

# Employee Morale

*Examining the link to occupational safety and health*

**By Michael Behm**

**W**ORKPLACES WITH ACTIVE, VISIBLE SAFETY leadership have fewer injuries, are often rated as better places to work, and have more satisfied, more productive employees who are less likely to change jobs (OSHA, 2002). ASSE (2002) has taken the position that safety and health management programs improve a company's bottom line, including productivity and employee morale.

In 2005, *BusinessWeek* featured a special advertising section promoting safety's return on investment. One core message was that safety improves employee morale, which in turn enhances business value (Colford, 2005). Gice (1995) contended that increasing job satisfaction will reduce workers' compensation claims, and that improving job satisfaction is just as important as hazard reduction in controlling workers' compensation claims. Rechenthin (2004) found that poor safety programs could negatively influence company morale and make recruiting difficult particularly in high-risk industries.

## **What Is a Great Place to Work?**

Great Place to Work (GPTW) Institute compiles a list of the best places to work in the U.S. According to the institute (2008), a great place to work is one in which "you trust the people you work for, have pride in what you do, and enjoy the people you work with." Figure 1 depicts the institute's dimensions.

Similar to participants in OSHA's Voluntary Protection Programs (VPP), GPTW organizations (hereafter called best companies), self-nominate and initiate the process. The institute distributes a 57-item employee survey called the Great Place to Work Trust Index to several hundred randomly selected employees at each firm (Levering, 2004). Each organization also completes a culture audit, which includes an open-ended questionnaire, and firms

provide supplemental information for review (Rohman, 2007).

For 2007 and 2008, Google, a global technology service provider based in Mountain View, CA, was the number one Best Company to Work For in America. Best places to work cover a wide range of industries, including construction, manufacturing and advertising. In fact, in 2007, the two top companies on the small and medium lists were a construction company (Holder Construction Co.) and a mining company (Badger Mining Corp.). Table 1 (p. 44) provides a complete industry sector list with distribution. The sidebar on p. 45 provides a synopsis of how the best companies are chosen.

The institute's processes help companies improve corporate performance and raise the quality of work life for employees. Moreover, using stock market performance indicators, the data illustrate that the publicly traded best companies consistently outperform other major stock indices, including the Standard and Poor's 500 and the Russell 3000 (GPTW Institute, 2008; Lyman, 2007). In addition, the institute reports that how employees are treated adds significantly to the competitive advantages available to the organization.

## **GPTW as a Measure of Employee Morale**

For this research, the institute's list was used as a proxy for employee morale. This list has been used in previous research as a construct of employee relations, employee attitudes and employee morale. Ballou, Godwin and Shortridge (2003) used the list as a proxy for successful efforts in creating high workplace attitudes. Moskowitz (1985) described the list as a measure of employee attitude and the relationship between employees and managers, while Romero (2004) describes it as a measure of employee relations.

In a study on employee morale, McKnight, Ahmad and Schroeder (2001) provide a useful background on the definition of employee morale. They define it as the degree to which an employee feels

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good about his/her work and work environment, and use the term broadly to encompass constructs such as intrinsic motivation, job satisfaction, work meaningfulness, organizational commitment and work pride. While the term *morale* has been criticized as being too vague (Roethlisberger, 1941), more recently, Weakliem and Frenkel (2006) suggest the term *employee morale* is an underlying concept of many of the noted constructs and should be used as a general term to refer to feeling about one's job.

### Occupational Safety & Health Component

Occupational safety and health is a component of the *respect* dimension (Figure 1). To address this dimension, 13 questions are asked on a 5-point frequency scale, true/untrue scale (i.e., almost always untrue, often untrue, sometimes untrue and sometimes true, often true, almost always true).

One question is directly related to occupational safety and health, "This is a physically safe place to work" (Lyman, personal communication, April 17, 2008). Two other questions are also related to occupational safety and health, although they could have other underlying meanings in human resources and labor relations. These questions are: "This is a psychologically and emotionally healthy place to work" and "Our facilities contribute to a good working environment."

The question regarding a physically safe place to work scored the highest, 96%, among the average scores of 100 best companies in 2007 (GPTW Institute, 2007) and also in 2008 (Lyman, personal communication, April 22, 2008). This means that 96% of employees among the 100 best companies answered "often true" or "almost always true" that their place of work is physically safe. Amy Lyman is the director of corporate research, cofounder and chair of the institute's

board of directors. According to Lyman, "We've always seen physical safety as a basic item that employees expect to be present in any workplace."

Lyman (2007) reported information on certain aspects of the scale showing the differences between item scores between the top 100 and the bottom 100 (those companies that tried to be selected in the best 100 but ended up in the lower 100 among all nominations). According to Lyman (personal communication, April 22, 2008), the physically safe question is one that generates the smallest differences between the best group and the lower group. For 2008, among the best 100, the positive response was 96%; for the 100 lower, it was 89%.

Only 12 of the 57 items on the survey reported average levels of positive response above 90%. This demonstrates that feeling physically safe is an impor-

**Abstract:** *The notion that occupational safety and health performance is linked to business performance, including employee morale, has widespread appeal. However, claims that these two concepts are connected are limited by a lack of data to support the contentions. This research endeavor analyzes the relationship between occupational safety and health performance and employee morale, using the Great Place to Work Institute's data as the construct for employee morale.*






Dimension	How it plays out in the workplace	
	<b>Credibility</b> <ul style="list-style-type: none"> <li>• Communications are open and accessible</li> <li>• Competence in coordinating human and material resources</li> <li>• Integrity in carrying out vision with consistency</li> </ul>	T R
	<b>Respect</b> <ul style="list-style-type: none"> <li>• Supporting professional development and showing appreciation</li> <li>• Collaboration with employees on relevant decisions</li> <li>• Caring for employees as individuals with personal lives</li> </ul>	U S
	<b>Fairness</b> <ul style="list-style-type: none"> <li>• Equity-balanced treatment for all in terms of rewards</li> <li>• Impartiality-absence of favoritism in hiring and promotions</li> <li>• Justice-lack of discrimination and process for appeals</li> </ul>	T
	<b>Pride</b> <ul style="list-style-type: none"> <li>• In personal job, individual contributions</li> <li>• In work produced by one's team or work group</li> <li>• In the organization's products and standing in the community</li> </ul>	
	<b>Camaraderie</b> <ul style="list-style-type: none"> <li>• Ability to be oneself</li> <li>• Socially friendly and welcoming atmosphere</li> <li>• Sense of "family" or "team"</li> </ul>	

Figure 1: Great Place to Work Institute model diagram shows how each dimension plays out in the workplace.

**Table 1**

## High- & Low-Risk Industry Groups

Industry	No. of paired companies	Average no. of OSHA inspections	Risk category
Construction	7	22.57	High
Mining <sup>a</sup>	1	14.50	High
Hospitality	5	7.20	High
Manufacturing	17	6.47	High
Retail	17	6.26	High
BioPharma	4	3.88	High
Media	6	1.67	Low
Professional services	28	1.39	Low
Healthcare	13	1.31	Low
Education and training	1	1.00	Low
Telecom	2	1.00	Low
Information technology	14	0.86	Low
Finance and insurance	28	0.30	Low
Electronics	2	0.00	Low
Advertising/marketing	5	0.00	Low
	150 (total)	3.89 (avg)	

Note. <sup>a</sup>Includes MSHA inspections.

**Table 1: Best places to work cover a wide range of industries, including construction, manufacturing and advertising.**

tant component of a site being a great place to work. While manufacturing or mining can have a greater degree of obvious physical safety concerns, issues at other sites might include lighting safety at night, ergonomics for people working on computers, and ventilation and air conditioning to keep out asthma-producing materials (Lyman, personal communication, April 22, 2008).

Regarding the two other questions, “Our facilities contribute to a good working environment” and “This is a psychologically and emotionally healthy place to work,” the differences between the best 100 and the lower 100 groups are larger when compared to the physically safe question. For the facilities question, 91% of employees in the top group answered “often true” or “almost always true,” whereas 75% of the employees in the lower group did (Lyman, personal communication, April 22, 2008); for the psychologically safe question, the difference increases to 20%—83% compared to 63% (Lyman).

The range between the two groups demonstrates the difficulty in achieving each construct. These questions could be viewed as a tiered system of evolution, beginning with the physical aspects, evolving to facilities/design and finally extending to employees’ psychological well-being. This relationship can be used by SH&E professionals seeking to improve safety and contribute to the organization being a great place to work. Consider that most average safe places to work are attempting to comply with basic OSHA regulations that focus primarily on the physical aspects of work. Above-average safe workplaces seek to exceed OSHA compliance and might focus on issues such as facility design and safety, safety’s

relationship with work planning and ensuring that workers have opportunities to voice safety concerns.

However, for an organization to be a best safe place to work, the psychological and psychosocial aspects must be addressed. This is difficult to achieve and sustain. A marker in the best companies is that they moderate the effects of stress both at home and work (Lyman, personal communication, April 22, 2008). Topf (2008) reports that stress can have a dramatic effect on safety and health performance. Spigener (2008) reports that risk exposure can be introduced upstream through the decisions that leaders make regarding the systems which provide organizational consequences or that cause a state where employees feel psychologically unsafe.

An employee who feels psychologically unsafe tends to be focused inwardly and can be more reactive and volatile depending on the extent of the stress, all of which can cause a person to lose focus in the moment, which can adversely affect organizational safety. For example, consider a shipping employee pressured to meet end-of-month deliveries. If occupational safety is not a shared value among employees and management, the management decision and company culture regarding end-of-month deliveries could result in a psychologically unsafe situation.

Workplace violence prevention and wellness programs are key components of this psychological construct as well. These represent job enlargement and growth areas for many SH&E professionals. To move their organizations and safety performance from good to great, SH&E professionals should consider and evaluate these areas after they have satisfactorily addressed the physical and beyond-compliance aspects. It may be the next step in the profession’s trajectory. Based on Lyman’s comments and the analysis of the institute’s data, it is likely that some level of high safety performance is a necessity just to be a good place to work. This could mean that the relationship between safety level and employee morale is curvilinear (Figure 2, p. 46).

### The Relationship Between GPTW & Occupational Safety

In researching the institute’s selection process, striking similarities were noted between an organization’s path to becoming a best place to work and the management philosophy necessary for a high-performing safety culture. Erickson (1997) found that in high safety organizations, management communication is honest, open and understandable, employees are treated with respect and receive positive feedback, and suggestions are encouraged. These characteristics are involved in becoming a best place to work as well. If these attributes are in place, and if

safety is integrated seamlessly into the organization as a core value, the results within individual organizations are not surprising.

For example, according to Tonya Vyhldal (personal communication, Aug. 12, 2008), director, wellness and life enhancement for Lincoln Industries, a manufacturing firm on the institute's list for 5 consecutive years, the firm comprehensively integrates employee wellness and occupational safety. The company works with a physical therapist and a massage therapist to support proactive wellness programs. The benefits are seen not only because work-related musculoskeletal disorders are at an all-time low, but also because such beyond-compliance programs make the company a great place to work.

### Study Methods

All 150 firms (100 large and 50 small/medium) on the institute's 2007 GPTW list were used in the research database. To evaluate the relationship between safety and employee morale, the researcher needed a comparison group of places to work that were not among the best list. To create such a group, the researcher used a matching procedure whereby each firm on the best list was matched to a single firm not on the list. Matching is a strategy to deal with and control for extraneous variables and reduce bias (Portney & Watkins, 2000).

The following matching criteria were used. First, a list of all possible comparison firms was generated based on industry type (e.g., education, retail, construction, manufacturing) and ownership (private, public, nonprofit) in relation to the firm on the best places list. This information was found on Yahoo Finance and Hoover's Inc., then confirmed on each company's website.

Second, because the focus of this research was employee safety, the potential comparison firm with the closest number of employees to the best company was selected as the comparison firm for the matching list. Random selection was not used

because of the effect of employee number on the dependent variables (safety measures). For example, if a best company with 50,000 employees were matched with a firm with 1,000 employees, differences would exist in areas such as safety staffing and likelihood of an OSHA inspection. This would yield confounding variations on the dependent variables.

An assumption of this research is that the sites selected as matching firms would not be selected as great places to work if they were nominated. This method of matching firms, and the assumption, is comparable to previous research where the best places were matched to firms not on the list (Simon & DeVaro, 2006; Fulmer, Gerhart & Scott, 2003; Filbeck & Preece, 2003). The difference is that the previous research used financial data (e.g., annual sales, revenue) as the final deciding match criterion because those research efforts focused on financial issues.

The result was a list of 300 companies (150 pairs) matched by industry type, ownership type and employee number. Independent samples *t* tests confirmed the nondifference in employee numbers between the two lists. Large best companies were adequately matched based on employee numbers ( $p = 0.16$ ). A match for the best small and medium companies was also adequately found ( $p = 0.81$ ). The *p* values ( $p > 0.05$ ) indicate that the paired companies' employee numbers were not significantly different.

Measures of safety performance and safety commitment that could be located from publicly available sources were used as data. Data came from governmental and company websites, professional association directories and publicly available sources. The variables collected for this research were: VPP participant status; number of total OSHA inspections; number of OSHA inspections due to complaints and accidents; number of OSHA violations; number of OSHA violations classified as repeat, willful and serious; dollar value of OSHA fines; number of ASSE members employed in the organization; and number of CSPs in the organization.

## Selecting the 100 Best Companies

To pick the 100 Best Companies to Work For, the Great Place to Work Institute conducts the most extensive employee survey in corporate America. In 2007, nearly 100,000 employees at those companies invited to participate responded to a 57-question survey (the Trust Index) created by the institute, a global research and consulting firm with offices in 30 countries.

Most of a company's score (two-thirds) is based on the results of the survey, which is sent to approximately 400 randomly selected employees from each company. The survey asks questions related to employees' attitudes

about management's credibility, the respect with which they are treated, the fairness evident in workplace policies and practices, pride in one's work and camaraderie.

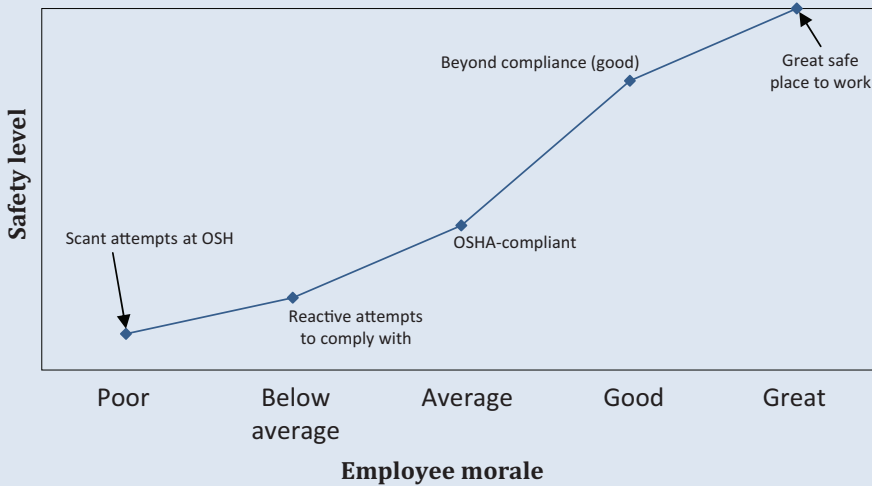
The other third of the scoring is based on the company's responses to the institute's Culture Audit, which includes detailed questions about demographic makeup, and pay and benefit programs, as well as a series of open-ended questions about the company's management philosophy, methods of internal communications, opportunities, compensation practices and diversity efforts.

Any company that has operated for at least 7 years and has more than 1,000 U.S. employees is eligible to nominate itself (for the large company category), while small (50 to 249 employees) and medium (250 to 999 employees) companies do not face the years in operation restriction. Companies involved in a merger, acquisition or layoff that affects more than 25% of the workforce may be asked to wait until the change in employee size has been completed before applying.

*Note.* A. Lyman, personal communication, April 22, 2008.

**Figure 2**

## Hypothesized Relationship Between Safety Level & Employee Morale



**Figure 2: Some level of high safety performance is likely a necessity just to be a good place to work. This could mean that the relationship between safety level and employee morale is curvilinear.**

Analysis of the data for each variable was made as pairs; only when data were available on at least one of the two paired companies were both companies included in the data analysis. For example, in the results section, consider the category “Number of OSHA inspections due to accident or complaint.” Sixty-five pairs were reported in the data; this means that 85 paired companies in the dataset reported zero OSHA inspections due to accident or complaint. This decision was made to ensure adequate comparison to maintain an equal number of best companies and matched companies in the analysis.

### VPP Participant

Under VPP, management, labor and OSHA establish cooperative relationships at workplaces that have implemented a comprehensive safety and health management system. Acceptance into VPP is OSHA’s official recognition of an organization’s exemplary occupational safety and health performance (OSHA, 2007). VPP and GPTW are both self-selected programs that recognize exemplary achievements. The researcher searched the VPP list available on the OSHA website to determine VPP status among each GPTW company and its matched company.

**Hypothesis 1:** *The best companies are more likely to be VPP participants as compared to peers not on the best companies list.*

### OSHA Citations

Citations for each firm and any subsidiaries were found using OSHA’s inspection search data (covering 5 years, July 1, 2002, to June 30, 2007). Only closed cases were included. Each organization was searched using the various firm names and any known subsidiaries.

Because most OSHA inspections are programmed, there is no directional hypothesis associated with the number of OSHA inspections between the best companies and their peers. However, OSHA also conducts inspections in response to employee complaints and accidents. Employee complaints are a sign of a communication breakdown or a lack of trust within the organization and would not be indicative of a best place to work (Marrewijk, 2004). Best places to work likely have effective communication mechanisms that employees use to report safety issues, a system to resolve these situations and a feedback process.

Serious accidents also can be detrimental to employee morale, in both the short term and the long term. Violations that are more critical (willful, repeat and serious) are not likely to be present in best-place-to-work facilities. An organizational culture that allows such violations to occur is indicative of a low level of respect, which would have a negative impact on employee morale (Marrewijk, 2004).

Along the same lines, and because fewer overall violations would occur and they would be less severe in the best places, the total amount of OSHA fines also would be lower among the best places to work. Clarke (2006) makes the case to encourage employers to appeal any and all OSHA citations to reduce long-term OSHA liability. Therefore, data collection included initial and current status whenever possible to see whether the best companies are somehow different from their peers in negotiating the elimination or reduction of fines and citations.

**Hypothesis 2:** *The best companies will have fewer OSHA inspections due to complaints and accidents as compared to peers not on the best companies list.*

**Hypothesis 3:** *The best companies will have fewer OSHA violations (initial and current) as compared to peers not on the list.*

**Hypothesis 4:** *The best companies will have fewer OSHA violations categorized as willful, repeat and serious (initial and current) as compared to peers not on the list.*

**Hypothesis 5:** *The best companies list will have smaller OSHA fines, measured in dollars (initial and current), as compared to peers not on the list.*

### SH&E Staff: Professional Memberships & Certification

Staffing the safety function with educated, trained personnel is vital to an organization’s long-term safety success. ASSE (2009) is the oldest and largest professional safety organization and has more than 30,000 members. On the ASSE website, one can search the organization’s membership directory by company name. The researcher searched for company name and subsidiaries to find ASSE members who work for the best companies and their matched firms.

One highly recognized accredited safety credential is the CSP designation administered by BCSP (Camplin, 2008). Sixty-five percent of CSPs are ASSE members (T. Wilkerson, personal communication, Jan. 6, 2009). BCSP also has an online directory; it can be searched by employee name, but not by company name. A search was conducted for CSPs in each firm by using the names of ASSE members in that firm. Each member was individually searched for within the CSP directory. Therefore, hypothesis 7 is written to include only those safety professionals who are both ASSE members and CSPs. No other certifications (e.g., ASP, CHST, OHST) were searched.

Two insurance companies were on the best company list. These firms and their matched pairs provide loss control services that are a function of their external business rather than their internal safety commitment. It could not be determined whether staffing was for external or internal purposes. To account for that uncertainty, these four firms were not included in the ASSE member and CSP analysis.

**Hypothesis 6:** *The best companies will have more ASSE members on staff as compared to peers not on the best companies list.*

**Hypothesis 7:** *The best companies will have more ASSE members on staff who are CSPs as compared to peers not on the list.*

Each variable was assessed for normal distribution using the Kolmogorov-Smirnov test. None of the variables were normally distributed ( $p < 0.05$ ). The non-parametric counterpart to the independent samples *t* test, the Mann-Whitney *U* test, was used. This test examines the variables as ranks and tests difference between the two groups.

### High- & Low-Risk Groups

All analyses were performed, including all 150 matched pairs, regardless of industry. It was observed that several industry groups within the data had less data than other groups. In other words, high- and low-risk groups were included in the dataset. A cluster analysis allows categories to be broken into similar groups based on a particular variable. The best variable available in this dataset to signify the difference between high- and low-risk firms was the number of OSHA inspections (Table 1, p. 44).

### Results & Discussion

Results and data for each variable are shown in Table 2. Mean is shown only to provide a sense of the data and to explore how the best companies compared to their peers; the data are not normally distributed and nonparametric statistics were used for the analysis. A level of significance of 0.05 was used.

### VPP Participant Status

**Hypothesis 1:** *The best companies are more likely to be VPP participants as compared to peers not on the best companies list.*

Of the 300 companies analyzed, only six had VPP sites within their organization, three came from the best company list, three came from the matched company list. Therefore, no relationship was found between best company status and VPP status. No statistical test was used.

### OSHA Citations

The two study groups experience essentially the same number of OSHA inspections ( $p = 0.202$ ). This

**Tables 2 and 3: Seven hypotheses were tested to evaluate how the best companies compared to peers not on the list. The results of this research demonstrate that occupational safety and health performance and management is a significant component of employee morale.**

**Table 2**  
**Results, All Companies**

Variable	Best company or matched firm	No. of companies in the analysis	Mean	Significant <i>p</i> value
No. of OSHA inspections in the 5-year period	Best company	150	3.22	No
	Matched firm	150	3.85	0.202
No. of OSHA inspections due to accident or complaint	Best company	65	2.09	Yes
	Matched firm	65	3.54	0.023
No. of initial violations	Best company	150	3.23	No
	Matched firm	150	5.72	0.151
No. of current violations	Best company	150	2.80	No
	Matched firm	150	5.19	0.108
No. of initial serious, willful or repeat violations	Best company	52	4.88	Yes
	Matched firm	52	8.52	0.008
No. of current serious, willful or repeat violations	Best company	52	3.38	Yes
	Matched firm	52	6.48	0.006
Total amount of initial penalty	Best company	58	\$11,119	Yes
	Matched firm	58	\$25,454	0.011
Total amount of current penalty	Best company	58	\$5,402	Yes
	Matched firm	58	\$16,330	0.006
No. of ASSE members in the organization	Best company	55	4.24	Yes
	Matched firm	55	1.84	0.001
No. of CSPs in the organization	Best company	28	2.04	Yes
	Matched firm	28	0.89	0.001

**Table 3**  
**Results, *p* Values**

Variable	High risk	Low risk	All <sup>a</sup>
No. of OSHA inspections in the 5-year period	0.665	0.074	0.202
No. of OSHA inspections due to accident or complaint	0.410	0.001 <sup>b</sup>	0.023 <sup>c</sup>
No. of initial violations	0.158	0.200	0.152
No. of current violations	0.126	0.206	0.108
No. of initial serious, willful or repeat violations	0.032 <sup>c</sup>	0.053	0.008 <sup>b</sup>
No. of current serious, willful or repeat violations	0.014 <sup>c</sup>	0.109	0.006 <sup>b</sup>
Total amount of initial penalty	0.044 <sup>c</sup>	0.041 <sup>c</sup>	0.011 <sup>c</sup>
Total amount of current penalty	0.025 <sup>c</sup>	0.038 <sup>c</sup>	0.006 <sup>b</sup>
No. of ASSE members in the organization	0.003 <sup>b</sup>	0.004 <sup>b</sup>	0.001 <sup>b</sup>
No. of CSPs in the organization	0.001 <sup>b</sup>	0.480	0.001 <sup>b</sup>

**Note.** Results, *p*-values—breakdown by high- and low-risk industry and all firms; Mann-Whitney *p* values comparing high- and low-risk firms.

<sup>a</sup>As reported in Table 2. <sup>b</sup>Denotes a significant difference at the  $p < 0.01$  level between best places to work and their peers. <sup>c</sup>Denotes a significant difference at the  $p < 0.05$  level between best places to work and their peers.

Occupational safety and health performance can, and should, play a larger part in enhancing employee morale as companies seek to move from good to great.

result was expected as most OSHA inspections are random. Simply having an inspection does not imply higher or lower employee morale.

However, it is hypothesized that the best companies will have fewer violations, fewer OSHA inspections due to accidents and complaints, and fewer OSHA violations categorized as willful, repeat and serious as compared to their peers.

**Hypothesis 2:** *The best companies will have fewer OSHA inspections due to complaints and accidents as compared to peers not on the best companies list.*

Overall, GPTW companies experience fewer OSHA inspections due to complaints and accidents compared to peers not on the list ( $p = 0.023$ ). The best companies have effective mechanisms of communication that apparently include safety and health. Moreover, these firms have fewer incidents that result in an OSHA inspection.

However, interesting differences are found when analyzing the high- and low-risk industry groups separately. Among high-risk industries, no difference was noted in the number of OSHA inspections due to complaints and accidents between best places and their peers ( $p = 0.410$ ). Conversely, among low-risk industries, a highly significant difference was found in the number of OSHA inspections between best places and their peers ( $p = 0.001$ ). The low-risk best places had far fewer OSHA inspections due to complaints and accidents compared to the matching firms.

**Hypothesis 3:** *The best companies will have fewer OSHA violations as compared to peers not on the list.*

The analysis showed no significant differences between the best places and their peers in any of the six category breakdowns tested (all initial and current; high-risk initial and current; low-risk initial and current). Table 3 shows detailed  $p$  values.

**Hypothesis 4:** *The best companies will have fewer OSHA violations categorized as willful, repeat and serious as compared to peers not on the list.*

Willful, repeat and serious violations would signal a breakdown in the safety management system and in communication—meaning the organization is unaware of its safety responsibility or does not care. These are not attributes of a great workplace.

Both the initial and current violations among all firms in the dataset were significantly different and supported the hypothesis [initial ( $p = 0.008$ ) and current ( $p = 0.006$ )]. Among high-risk firms, the data were also significant and supported the hypothesis [initial ( $p = 0.032$ ) and current ( $p = 0.014$ )]. However, among low-risk firms, the results found in this data analysis were not significant.

**Hypothesis 5:** *The best companies will have smaller OSHA fines, measured in dollars, as compared to peers not on the list.*

The results across all firms, high-risk, and low-risk firms were significant and supported the hypothesis. Best places have fewer violations (although not significant), fewer willful, repeat and serious violations and, therefore, have smaller monetary penalties when compared to their peers.

**Hypothesis 6:** *The best companies will have more*

*ASSE members on staff as compared to peers not on the best companies list.*

The results across all firms, and high-risk and low-risk firms, were significant and supported the hypothesis. The best companies have more safety staff who are ASSE members. Staffing the safety function with members of the leading occupational safety organization demonstrates that these employers recognize the need for staff who seek professional development. It also demonstrates that the best workplaces are staffing the function at a higher level than their peers.

Because a certain level of safety is an integral component of being a best place to work, the results might seem surprising since these organizations may not need ASSE members on their staff any longer. However, these organizations recognize the value of the safety professional in some aspects. That aspect may be exceeding compliance, although it is not evident in the VPP-status data. Beyond-compliance initiatives are not limited to VPP and it may be those non-OSHA-compliance issues that have a greater effect on employee morale and help to explain the differences on the institute's question about "being a psychologically and emotionally healthy place to work." As noted, such safety programmatic issues that would affect this construct might include wellness programs, workplace violence prevention and occupational stress.

**Hypothesis 7:** *The best companies will have more ASSE members on staff who are CSPs as compared to peers not on the list.*

The results across all firms and high-risk firms were significant and supported the hypothesis. Among low-risk firms, the research found no difference between staffing of ASSE members who are CSPs between the best companies and their peers. High-risk best places recognize that a higher level of safety expertise is needed because of the industry and risk status. Thus, these organizations view CSP certification as a necessity for safety staff.

Low-risk best companies, on the other hand, do not see the benefit of employing a CSP as compared to peers. These firms see the value of a safety professional (see ASSE member data), but do not appear to believe it necessary that the individual be a CSP. This is an interesting finding and may explain the previous contention that safety professionals might be asked to take on larger responsibilities across all best places. For example, the best places, both high-risk and low-risk, see the value in employing safety professionals, but only the high-risk best places need the safety specialist. This is an area for future research.

## Conclusions

The results of this research demonstrate that occupational safety and health performance and management is a significant component of employee morale. A key aspect of this research is that the previous anecdotal claims are supported by these data. Organizations with high levels of employee morale have fewer OSHA inspections due to accidents or com-

plaints, serious, willful or repeat violations, and lower monetary penalties. Furthermore, these workplaces appear to have recognized the value of the safety professional. They staff the safety function differently from comparison companies. They employ more ASSE members, and within the high-risk industries, they employ a greater number of CSPs.

The results also demonstrate that occupational safety and health performance can, and should, play a larger part in enhancing employee morale as companies seek to move from good to great. While beyond-compliance safety initiatives are an important factor in helping organizations improve, it is the psychological safety initiatives that appear to be a key component in an organization's improvement.

SH&E professionals have opportunities for job enlargement in nontraditional safety areas such as wellness, workplace violence prevention, occupational stress minimization and off-the-job safety. At ASSE's Safety 2008 conference, former (and recently reappointed) NIOSH director John Howard and former OSHA administrator Edward Fouke encouraged SH&E professionals to use their skill set in an expansive manner that contributes to the organization's value.

The results of this study suggest that in the best workplaces, ASSE members are getting involved in other aspects of human capital enhancement, such as wellness and other programs that make these companies the best places to work. Combined with the other beyond-compliance issues, this creates a situation in which SH&E professionals are being sought after by leading organizations—not solely because of their technical safety expertise but rather because of their skill set in enhancing organizational resources.

These results support the notion that maintaining a good safety management system can be a value-added function and that SH&E professionals play a key role in that endeavor. Future research should explore the role of the SH&E professional in the best companies and how their safety skill set contributes to overall organization value.

Additional research to advance the concepts discussed would include evaluating the best companies' safety and health management systems through case studies or other research endeavors. The comparison survey questions between the best 100 and the lower 100 are interesting data. A future study might be conducted between companies that apply to be a best place to work to determine the safety and health management differences and whether they are significant in moving a company from good (lower 100) to great (best 100). ■

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## Acknowledgments

The author thanks Brian Briley and Marshall Walker for their help in collecting the data for this research. Dr. Amy Lyman, director of corporate research, cofounder and chair of the board of directors of Great Place to Work Institute, provided valuable information on the institute, its data and the process of becoming a best place to work. Thanks also to the ASSE Foundation, which provided the financial support for this research as well as a constructive review by its Research Committee and approval of its trustees.