OSHA’S I2P2 & Zero Incident Cultures: What You Need to Know

May 2013
THE QUESTION

Is pursuing a Zero Incident workplace an impossible mission?

Many safety experts think it is. They believe it is an unwise and unrealistic goal that can do more harm than good by ruining worker trust in company leadership and ultimately causing employee morale to decline.

Those in favor of the Zero Incident approach believe that any safety goal other than Zero Incidents signals a lack of concern for employee health, and that the company cares more about profit than it does worker safety. Proponents point to those companies that have reported success in achieving zero incidents to bolster their arguments.

What does OSHA think? OSHA’s Injury and Illness Prevention Programs (I2P2) initiative signals the agency’s support for a methodical and preemptive approach to eliminating workplace hazards, which is also at the heart of the Zero Incident approach. Indeed, a white paper issued by OSHA last year on I2P2 (Figure 1) would be a logical starting point for anyone thinking about a Zero Incident approach.

The aim of this paper is not to persuade readers to pick one side of the Zero Incident debate – there are plenty of conversation threads in safety groups on LinkedIn and elsewhere dedicated to that topic. Moreover, at MSDSonline we don’t believe there is a single “right” answer; which approach is right for a given workplace will be dependent upon a myriad of factors like the size of the company, the experience of the workers, and executive support for safety in general.

Instead, we will focus on an outline for adopting I2P2 (with a wink at the Zero Incident approach), since the basic tenets of OSHA’s I2P2 can be useful to any workplace wanting to improve the efficiency and cost-effectiveness of its employee safety program, regardless of whether it’s taking the Zero Incident approach or not.

OSHA LOVES I2P2

Dr. David Michaels, OSHA’s director, has repeatedly called the creation of I2P2 a top priority for his agency. However, concerns about the impact an I2P2 standard would have on small businesses, and the chilly reception the idea has received in Congress, thus far, have forced OSHA to take a cautious approach to promulgating a new rule.

That is not to say OSHA has given up. Many I2P2 supporters and careful watchers of OSHA’s regulatory process think a new rule is inevitable. Perhaps more importantly, the wide support I2P2 engenders from all corners of the safety community, like the vocal support from the American Industrial Hygiene Association, suggests it is an idea whose time has come.

“AIHA affirms its support for the development on an I2P2 standard by OSHA...As needed and requested by the agency, we would be honored to support the agency in crafting a proposed I2P2 standard and are willing to provide information and data to help make the case for its promulgation.” — American Industrial Hygiene Association I2P2 Task Force

If nothing else, having an understanding of I2P2 and other new OSHA initiatives related to workplace safety is a good idea for safety professionals who may be called upon to ensure
compliance with new rules in the future. For that reason, a portion of our discussion will include information about OSHA’s activities around electronic submissions of injury and illness data, changes to whistleblowing enforcement, and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

**FIND AND FIX**

An Injury and Illness Prevention Program is defined by OSHA as a “proactive process to help employers find and fix workplace hazards before workers are hurt.” Informally, many refer to it as the “Find and Fix” approach. It is a systematic way of eliminating hazards using a framework to be provided by OSHA. Within this approach, employers would be required to demonstrate compliance.

More specifically, OSHA has outlined six core principles in its I2P2 proposal:

1. **Management Leadership**  
2. **Worker Participation**  
3. **Hazard Identification and Assessment**  
4. **Hazard Prevention and Control**  
5. **Education and Training**  
6. **Program Evaluation and Improvement**

These six principles are at the heart of an expansion of OSHA’s 1989 Safety and Health Guidelines, which had four key principles:

1. Management Commitment and Employee Involvement  
2. Worksite Analysis  
3. Hazard Prevention and Control  
4. Safety and Health Training

The big difference between the two lists (aside from the fact that the I2P2 list separates management participation from worker involvement) is that the I2P2 list includes a step for Evaluation and Improvement. Table 1 lists additional Occupational Health & Safety Management Systems (OHSMS) upon which I2P2 is modeled.

### Table 1

<table>
<thead>
<tr>
<th>Model Occupational Health &amp; Safety Management Systems (OHSMS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The core I2P2 principles can be traced back to older OHSMS like the ones listed below:</td>
</tr>
<tr>
<td>• Voluntary Protection Program (VPP)</td>
</tr>
<tr>
<td>• Safety and Health Achievement Recognition Program (SHARP)</td>
</tr>
<tr>
<td>• ANSI/AIHA Z10 Occupational Safety and Health Management Systems</td>
</tr>
<tr>
<td>• Occupational Health and Safety Assessment Series (OHSAS) 18001</td>
</tr>
<tr>
<td>• California’s I2P2</td>
</tr>
<tr>
<td>• OSHA’s 1989 Safety and Health Program Management Guidelines</td>
</tr>
</tbody>
</table>

Several of the OHSMS programs listed in Table 1 use the “Plan-Do-Check-Act” (PDCA) approach, which is discussed in greater detail later in this paper.

Let’s now take a look at each of the six I2P2 principles and discuss ideas for implementation.

### THE SIX STEPS OF I2P2

**PRINCIPLE 1: MANAGEMENT LEADERSHIP**

The challenge of every health and safety management system is securing leadership buy-in and participation. It is absolutely critical and utterly elusive. OSHA says, “Management leadership provides the motivating force and the
resources for organizing and controlling activities within an organization” (OSHA 2007).

Workers know whether company leadership is genuinely engaged and invested in safety. If it is, employees are more likely to follow suit. The flipside is also true: workers will not invest much in a safety program that is merely paid lip-service by management – no matter how many times they hear, “Safety First.”

Of course, now we’re preaching to the choir. EH&S managers know the value of leadership support for safety enterprises. So how do you get it? And once you have it, what do you do with it?

How do you get leadership buy-in? To quote Sartre, (and later Malcolm X): “By any means necessary!” Try these three steps:

1. **Ascertain leadership’s current view on safety**

To secure leadership buy-in, you must first have its attention. To get its attention, one must have a compelling argument. To build a compelling argument, you must first know where leadership stands on safety. Otherwise, you run the risk of building a case for safety that fails to address leadership attitudes and prejudices. You will build an argument differently for leadership that feels the safety culture does not need fixing than you will build it for leadership that believes safety is outside of its purview.

2. **Find the weak spot**

So far we’ve been talking about “leadership” as though it were a monolith; that is rarely the case. Each manager or executive has a unique perspective. Finding an ally in someone who has a seat at the executive table is a good place to start building your bridge. It doesn’t have to be the top-dog. It technically doesn’t even have to be an ally. Any executive willing to hear you out and provide constructive feedback is a valuable resource. That said, go as deep into the executive suite as you can reach— ideally to someone with influence. In the end, it will be easier to get your case heard if you are not the only one making it.

3. **Craft an attention getting argument**

Be sure to talk the language of your audience. Executives deal in a world of figures and facts tied to a bottom line; if your argument can engage them on this level, it should help your cause. You might have to recruit your inner salesperson.

- Accounting Oriented: Try the ROI approach
- Expense Oriented: Point to workers’ compensation claims
- Softy: Appeal to their compassionate side (think of the employees)
- Don’t Cares: Try a little FUD (fear, uncertainty and doubt) OSHA fines, etc.

Finding studies that reflect safety’s positive impact on operations, employee well-being, and profit is easier to do these days. Also, rather than trying to convince leadership that your ideas are great, see if you can get them to take ownership — to believe the best ideas are their own. And feel free to feed their sense of importance when it comes to safety, because in this case, it just happens to be the truth.

The answer to “What does effective leadership participation look like?” will vary by organization. Overall, executive participation must not be limited to platitudes about safe workplaces; there must be active participation in shaping and executing safety policies and goals (AIHA 2011). This is not to say leadership should make all the decisions on its own. Employees throughout the organization should have a stake in creating safety
policies and goals, which in turn can make getting companywide buy-in a much easier task. The conversation about safety between leadership and employees should be collaborative and visible to all levels of the company.

More specifically, one outcome to strive for from this collaboration is a written plan that outlines roles, responsibilities, and the specific actions to be taken by all stakeholders (AIHA 2011). As Melody Barnes said during her appointment as Director of the Domestic Policy Council, “In your head it’s a dream. On paper it’s a plan.”

Don’t forget as you begin to work the plan, to record the steps of your efforts. Having records that demonstrate your “good faith” efforts can be valuable in the event OSHA ever audits or takes action against your company (OSHA 2010).

**PRINCIPLE 2: WORKER PARTICIPATION**

An excellent safety culture requires participation by the trifecta: executives, safety professionals and workers. Still at the end of the day, much of the success of your program is going to come down to employees who choose to do the safe thing at every opportunity. This is why having employees at the table early and giving them a real voice can lead to the best outcomes; after all, they have the best understanding of what is happening on the ground and where the most help is needed (OSHA Fact Sheet 2005).

Also, by garnering employee participation, EHS professionals create powerful safety advocates on a peer-to-peer level. And, when workers and executives take up the safety slack, theoretically, safety professionals will have more time to address proactive safety initiatives instead of reactive ones.

OSHA broadly defines a hazard as “the potential for harm. In practical terms, a hazard often is associated with a condition or activity that, if left uncontrolled, can result in an injury or illness” (OSHA 2002).

At its essence both I2P2 and Zero Incident cultures are about “finding and fixing” hazards. I2P2 step three, Hazard identification and assessment, deals with the “finding.” Critics of the push toward I2P2 believe this step is redundant (FDR safety 2011). They argue employers are already bound by OSHA’s General Duty Clause of the 1970 OSH Act (29 USC 654) to provide work environments “free from recognized hazards that are causing or are likely to cause death or serious physical harm” to employees.

Opponents of I2P2 claim the General Duty Clause already outlines the responsibility of employers to create safe work conditions and fear I2P2 could result in double jeopardy with employers being cited and fined twice for the same infraction.

On the other hand, OSHA and proponents of I2P2 argue that the General Duty Clause is not specific enough and falls short of delineating employers’ responsibilities to proactively hunt for potential hazards. They want a systematic approach for hazard identification.

For employers looking to get started on I2P2, OSHA and other organizations provide numerous resources, checklists, and strategies that can help. Two of those resources, OSHA’s Voluntary Safety and Health Program Management Guidelines and OSHA’s Handbook for Small Businesses, include the following guidance in the identifying of hazards:

1. Assess existing workplace conditions
   a. Survey employees
      i. Anonymous and 3rd party distribution is best
      ii. Ask them to identify problems and evaluate the conditions

**PRINCIPLE 3: HAZARD IDENTIFICATION AND ASSESSMENT**
iii. Useful in setting baselines for future tracking
iv. Great for gaining support and buy-in later

b. Analyze workplace conditions
   i. Look across departments and categories (e.g., shipping, housekeeping, machinery, fire prevention)
   ii. Use available checklists (like the one published OSHA’s small business handbook)
   iii. Consider OSHA Standards, such as:
      i. Lockout/Tagout
      ii. Blood borne Pathogens
      iii. Hazard Communication

2. Perform a Job Hazard Analysis
   a. Observe and Record
      iv. Nearly every job can be broken down into job tasks or steps
      v. Watch employee perform the job and list each step as the worker takes it
      vi. Record enough information to describe each job action without getting overly detailed
   b. Ask:
      i. What can go wrong?
      ii. What are the consequences?
      iii. How could it arise?
      iv. What are other contributing factors?
      v. How likely is it that the hazard will occur?
   c. Describe:
      i. Where it is happening (environment)

   ii. Who or what it is happening to (exposure)
   iii. What precipitates the hazard (trigger)
   iv. The outcome that would occur should it happen (consequence)
   v. Any other contributing factors

3. Track near misses, along with accidents and injury and illness trends (see Table 2 for the top nine reasons employees don’t report near misses).
   a. Have to do more than keep score. Have to get to root cause and stop near misses
   b. Two primary phases in the incident/accident analysis process
      i. Event analysis
         1) What happened
         2) What occurred prior to event?
      ii. Cause analysis
         3) Identify surface/root causes. Is system failing to perform in any of these areas:
            a) Training
            b) Resources
            c) Enforcement
            d) Supervision
            e) Leadership

4. Set up a reliable system that encourages employees to notify management about hazardous conditions as they arise without fear of reprisal – See Appendix A
   a. In the absence of an effective method for reporting concerns, many will go outside the company
b. OSHA, as we will see, has had to put more resources towards whistleblowing to handle the backlog of cases

c. In many regions, whistleblowing is the leading driver for inspection/audits

Good cloud-based incident management systems can simplify the collection, processing and reporting of hazard information.

Repeat these steps with regularity to ensure new hazards are identified along with preexisting hazards that may have been overlooked earlier.

Table 2

<table>
<thead>
<tr>
<th>Phil La Duke’s Top 9 Reasons Employees Don’t Report Near Misses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Fear</td>
</tr>
<tr>
<td>2) Embarrassment</td>
</tr>
<tr>
<td>3) Difficulty</td>
</tr>
<tr>
<td>4) Bureaucracy</td>
</tr>
<tr>
<td>5) Peer pressure</td>
</tr>
<tr>
<td>6) Loss of reputation</td>
</tr>
<tr>
<td>7) It’s easier not to</td>
</tr>
<tr>
<td>8) Lack of interest from the organization</td>
</tr>
<tr>
<td>9) Perceived as pointless</td>
</tr>
</tbody>
</table>

Phil La Duke is a Partner, Performance Assurance Practice at ERM: Environmental Resources Management and prolific safety blogger at: [http://philladuke.wordpress.com/](http://philladuke.wordpress.com/)

**Hierarchy of Controls**

The “Hierarchy of Controls” model (see Appendix B) is strongly recommended by groups like the AIHA (AIHA 2011). Under the Hierarchy of Controls model, hazards are mitigated in a specific order of preference (CDC 2011):

1. **Elimination**
   - Design the facility, equipment, or process to remove the hazard
   - Most effective and most difficult to implement (with existing process)

2. **Substitution**
   - Substituting processes, equipment, materials, or other factors to lessen the hazard
   - Replace tools, equipment, materials. Substitute toxic substances with less toxic substances.
   - Like the elimination step, substitution is easier to implement during design or development stage

3. **Engineering Controls**
   - Remove hazard or place a barrier between the worker and hazard
     - (e.g. by using enclosed cabs, machine guards, blast shields, welding curtains, local and exhaust ventilation or other means)
   - Initial costs can be higher, but long term costs are frequently lower than Admin and PPE controls

4. **Administrative Controls**
   - Used with existing processes where hazards are not well controlled
   - Written operating procedures, work permits, safe work practices, exposure limits, monitoring, alarms, signs, buddy system, training

**PRINCIPLE 4: HAZARD PREVENTION AND CONTROL**

Once hazards have been found, they need to be fixed — the second half of the “Find and Fix” approach. There are several well-known approaches that could be utilized in fulfilling this principle.
Initial costs can be lower than engineering controls, but ongoing and costlier over time

5. Personal Protective Equipment (PPE)
   - Less effective than other methods & requires employee effort
   - PP&E ex: respirators, hearing protection, protective clothing, safety glasses, hardhats
   - Used when engineering controls do not totally eliminate hazards or when such controls are not feasible

Of course, many hazards require a combination of controls to ensure employee safety. Additional methods of preventing and controlling hazards include:

- Setting up safe work procedures, especially when changing an existing process or adding a new one
- Keeping up with routine/scheduled maintenance and emergency planning
- Having the appropriate contingencies in place in case of a medical emergency (OSHA Small Business 2005)

**Plan, Do, Check, Act**

Many mature safety programs are moving toward the Plan, Do, Check, Act model (PDCA) (see Figure 2), which is at the heart of The OHSAS 18001, the international OHS system regarded by many to be the gold standard of safety management systems and developed by The Occupational Health and Safety Advisory Services Project Group.

PDCA, also known as the Deming or Shewhart Cycle — after the two most well-known proponents of the model — is an approach to identifying and fixing hazards in a continuous and systematic fashion. Because it is a never-ending cycle, PDCA can bring about continuous improvement in the workplace (PKPIN.com 2009). Problems are identified, actions are planned and enacted on a small scale, results are evaluated, and a corrective action is taken — in what is more of a scientific approach to safety.

**Six Sigma**

Six Sigma devotees will recognize similarities between PDCA and DMAIC. DMAIC in Six Sigma stands for: define measure, analyze, improve and control (see Figure 4). It is the secret to achieving Six Sigma quality. GE a big believer in DMAIC says to achieve Six Sigma quality “a process must produce no more than 3.4 defects per million opportunities. An “opportunity” is defined as a chance for nonconformance, or not meeting the required specifications. This means we need to be nearly flawless in executing our key processes.”

**Figure 2**

![PDCA Diagram](PDCA_Diagram.png)

**Figure 3**

![DMAIC Diagram](DMAIC_Diagram.png)
Emphasis on lean manufacturing and quality improvement has pushed many companies toward Six Sigma techniques in the areas of operations and other critical areas because it “actively links people, processes, and outcomes in a rigorous, adaptable way to get results” (Briefcasebooks.com 2002) which is also why many companies believe the Six Sigma approach can make a serious impact on safety (EHSToday 2007).

Interestingly, from a Zero Incident perspective, even 3.4 defects per million opportunities would be a failure. Opponents of the Zero Incident approach might say an understanding of Six Sigma principles just shows the error of making your safety goal Zero Incidents. Regardless, adoption of the Six Sigma approach, even if it’s not done wholesale, can help drive errors or defects out of an organization and its processes. (Figure 4 shows deviation from the mean, where Six Sigma represents less than 99.99% incident’s falling outside that range).

**Figure 4**

Many find Six Sigma intimidating, with its rigor and martial arts terminology (users are called black belts, green belts, etc. depending upon their proficiency); however, we don’t recommend letting the fear of doing something imperfectly prevent you from doing something.

---

**PRINCIPLE 5: EDUCATION AND TRAINING**

From OSHA’s perspective, worker training is a primary driver of safety and one of its key focus areas. A review of the top 10 most frequently cited OSHA standards reveals that failures in employee training is one of the biggest reasons OSHA issues citations.

Unfortunately, making safety training comprehensive and engaging is difficult for many employers. To see hilarious proof of it, go on Twitter and search for #OSHA or #Safety. In addition to many Not Safe for Work (NSFW) posts, you’ll see a stream of Tweets from employees frustrated by OSHA required training (two examples shown in Figure 5).

**Figure 5**

Short attention spans and the prevalence of digital distractions have combined to make the safety trainer’s job that much more difficult. To combat employee antipathy, trainers must take into account the preferred learning style of their audiences and ensure not only that the training content is relevant, but also its delivery.

**Best practices tips:**

- Utilize a blended training approach that combines an appropriate mix of presentations, hands on exercises, online learning, and evaluations and feedback
- Ensure workers are aware of all of the known hazards to which they will be exposed and that
they are never expected to do a job before they have been properly trained on it, or if it appears unsafe

- Make the training specific to the work environment and the actual hazards and conditions present in the workplace
- Combine health and safety training with overall job performance and practices (OSHA 2007)
- Recognize and adjust for multiple learning styles (e.g., visual, auditory, kinesthetic)
- Address trainees in a language they understand and accounting for any learning barriers, like illiteracy
- Include new hires, contract workers, employees who wear personal protective equipment, workers in high risk areas (OSHA 2007), and employees moving to new areas of responsibility (OSHA Small Business 2005).

Employees, safety professionals and company leadership should all have equal stakes in the creation of a safe environment. Through training, employees should come to understand that they are expected to take responsibility for their own safety as a condition of their employment and to be proactive in identifying potential problems in the workplace.

**PRINCIPLE 6: PROGRAM EVALUATION AND IMPROVEMENT**

A big difference between I2P2 and OSHA’s earlier attempts to enact a “Find and Fix” approach to workplace hazards is its emphasis on Program Evaluation and Improvement. Including this sixth step recognizes that in addition to doing the work of finding and fixing hazards, a period of reflection and adjustment is also essential. In other words, the Plan, Do, Check, Act model applies to specific hazards as well as the overall safety approach, or to put it another way, at both the micro and the macro level.

Similarly, Zero Incident safety cultures are not one and done enterprises. Self-renewing safety cultures that consistently produce safe outcomes require continuous effort and revitalization. The engine behind that rejuvenation is the culture — the enduring attributes of the collective actions and thought processes of the workplace community. Safety is a byproduct of a set of attitudes and behaviors exhibited by the members of a workplace. Get the culture wrong, and creating a safe workplace becomes harder.

So how do you evaluate and improve your program? Start with incident data and employee feedback.

Using a good electronic incident management system in conjunction with other safety efforts simplifies retrieving and reviewing data, analyzing trends and generating reports. (Figure 6 shows example of reporting tool from MSDSonline’s Incident Management Tool).

**Figure 6**

Similarly, Zero Incident safety cultures are not one and done enterprises. Self-renewing safety cultures that consistently produce safe outcomes require continuous effort and revitalization. The engine behind that rejuvenation is the culture — the enduring attributes of the collective actions and thought processes of the workplace community. Safety is a byproduct of a set of attitudes and behaviors exhibited by the members of a workplace. Get the culture wrong, and creating a safe workplace becomes harder.
The difficult part remains incorporating and evaluating employee feedback in a constructive and transparent manner. AIHA recommends making management review a requirement (AIHA 2011).

**I2P2: THE CASE FOR ADOPTION**

While OSHA struggles to implement I2P2 at the federal level, the approach has already been adopted by many states and many in the global safety community.

In the United States, 15 states (red states on Figure 7) have established mandatory regulations for employers on illness and injury prevention programs, including California, Colorado, Michigan, Minnesota, North Carolina, New Hampshire, Nevada and New York.

Another 19 states (orange states on Figure 7) have laws that encourage participation in I2P2 type activities.

**Figure 7**

![Map of the United States](image)

Plus, more than 3,900 companies participate in OSHA’s Voluntary Protection Program (VPP) and Safety and Health Achievement Recognition Program (SHARP), while internationally, the European Union, Norway, Hong Kong, Japan, Korea and Australia have all pursued illness and injury prevention programs.

OSHA’s White Paper on I2P2, published in February 2012, provides statistics to support its push for a federal standard. It cites reports and studies that say:

- Workplace deaths total over 4,500 a year
- Injuries total over 4.1 million a year
- 60,000 workers die each year from occupational illnesses
- Upwards of 10,000 to 20,000 workers die from cancer due to occupational exposure
- 5,000 to 24,000 die from Chronic Obstructive Pulmonary Disease

With these numbers, OSHA is making its business case (similar to the type of business case this paper encourages safety managers to make to their leadership). OSHA, citing several studies, says the cost of injuries and illnesses in the workplace, is upwards of $53-60 billion, an amount based on workers’ comp benefits paid in the United States annually. This figure does not include indirect costs like lost productivity and repair costs.

Can I2P2 type programs actually reduce injuries? OSHA points to numerous studies that show reductions in injuries and illnesses range between 9 percent and 60 percent for states with mandatory prevention programs. OSHA’s expects to achieve a 15-35 percent reduction in injuries with its I2P2 standard (OSHA White Paper 2012).

Return on investment (ROI) was the focus of a 2001 Liberty Mutual Executive Survey of Workplace Safety which found ROI for safety to be greater than 3 to 1. Every dollar spent on safety netted three dollars in return. In 2009, the American Society of Safety Engineers Professional Safety Magazine published details of a survey which found the expected return to be closer to 2 to 1. Whether the return is 3 to 1 or 2 to 1 or even 1.5 to 1, data in the marketplace substantiates
what safety professionals have always believed — that safety is an investment, not an expense.

**GETTING I2P2 OR A ZERO INCIDENT CULTURE UP AND RUNNING**

OSHA’s I2P2 is still a ways off; yet, there are a number of systems companies can enact to get an injury and illness prevention program up and running. Systems like ANSI/AIHA Z10 or OHSAS 18001 provide very specific, detailed guidance for bringing a facility into compliance with its provisions. And increasingly, it is certification under a system like OHSAS 18001 that is the “order qualifier” necessary even to compete in the international marketplace in some industries (Judy Mieding 2010).

Of course, not every company will need such a comprehensive system. Simply exploring the ideas provided here and taking advantage of resources available on websites for OSHA, NIOSH and CDC will provide sufficient guidance. Whatever path an organization takes, it is important to consider how technology will be used to amplify the prevention program. Tracking, analyzing and reporting data is key to I2P2 and Zero Incident cultures alike.

*A good electronic solution* is the communication hub that can bring together all the stakeholders of an I2P2 implementation, letting them submit information that can be leveraged via real-time analytics to identify hazardous trends. Once identified, corrective actions can be implemented that will, if done right, reduce the number and severity of accidents. As a bonus, a good system can simplify OSHA Recordkeeping compliance.

Under OSHA’s Recordkeeping Standard (29 CFR 1904), businesses and organizations not partially exempted from the standard are required to track and report injuries and illnesses. The tracking and reporting is done via OSHA Forms 300, 300A, and 301. The form most folks are likely familiar with is Form 300A, which must be posted by non-exempt facilities between Feb. 1 and April 30 in a location where all employees can see it.

Even partially exempted employers are required to report any death or the hospitalization of three or more employees from a single incident. OSHA, as discussed briefly below, is in the process of changing this requirement so that reporting will be expanded to include any fatality, workplace amputation, or hospitalization.

One component of the OSHA Recordkeeping Standard that some find tricky is knowing when an injury or illnesses actually needs to be recorded. Again, a good electronic solution can simplify the process by guiding the user through the recordable injury and illness decision tree (see Figure 8), and making the process of filling out forms a more intuitive experience. Completed forms can easily be printed out for submission to OSHA and/or the Bureau of Labor Statistics (BLS) as needed.

**Figure 8**

**OSHA’S CURRENT REGULATORY AGENDA**

The combative regulatory environment in Washington has slowed regulatory expansion in many areas, including Occupational Health and Safety. Nevertheless, in comments that OSHA Director Dr. Michaels has made in the past year, it looks as though OSHA plans to continue to moving forward on a number of agenda items related to
injuries and illnesses. Namely, progress is expected in the following areas: updates to injury and illness reporting criteria, modernization of the Injury and Illness Data Collection Process, increased enforcement and improved worker protections for whistleblowing, and cracking down on improper safety incentives.

GHS

Finally revising the Hazard Communication Standard to align with GHS helped make 2012 a big year for OSHA. The revision, called HazCom 2012 by OSHA, is the most significant change to the HCS since 1994. The three biggest changes that GHS brings to the HCS are to chemical classifications, safety data sheets and safety labels.

HazCom 2012 went into effect May 25, 2012, and the first employer deadline is less than a year away.

By December 1, 2013, employees covered by the standard must be trained on the new GHS styled label elements and the MSDS format. MSDSonline offers free bi-weekly webinars on GHS and has several HazCom 2012/GHS online training courses available to fit your training needs.

CHANGES TO INJURY AND ILLNESS RECORDKEEPING

As mentioned earlier, current OSHA Recordkeeping Standard rules require employers to notify OSHA in the event of any deaths or the hospitalization of three or more employees. Under a rule OSHA is working on, Injury and Illness Recording and Reporting Requirements — NAICS Update and Reporting Revisions, 1218-AC50 — OSHA is working to implement a change that would require employers to report all work-related fatalities and all work-related in-patient hospitalizations within 8 hours, and within 24 hours, all work-related amputations (OSHA Occupational 2011). The requirement that all work-related hospitalizations and amputations be reported would represent a significant change that could affect all employers.

Additionally, the list of industries partially exempt from the Recordkeeping Rule would be updated to reflect more recent injury and illness data and will transition from SIC to NAICS industry codes. As a result, some industries that are currently exempt would lose exemption status, and others not on the list would get added.

INJURY AND ILLNESS DATA COLLECTION MODERNIZATION

Another important change OSHA has been working on, which has received very little attention considering how significant its impact will be, is Recordkeeping Modernization, 1218-AC49. This new initiative would modify how, and how often, employers transmit recordkeeping information to OSHA.

Currently, employers are only required to submit data upon request by OSHA as part of the annual OSHA Data Initiative (ODI) survey of approximately 80,000 private-sector establishments in selected high-hazard industries, and/or to take part in the Bureau of Labor Statistics’ (BLS) Annual Survey of Occupational Injuries and Illnesses (SOII) , which is sent to a relatively small sample of about 200,000 establishments across the country.

The new rule could require submissions annually by all 750,000 employers and 1.5 million establishments. It could also require the electronic submission of OSHA forms 300 and 300A — all of which, OSHA says would “provide the agency with timely, establishment-specific injury and illness data to reduce the amount of resources needed to identify the most hazardous worksites. The new
recordkeeping system also will enable employers, employees, employee representatives, government agencies, professional and trade associations, and researchers to get access to better workplace injury and illness data.”

In short, once enacted, employers could eventually be required to submit OSHA Recordkeeping information electronically on an annual, or even more frequent, basis.

WHISTLEBLOWING

In the last year, OSHA has placed increased emphasis on its Whistleblower Protection Program. It follows on the heels of a Government Office of Accountability (GOA) report that was critical of OSHA’s handling of whistleblower cases between 2009 and 2010. In response, OSHA revised its guidelines for investigating whistleblowing cases and made it a priority to get more whistleblower resources out in the open.

For instance, in October 2012, OSHA launched a new Early Resolution Mediation Program, and in November, named a new Whistleblower Director, Beth Slavet. Also in 2012, OSHA created a new Webpage dedicated to whistleblowing — http://www.whistleblowers.gov/.

Every employer should take whistleblowing seriously. OSHA is upfront in saying that many of its inspections (or even most inspections in some regions) are the result of information provided to them from someone within a company who is concerned about unsafe practices. A better outcome for companies would be to capture and deal with employee concerns before they are escalated to OSHA and trigger a series of events that could harm the health of the company on a larger scale.

If an employee has a genuine safety concern, companies should be making it easy for them to report and address it. This point comes back to safety culture. Telling workers you care about their safety is not enough. You must have processes in place to collect employee concerns and address them. If you are committed to finding and fixing hazards, employees will see that and get on board. It’s about moving from espoused values to enacted values.

SAFETY INCENTIVES

For several years, OSHA Director Dr. Michaels has been concerned about safety incentive programs that he fears encourage underreporting of injuries and illnesses. OSHA does not want employers rewarding employees for having fewer accidents. It’s a big deal because many companies have reward programs that provide incentives to employees for having fewer reported accidents. OSHA is concerned enough about it that in a March 2012 memo, Deputy Assistant Secretary of OSHA, Richard E. Fairfax, issued a directive to inspectors to be on the lookout for such incentive programs.

In a 2011 OH&S article, Sean Roark describes the issue this way, “The criteria for these rewards often include having a defined period without an accident, and this result-based milestone is an problem for OSHA, because they see any award that is based on an absence of an accident as also containing the implied underlying message to employees that if an accident is reported, they will lose benefits.”

OSHA warns in the OSH Act of 1970 that an employer may not “in any manner discriminate” against an employee because the employee exercises a protected right, such as the right to report an injury. For example, if an employee of a firm with a safety incentive program reports an injury, the employee, or the employee’s entire work group, will be disqualified from receiving the incentive, which could be considered unlawful discrimination.
Instead of incentivizing employees based upon accident and incident rates, OSHA would prefer to see incentive programs where employees are rewarded for taking actions to prevent accidents from occurring. It would be a major shift. Many organizations have reward programs built around injury and illness statistics. It’s an easy target to see and report against. Dr. Michaels recommends incentive programs that “feature positive reinforcement when workers demonstrate safe work practices, and when workers take active measures such as reporting close calls, abating hazards, and using their stop-work authority to prevent a workplace tragedy” (OSHA Plenary 2010).

CONCLUSION

Does OSHA have the political capital required to get I2P2 made into law? It’s too early to tell. But for careful observers, the writing is on the wall...injury and illness prevention programs are important to the agency and getting on the bandwagon sooner rather than later could have rewards that go beyond reduced risks in the workplace.

Much of what OSHA does on the compliance side is subjective. OSHA inspectors are not just looking at the letter of the law; they are looking at the spirit. They are looking for good faith efforts from employers to mitigate risks in the workplace and create a culture of safety. Having a program in place that follows along the lines of I2P2 could go a long way in demonstrating that good-faith effort.

And, in the eventuality that I2P2 is passed, as a number of leading safety professionals believe it will be, you’ll be ready. Forgetting politics for a moment, I2P2 and its six tenets — Management Leadership, Worker Participation, Hazard Identification and Assessment, Hazard Prevention and Control, Education and Training, Program Evaluation and Improvement — provide a useful guide on how companies can organize their health and safety program.

Likewise, just because the tenets of a Zero Incident culture seem far-fetched to some, that does not mean all of the ideas involved in the movement should be dismissed. While every workplace and every employee is unique, the end goals are basically the same for all — do good work, make good money, make it home alive every day.
Appendix A – Reporting System

Example of a Reporting System

Employee identifies hazard

Self correct

Yes

No

Supervisor correct

Yes

No

Identity resources

Are resources available

Yes

No

Request management assistance

Hazard corrected

Employee feedback

End

Very Important!

✓ Timely
✓ Don’t assume they know
Appendix B

Hierarchy of Controls

- **Elimination**
  - Design the facility, equipment, or process to remove the hazard
- **Substitution**
  - Most effective and most difficult to implement (with existing process)
- **Engineering Controls**
- **Administrative Controls**
- **PPE**

---

**Hierarchy of Controls**

- **Elimination**
  - Substituting processes, equipment, materials, or other factors to lessen the hazard
- **Substitution**
  - Replace tools, equipment, materials. Substitute toxic substances with less toxic substances
- **Engineering Controls**
- **Administrative Controls**
- **PPE**

- Like the elimination step, substitution is easier to implement during design or development stage
Hierarchy of Controls

- **Elimination**
  - Remove hazard or place a barrier between the worker and hazard
  - (e.g. by using enclosed cabs, machine guards, blast shields, welding curtains, local and exhaust ventilation or other means)

- **Substitution**
  - Initial costs can be higher, but long term costs are frequently lower than Admin and PPE controls

- **Engineering Controls**
  - Used with existing processes where hazards are not well controlled
  - Written operating procedures, work permits, safe work practices, exposure limits, monitoring, alarms, signs, buddy system, training

- **Administrative Controls**
  - Initial costs can be lower than engineering controls, but ongoing and costlier over time

- **PPE**
Hierarchy of Controls

1. Elimination
   - Less effective than other methods & requires employee effort

2. Substitution
   - PP&E ex: respirators, hearing protection, protective clothing, safety glasses, hardhats

3. Engineering Controls
   - Used when engineering controls do not totally eliminate hazards or when such controls are not feasible

4. Administrative Controls

5. PPE

Last Resort
Bibliography


