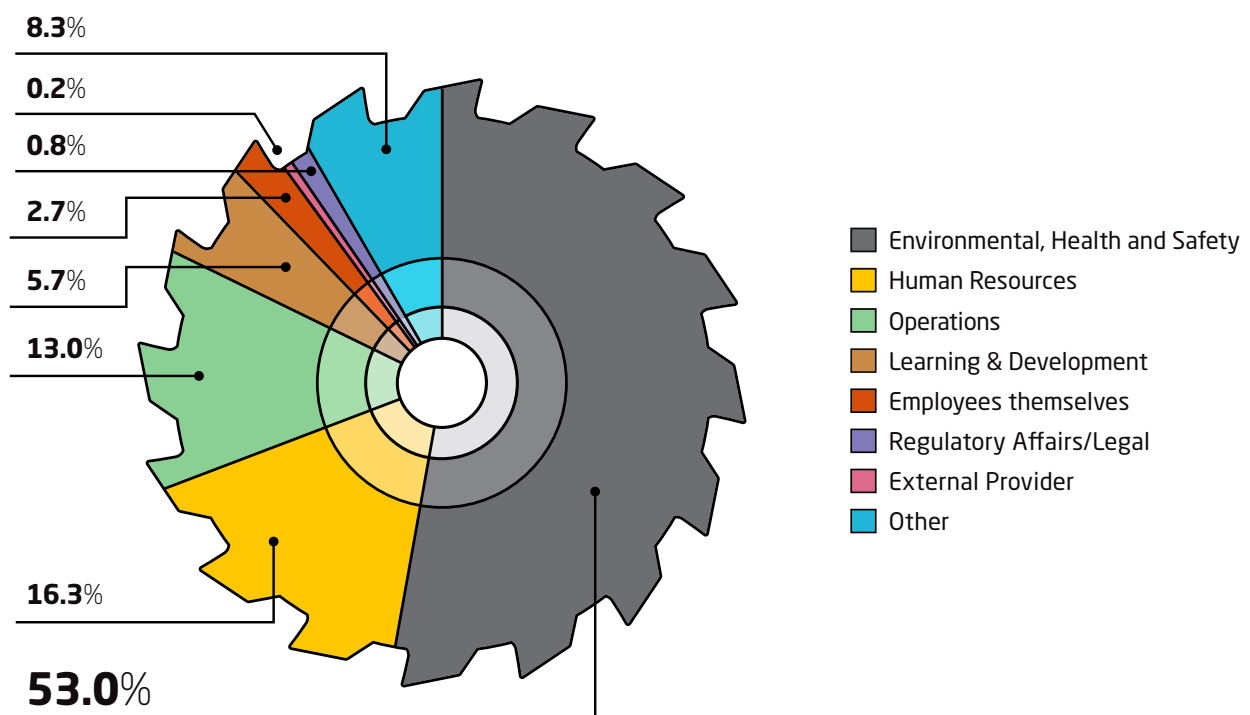


Figure 42: Responsible for Safety Training: by Job Role

	HR	L&D	Operations	EHS	Plant Supervisor	Other
Human Resources	57.9%	13.1%	17.1%	7.2%	16.2%	19.9%
Learning & Development	2.8%	29.8%	4.1%	3.5%	2.7%	4.5%
Operations	3.7%	13.1%	41.5%	8.5%	29.7%	91.0%
Environmental, Health and Safety	27.1%	33.3%	27.6%	74.8%	35.1%	33.0%

Of great interest, however, is that every group seems to think it's their responsibility, yet no other group agrees with them [Figure 42]. More specifically:

- **58%** of HR personnel believe safety training is their responsibility, yet only about **15%** of everyone else thinks it is HR's job
- **30%** of L&D leaders think safety training is their responsibility, yet only about **4%** of everyone else thinks it is L&D's job
- **42%** of operations leaders think safety training is their responsibility, yet only about **13%** of everyone else thinks it is Ops' job
- **75%** of EHS leaders think safety training is their responsibility, yet only about **31%** of everyone else thinks it's EHS' job

It might seem a good thing that everyone wants to take responsibility. But for any process to flow smoothly up and down the chain, across a whole organization, roles and responsibilities must be clearly defined. This study suggests companies can better define these responsibilities when it comes to safety training.

We find another interesting fact when slicing the data by size of company. The larger a company gets, the less likely HR or Ops are ultimately responsible for safety training, and the more likely it falls to L&D

or EHS [Figure 43]. As companies grow, HR tends to have more on their plate with personnel, insurance, benefits, etc. Also, the smaller a company is, the less likely they even have an L&D team. The significance here is that at smaller companies, HR is expected to wear more hats, becoming safety experts despite likely having no training in the area. On the other side, EHS leaders are inherently more occupied the larger the company, yet they are increasingly expected to be training experts as well, with adult education probably not in their résumés.

Figure 43: Responsible for Safety Training: by Company Size

	Number of Employees			
	Less than 100	100-50	501-1,000	Over 1,000
EH&S	46.8%	54.9%	53.2%	56.9%
Human Resources	17.3%	16.7%	16.5%	14.2%
Learning & Development	1.8%	5.7%	7.9%	9.5%
Operations	16.9%	12.6%	12.2%	9.5%
Employees themselves	4.0%	2.5%	2.2%	1.9%
Other	11.2%	7.1%	7.2%	7.6%

Who is missing from safety training, and how to fix it?

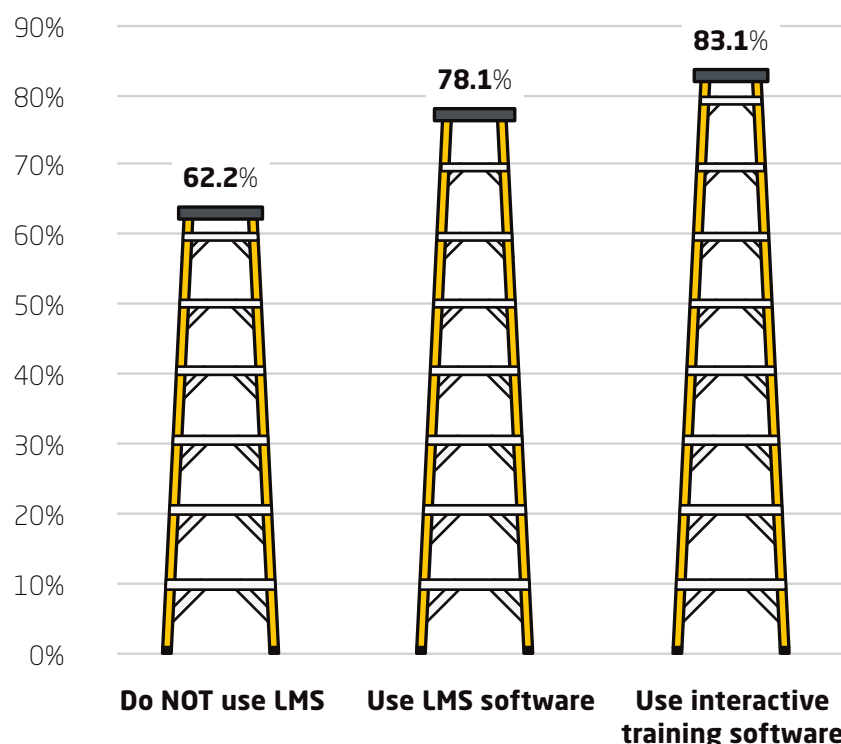
Probably every safety leader would agree anyone working on the production floor, on the construction site, or wherever work is conducted should receive safety training. But what should happen and what does happen are often not aligned, and this is no exception.

Temporary, leased, and contract workers are more common in many labor-intensive industries. Seasonality can derive from peak demand periods, weather, harvest schedules, and much more. Temp workers might last a whole season or feel they've had enough after one shift and not show up again. This could be one reason they don't always receive the same workplace safety training as their tenured employees they work beside.

Cumulatively, **72%** of companies answer "yes" when asked if they require temp/contract/leased workers to receive documented workplace safety training before working in a production capacity. This falls short of the **100%** goal.

To get closer to the goal, the answer, yet again, is to utilize available training technology. Upon closer examination we see companies without an LMS provide safety training to temp workers only **62%** of the time [Figure 44]. Providing safety training to temp workers jumps to **78%** at companies utilizing an LMS (a **26%** greater likelihood). And, again, using interactive audience response training nets further improvement, with **83%** of these companies training temp workers on safety (a **34%** greater likelihood than the base group without training technology).

Figure 44: Companies Requiring Temp or Contract Workers to Receive Documented Safety Training



Five Key Recommendations for a Stronger Workplace Safety Training Program

At its core, *The State of Workplace Safety Training* study is about collecting data for the shared purpose of improving workplace safety. Every company and industry have many points of competition with other companies; worker safety should not be one of them. Below are a few recommendations based on analyzing the data collected in this survey and talking directly with hundreds of training and safety professionals.

1. Use course-authoring software to add site-specific photos and videos to training courses

The more real training material looks and feels, the more relevant and relatable it is to the workers. Without a doubt this includes real imagery of the actual equipment, site, and materials they will use. This doesn't have to be daunting. A number of training companies offer user-friendly course authoring software. Combined with an editable library of workplace safety courses, this can make it easy for even a beginning trainer to develop highly effective, site-specific courses. The software can vary in degree of complexity. A key is to keep it simple: a smartphone camera and basic PowerPoint skills should be all that is necessary.

The software is generally very affordable. At least one provider even includes it as a complimentary part of its workplace safety training library. And the return on investment has been highlighted in this report, with a recap below.

Companies using site-specific photos and/or videos in safety training are:

- More than two times more likely to have employees “very engaged” in their safety training
- Two times more likely to have total confidence one employee can show another employee how to perform job duties correctly and safely (and are **75%** more likely to have at least some confidence)
- **30%** more capable to provide evidence a specific employee understood their training;
- **124%** more capable to provide evidence of correct on-the-floor safety behaviors during an OSHA inspection

2. Introduce technology (or maximize existing technology) to help manage training

The survey illuminated that 4 in 10 companies are not using a learning management system (LMS) to help manage training, which can lead to gaps in safety training and place workers in harm’s way unnecessarily. Software and apps that can sync with your HR platform (or become your platform) are readily available to efficiently manage and document training records, verify employee understanding of training, and reduce the time and effort to do so.

But the **62%** of companies currently using an LMS are not entirely off the hook. They should take a moment to evaluate their platform. Like many of us who only use a fraction of our smartphone’s capabilities, most companies using third-party technology platforms are only scratching the surface of its power. Their provider should have an individual or team (depending on

their size and needs) dedicated to assisting them in unlocking more features and benefits from your system.

The benefits to utilizing an LMS to its fullest can be found throughout this report. Companies utilizing an LMS to document and manage training compared to those that do not are:

- Able to provide **30%** more training reinforcement
- **49%** more likely to be able to verify any specific employee understood their training
- **18%** more likely to provide at least 20 hours of annual safety training
- **26%** more likely to provide documented safety training to temporary and contract workers

3. Add interactive engagement elements to training

Interactive doesn't always mean online. In the truest sense of the word, it means requiring the input of the trainee to continue, thus creating engagement. Audience response technologies with games and quizzes during training are an easy way to create engagement, even when used to train many employees at once for greater efficiency. Plus, the technology doubles as a way to document employee understanding of training, or to discreetly identify certain workers in need of individual attention.

This seems to be the opportunity for the biggest leap forward in workplace safety training, as only **31%** of companies readily use this technology. And the results for those companies that do are even greater than using an LMS alone.

This research found that companies utilizing interactive audience response training technology compared to those that do not are:

- **22%** more likely to assess understanding of training via quiz or exam, **25%** more likely to use on-the-job review, and a whopping **52%** more likely to use documented behavior evaluation
- Able to provide **31%** more training reinforcement
- **58%** more likely to be able to verify any specific employee understood their training
- **31%** more likely to provide at least 20 hours of annual safety training
- **34%** more likely to provide documented safety training to temporary and contract workers

4. Incorporate a strong, visible on-the-job training program

Bad information passing from employee to employee has been correlated directly to why a workplace safety program isn't always followed. It's unlikely to assume an employee will never have a question when working on the floor. So, the goal should be to ensure they know where to turn for the answer, and that the answer given is accurate.

Leaders recognize the value of such a program, with **41%** citing "training courses right on the floor where the work will be done" as the best way for an employee to learn (the highest of any category). This compares to just **14%** citing "shadowing an employee as they

perform their work." This is because this "buddy system" invariably leads to inconsistency and shortcuts passed between employees.

When utilizing mobile technology, companies can create and deliver consistent and accurate OJT. Supervisors can be equipped with the app to deliver company-sanctioned training on any mobile device, so the veracity and consistency of training isn't in question. This practice has a cascading effect. If easily accessible, it becomes the norm. Thus, when an employee needs guidance, they are conditioned to seek their leaders that have the answer in their mobile training tool.

5. Evaluate and document on-the-floor behavior to measure training effectiveness

Only by measuring employees' behaviors will companies be able to measure whether their time and dollars spent on training are worth it. Yet barely a quarter of companies are doing this. Mobile technologies exist to make this an easy part of their day with little to no noticeable

impact to operational productivity. If deploying such technology, companies should be sure the apps and software are suited for a manufacturing environment, including the ability to function without WiFi connection.

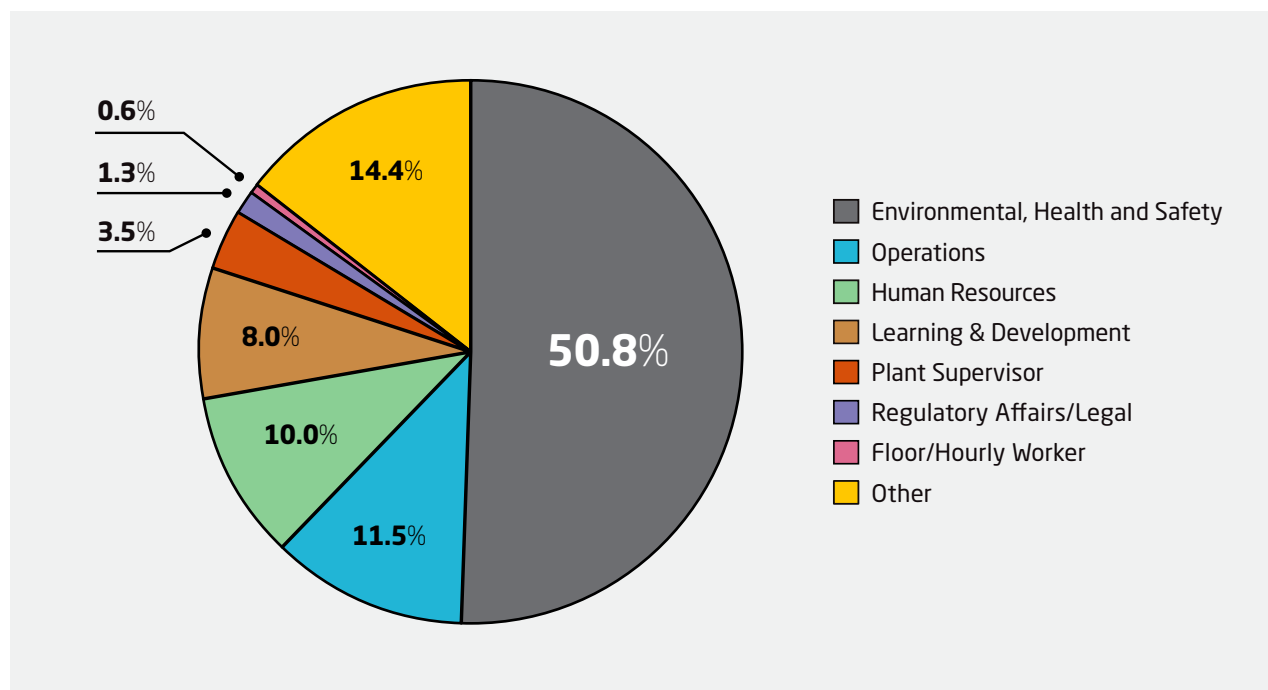
Survey Methodology & Demographics

The Workplace Safety Training Survey was conceived and designed by Intertek Alchemy. Intertek Alchemy partnered with Endeavor Business Media to distribute the survey to a wide audience and to provide independent, third-party tabulation of the data. The survey was administered electronically in November and December 2020. The survey was completed by 1,071 respondents, representing approximately 4,425 facilities. Below are details on survey respondents by job role, company size, and industry sector.

Job Role

Unsurprisingly, those in EH&S made up the largest share of respondents to the workplace safety training survey (**51%**). If human resources and learning and development were combined (their roles often overlap based on the size of the company), they would represent the second-largest group at **18%**. And operations third at nearly **12%** (**15%** if combined with plant supervisor).

Figure 45: What is your job role at your company?



Size of Company

The size of a company was based on the number of employees. Some survey respondents may work at a single facility within a larger company that has several facilities. To help clarify potential data variances, respondents were asked if they were answering on behalf of their facility alone, or all facilities within their organization.

Figure 46: Are you responding on behalf of one facility or multiple facilities?

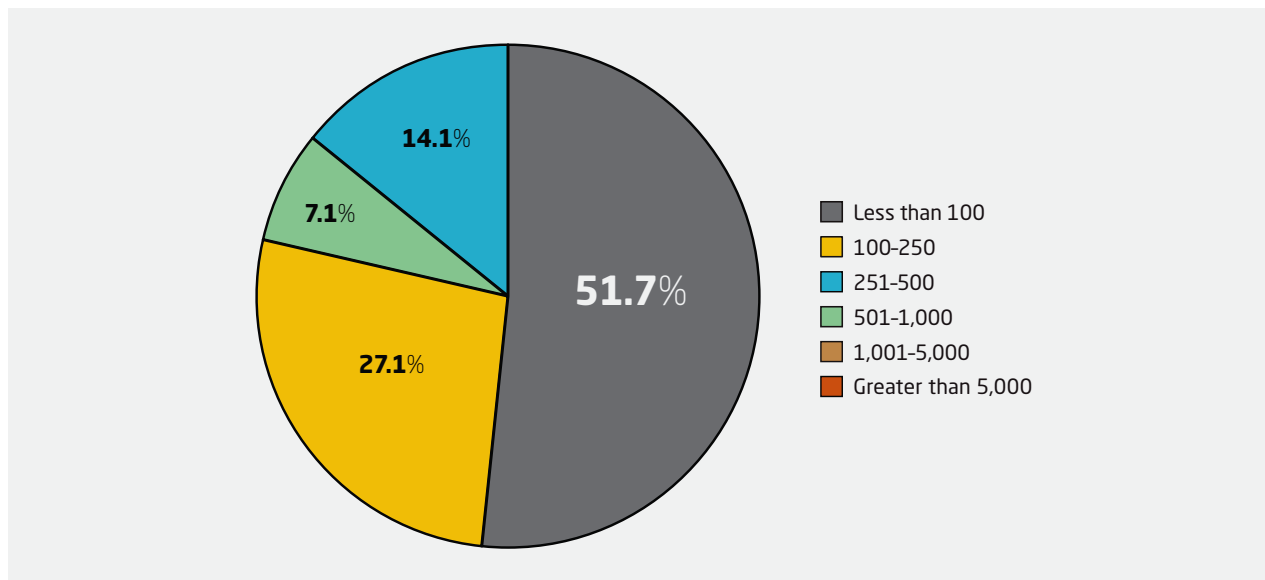
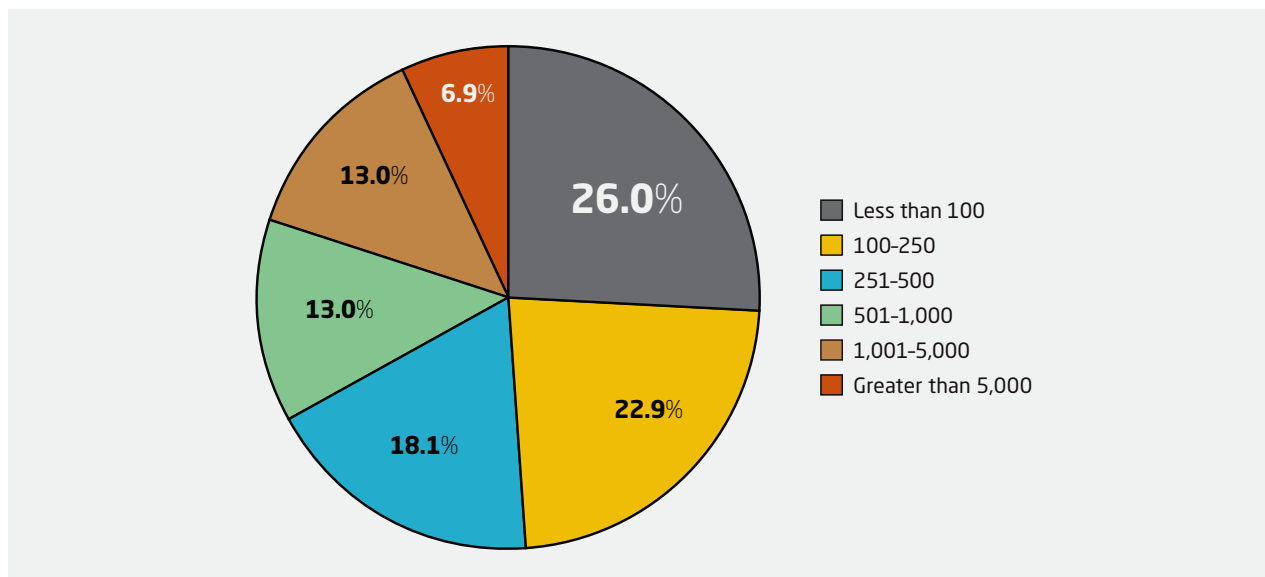


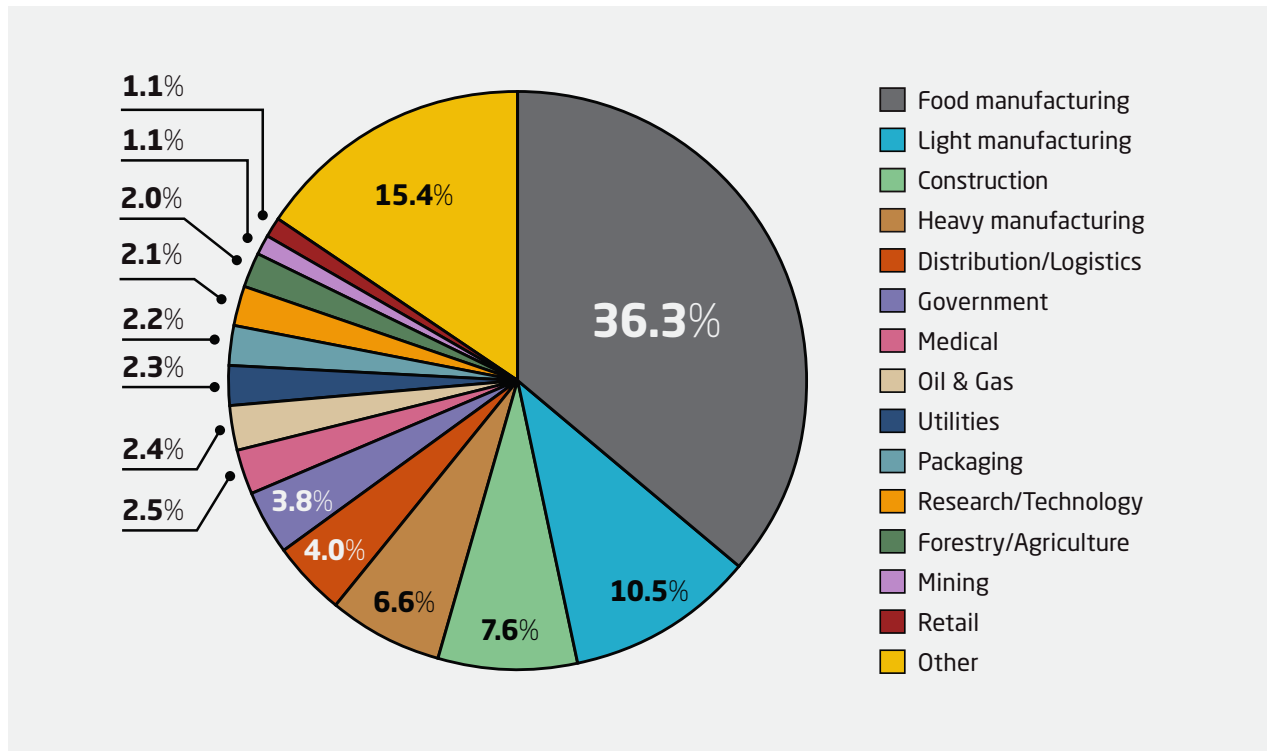
Figure 47: What is the approximate number of current full time (or equivalent) staff employed at your facility (or multiple facilities combined if you are answering for multiple facilities within your company)?



Industry Breakdown

Manufacturing represented the largest industry represented (53%), which itself is further broken down as food manufacturing, light manufacturing, and heavy manufacturing. variances, respondents were asked if they were answering on behalf of their facility alone, or all facilities within their organization.

Figure 48: Which of the following best describes your industry?



Powering Your Workforce

For more information or questions regarding the data, research, or recommendations in this report, please contact us at:



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