1.0 What's Workplace Safety All About

When one hears the words, 'workplace safety,' does it immediately conjure up images of regulators with their pads and pens, looking to write up hefty citations and fines for non-compliance? Agencies like OSHA, DOT or MSHA, consensus standards like NIOSH, ANSI or NFPA, and organizations with members like NASP, ASSP, or BCSP have all been created to aid in workplace safety. Perhaps workplace safety is about proper hazard analysis, risk management, and a corresponding reduction in workers' compensation premiums. Maybe safety is about eliminating hazards entirely, engineering out the hazards or controlling them through administrative oversight. Or does one focus on minimizing civil or criminal liability exposure by proper documentation of safety efforts to avoid placing themselves or the company into compromising positions as it pertains to safety compliance efforts? These are all certainly legitimate thoughts and concerns when it comes to workplace safety. However, the true measure of a successful safety program (or shall we say 'culture') is the elimination of death and serious injuries in our workforce.

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1.1 Is Safety All About OSHA?

There is certainly much more to workplace safety than simply OSHA compliance. OSHA compliance (or compliance with any regulatory agency, for that matter) is merely one element of true workplace safety. 100% compliance with OSHA regulations does not necessarily mean a 100% safe workplace. In fact, from a statistical standpoint, if we measure the cause of most accidents in the workplace, we will find that, on average, 80% of all accidents are due to unsafe employee ACTS; only 20% are due to unsafe conditions. This means that we could have a 100% perfectly safe work environment and still experience an 80% injury rate. This is due to unsafe behaviors, which have developed for a variety of reasons. This is discussed more in the Training Methodologies course.

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1.1 Is Safety All About OSHA?

The bottom line is this: If one looks at safety as merely OSHA compliance, then he has restricted his vision and will **NOT** succeed in eliminating workplace deaths and injuries.

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1.1 Is Safety All About OSHA?

It's About People

Click Box

1.1 Is Safety All About OSHA?

It's About Death

Click Box

1.1 Is Safety All About OSHA?

It's About Agony

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1.2 The Human Toll of an Unsafe Workplace

Safety in the workplace is about PEOPLE. Every day in the United States and abroad, someone loses a parent, a son or daughter, a sibling or a loved one to death in the workplace. The statistics are staggering and will be discussed in detail in this section. While some do not wish to discuss the graphic nature of workplace fatalities, there is no “nice” way to describe dying on the job. It is about DEATH and it is about AGONY. Imagine being crushed by a forklift, being pulled into a piece of equipment, falling from a ten-foot raised platform, dying in a workplace fire, or succumbing to an illness caused by repeated exposure to an air contaminant over a period of years or even decades. While visualization of these types of things is certainly not pleasant, this is what our focus should be as safety professionals and this is what workplace safety is all about.

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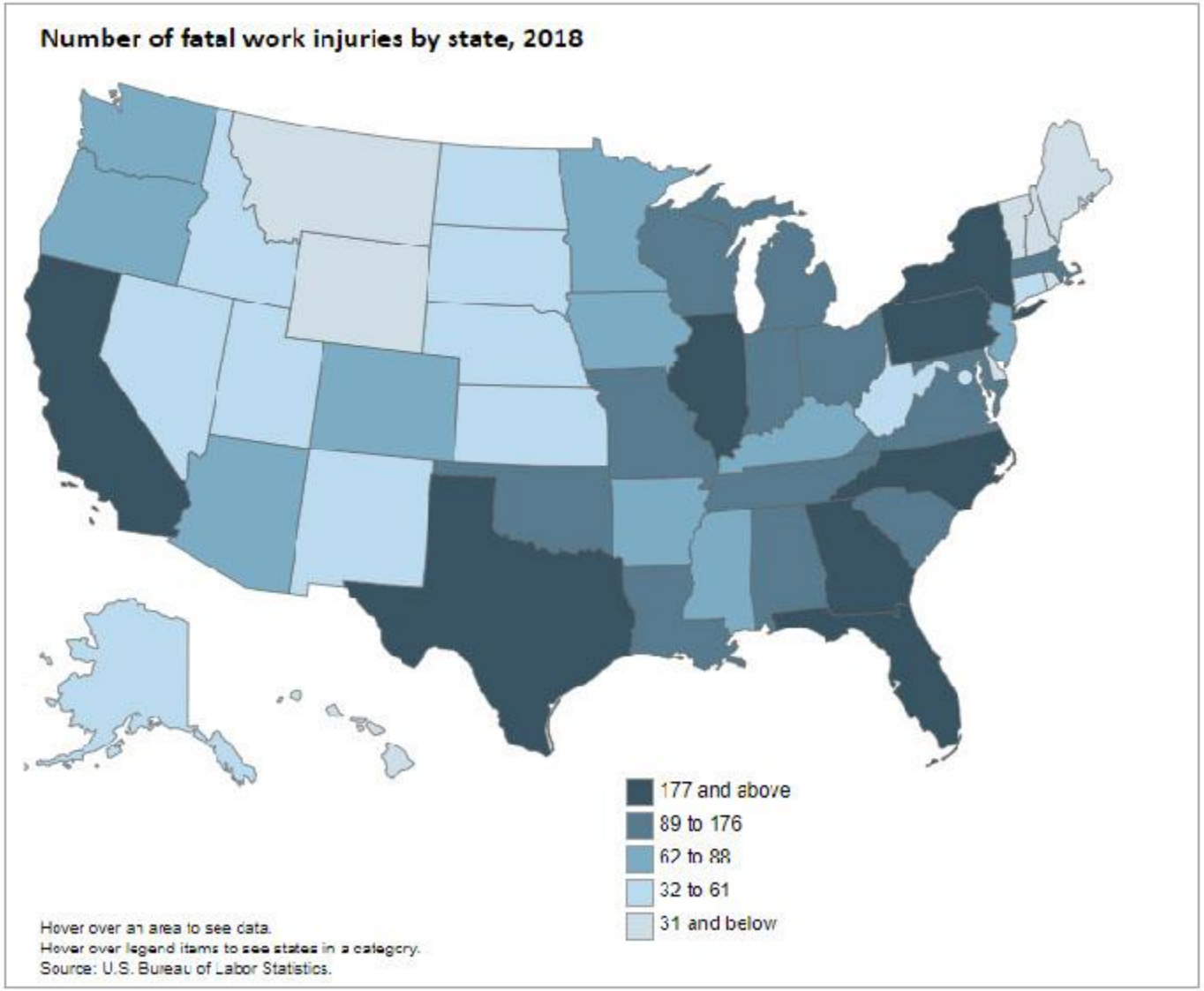
1.2.1 Statistics on Work Related Death and Injury



Americans are at a greater risk in the workplace than most workers in other *industrialized* nations. Notice the emphasis on industrialized; if you are taking this course outside of the United States, death and injury rates may be higher. No one can be certain, however, as reporting requirements in many countries are lax or even non-existent. One reason that workplace safety is not prioritized as high as it should be in the United States is that people simply do not understand the extent of the problem.

One of the reasons that people do not realize the issue of workplace safety is that accurate injury, illness, and death statistics are typically absent or unsubstantiated. Most people rely on the Bureau of Labor Statistics (BLS) for these figures without realizing that BLS statistics are inaccurate and decidedly low. Deaths from workplace illnesses are not even reported in BLS statistics. There are a huge number of deaths that result from things like cancer, various lung ailments, etc. that result from workplace exposure to hazardous materials as well as all other illnesses in the workplace.

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1.2.1 Statistics on Work Related Death and Injury

In addition, BLS excludes local government, state, and federal workers. There are 23,000,000 such employees, with government employees out numbering manufacturing employees by 1.8 to 1. This is certainly significant, and one can begin to see that deletion of government employees from these stats certainly gives a 'rosier' picture of the number of workplace fatalities and injuries.

Employers often intentionally under report illness and injury and sometimes death in their workplaces. A study in the *Journal of Occupational & Environmental Medicine* said that BLS estimates missed as many as 69 percent of all injuries. This under reporting is sometimes intentional in an attempt to avoid liability or OSHA fines. It may also be unintentional as the example of many employers who fail to report workplace violence incidents to OSHA or BLS; instead, they report them to law enforcement. OSHA is trying to enforce better and more accurate reporting of death and workplace injuries. In 2015, they changed reporting requirements to include injuries that resulted in admittance to a hospital, amputations, and permanent eye loss. This will be discussed in more detail in the Recordkeeping course in this program.

BLS reports more than 3.0 million work-related injuries and illnesses each year while the AFL-CIO says the real number is between 7.6 million and 11.4 million annually and the United Support and Memorial for Workplace Fatalities (USMWF) reports 270 million occupational accidents each year and 160 million incidents of work-related illnesses.

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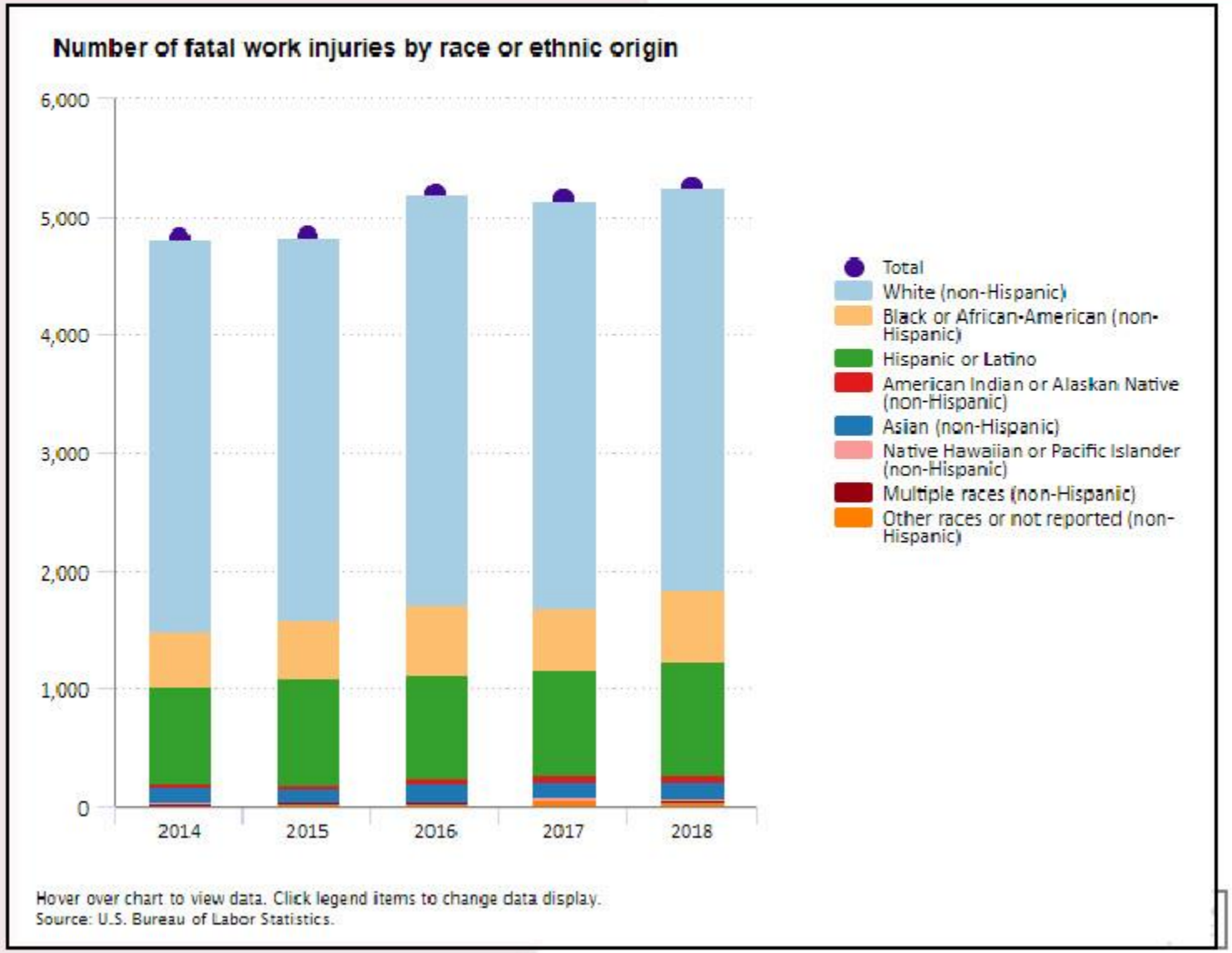

1.2.2 Recent BLS Statistics

Chart 1. Number of fatal work injuries, 2006-18

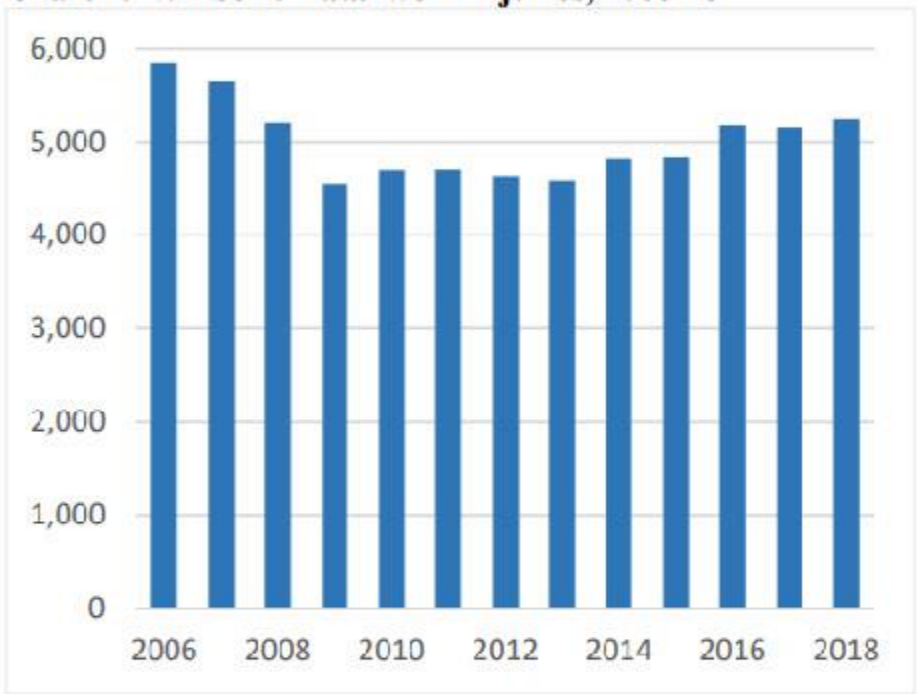

Chart 2. Fatal work injury rate, 2006-18

While Bureau of Labor Statistics (BLS) vary year to year, most fatalities fall into a "Top 3" that typically remain the same. These are transportation accidents, violence (which many studies suggest is the number one cause of fatalities) and falls. According to the most recent 2018 statistics, an annual total of 5,250 fatal workplace injuries was recorded and was the highest since 2008 and was a 2 percent increase from 2017. Several key points to these statistics include the following:

- The overall rate of fatal work injury for workers in 2018 was 3.5 per 100,000 full-time equivalent workers.

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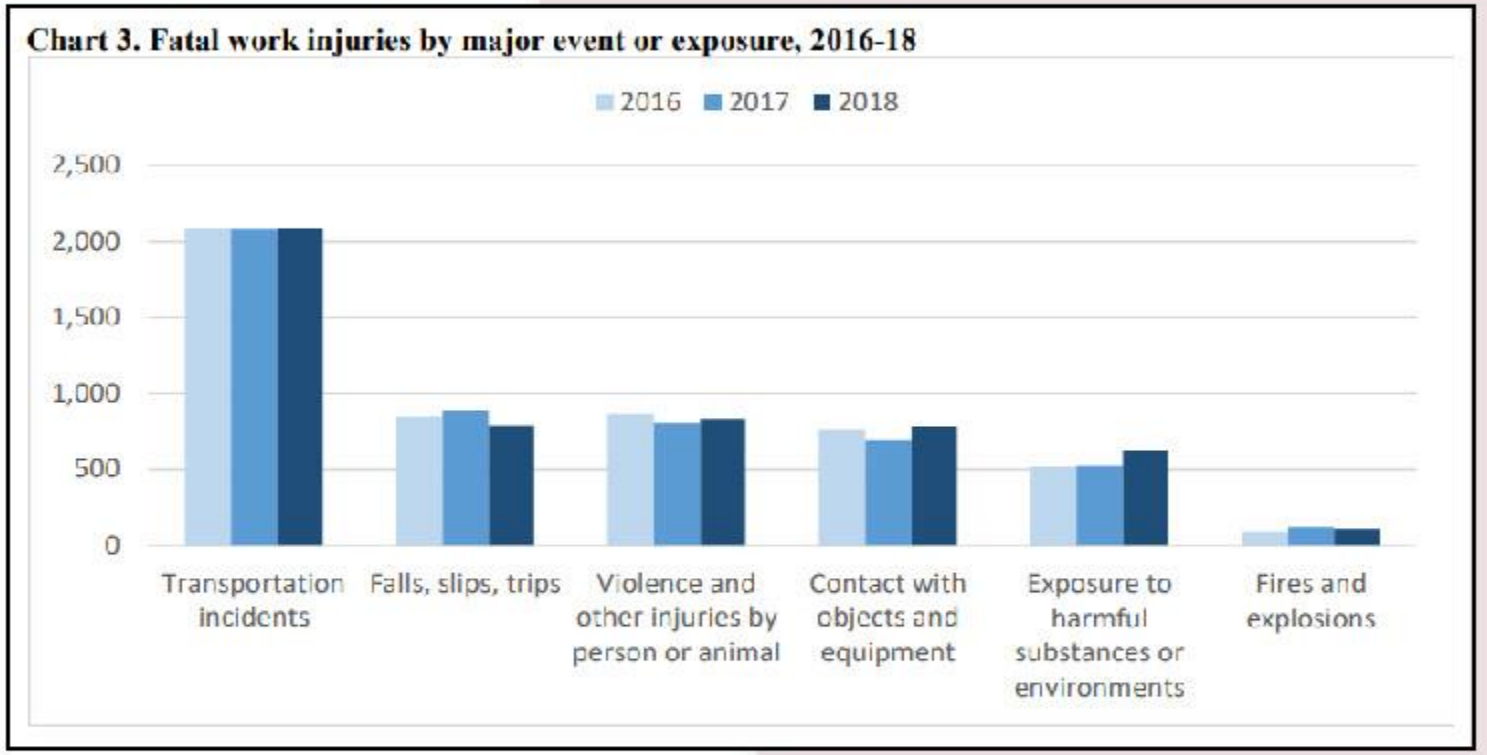
1.2.2 Recent BLS Statistics

- Workers age 65 years and older incurred 759 fatal injuries, the second-largest number for the group since the national census began in 1992.
- Roadway incident fatalities were up 4 percent from 2017 totals, accounting for over one-fifth of the fatal occupational injuries in 2018.
- Unintentional overdoses due to nonmedical use of drugs or alcohol while at work increased 12 percent from 272 to 305. This is the **sixth consecutive** annual increase.
- Total fatalities resulting from injuries: 5,250



1. Transportation incidents: 1,923
2. Violence and other injuries by persons or animals: 803 (Because workplace violence deaths are more under reported than other deaths, workplace violence is actually second only to transportation in deaths in the American workplace)
3. Falls, slips, trips: 791
4. Contact with objects and equipment: 786
5. Exposure to harmful substances or environments: 340
6. Fires and explosions: 122

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1.2.3 NASP Statistics

These statistics are a compilation of those mentioned above and are mathematically interpolated from the most accurate figures available. The intent is to give as accurate a view as is possible of workplace deaths, injuries, and illnesses in the US and the figures are based on a variety of agencies including the ones previously mentioned.

- Work Related Deaths Annually: 54,400
- Work Related Illnesses and Injuries Annually: 9,500,000

National Association of Safety Professionals

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1.2.3 NASP Statistics

A typical day in the American Workforce may look like this with 149 workers dying each day. Specific causes of death would include the following:

- 127 deaths from occupational illness
- 4 workers die in highway vehicle accidents
- 3 workers are murdered
- 3 workers die from falling
- 3 workers die in a vehicle off a roadway
- 1 worker dies struck by a vehicle
- 1 worker dies in an air, water, or rail crash
- 1 worker dies by a falling object
- 1 worker is electrocuted
- 1 worker is killed in a fire or explosion
- 1 worker dies from drowning or toxic substance
- 1 worker commits suicide
- 1 worker dies trapped in a machine
- 1 worker dies under collapsing materials

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1.2.3 NASP Statistics

Even uncommon fatalities add up throughout the course of a year:

- 30 workers die the easily avoidable death of heatstroke
- 30 are poisoned to death by carbon monoxide
- 10 perish from exploding tires
- 12 farmers are gored or trampled to death
- 8 workers inspecting or cleaning machinery are burned to death by escaping steam

1.2.3 NASP Statistics

To put this in perspective, NASP has made the following comparisons:

- 124 times as many workers die daily as there were American soldiers killed each day in the US war on terror
- 23 times as many workers die daily as there were American soldiers killed each day in the Vietnam War
- 5 times as many workers die daily as there were American soldiers killed each day in the Korean War
- About the same number of workers die daily as Americans killed each day in the Civil War
- In 20 days, more workers die than the total number of people who died in the 9/11 attacks
- During the time one may spend on this course, three times more people will die at work than US soldiers have died annually in the War on Terror

1.2.3 NASP Statistics

How many lives are devastated when 149 workers die each day?

- 225 Children lose a parent daily
- 110 Spouses lose their loved one daily
- 207 Parents lose a child daily
- 228 Siblings lose a brother or sister daily
- 149 People lose their best friend daily

A total of 919 devastated people daily; this equals 335,435 lives affected annually!

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1.2.3 NASP Statistics

There are non-profit organizations in the US that do an excellent job in revealing some of the staggering statistics of on-the-job injuries and fatalities. One such group is the United Support and Memorial for Workplace Fatalities (USMWF). USMWF is a support group made up of empathetic families who have been there and understand the emotions and questions one may have regarding the loss of a family member. They know and understand the devastation which takes place in the mind, body and soul and strive to help individuals and family members who have been affected by this loss to go through both the grieving process and investigative process, if needed.

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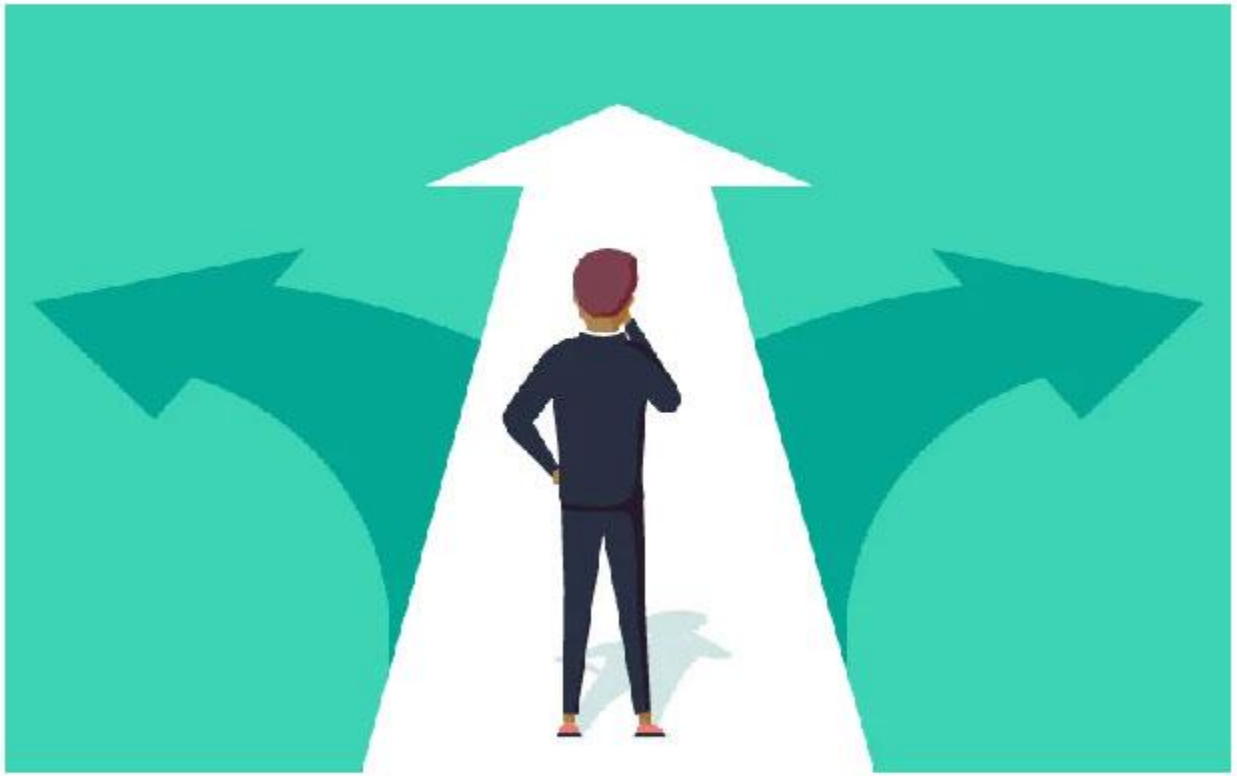
1.3 Safety Priorities



Let's apply this information to how we set our priorities as we work to lessen the incidents of injury, illness, and death in the workplace. First, we would want to consider the injuries, illnesses, and deaths that are most likely to occur in your workplace and address those. Absent information that changes your priorities from the norm, you should address hazards in order of their likelihood to injure or kill your employees. Much of this will be accomplished through the implementation of a robust Job Safety (Hazard) Analysis (JSA or JHA) and development of a risk matrix to determine the most hazards and risks in the workplace and then means to eliminate and/or control them.

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1.3 Safety Priorities

The top six killers in the workplace are as follows:

1. Transportation Accidents
2. Workplace Violence
3. Falls, Slips, Trips
4. Contact with Objects and Equipment
    a. Struck by Objects
    b. Entrapment in Equipment
    c. Electrocutions
5. Exposure to Harmful Substances or Environments (Chemicals/Hazardous Atmospheres)
6. Fires and Explosions

Click Box

1.3 Safety Priorities

It is the job of the safety manager to “proactively” attack the hazards within his facility BEFORE an accident occurs. We call management of safety ‘after’ the incident occurs, “reactive.” This can be difficult to achieve, especially in a facility where one has a high incident rate; however, the ultimate goal is to reduce the injuries and illnesses (by studying the lagging indicators like the OSHA 300 log and other recordkeeping tools) and then move towards the leading indicators in the workplace such as the observation of unsafe acts and/or unsafe conditions.

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2.0 Why Comply? Three Primary Safety Principles

Industry, business, and government workplace safety programs are based on one of three principles, or a combination of them: regulatory compliance, monetary savings, or ethics. Those whose programs are based on regulatory compliance are concerned with avoiding fines and citations and base their safety decisions solely upon existing safety regulations. Those whose programs are based on monetary savings are primarily concerned with reducing their cost from employee injury, illness, and death. Those whose programs are based on ethics are concerned with doing whatever is necessary to provide a safe workplace and desire to protect their employees from injury and death because they don't want them and their families to suffer.

NASP/IASP champions the provision of workplace safety as an ethical concern in its operations and production of safety training and certification courses. The three key components of the NASP/IASP Safety Philosophy are explained on the following slides.

2.1 Regulatory Compliance

Many employers feel that regulatory compliance and workplace safety are the same thing. An army of "safety consultants" markets their services by encouraging employers to fear regulators, which only exacerbates the problem. Most of the world's workplace safety regulatory agencies make it clear that their regulations are only minimum requirements. In most cases, OSHA turns out to be a toothless tiger, willing to change "willful" citations to "unspecified" citations so employers can avoid criminal charges and because of the fear of civil liability. Willful violations that result in the death of an employee may be reduced to "undetermined."

Violating a legal regulation and violating a moral or ethical principle are not the same thing. In fact, reducing ethics to little more than compliance may lead to more non-compliance than if ethics were the guiding light for workplace safety. "Compliance" means not transgressing the limits defined by law. Business and society need regulations and laws along with enforcement.

Click Box

2.1 Regulatory Compliance

If you comply with every OSHA regulation, does that guarantee you will have a safe workplace? This was mentioned earlier in the text. Remember, there is not a specific OSHA regulation for every hazard that may exist so many hazards might be present even if you comply with every OSHA regulation. OSHA standards are designed to be minimum standards so there may be hazards that are beyond the scope of OSHA regulations. True workplace safety means considering all hazards whether OSHA covers them or not.

Does OSHA compliance equal a safe workplace? The answer is a resounding NO!! We must exceed mere OSHA compliance to truly protect our workers.

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2.1 Regulatory Compliance

An exclusive focus on laws and regulations restricts our attention to the edges of the playing field. Cross this line and you are busted. If you play the game by always working as close to the edges as possible, you are likely to stumble or sneak across the forbidden limit. Ethical principles of workplace safety sometimes do spell out "law-like" boundary conditions through written policies and procedures, but these are based not on what is legal, but on what is right. Ethical boundaries are usually drawn well back from those legal edges we might otherwise trespass. The ethics question is "what is right, good, and moral?" and that usually exceeds minimum regulatory requirements. A true facility safety culture cannot be established on a foundation of regulatory compliance alone.

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2.2 Monetary Savings

Sometimes people call safety implemented from the perspective of monetary savings “The Business of Safety.” They say that accidents cost money and expenditures hurt business. From the website of a safety association, it was recently posted:

“We were not hired because our companies were altruistic about providing an environment where employees did not get hurt. We were not hired because our companies were enamored with safety. However, we were hired because it makes good business sense. We were hired to reduce the costs of workers' compensation, the medical costs resulting from injuries, and the costs of potential OSHA citations.”

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2.2 Monetary Savings

They went on to say, “to cover the cost of a $500 accident, an employer would have to sell 61,000 cans of soda or 253,000 donuts.” They also stated, “the maximum value a human life is $1.54 million.” While this may be true from a strictly monetary standpoint, it certainly seems to be a sad commentary and seriously misguided in nature.

Many employers do genuinely care about the safety of their employees and see workplace safety as an ethical responsibility, not a cash center. The cost of injuries is a viable consideration and an excellent tool for a safety manager to use in justifying expenditures for workplace safety.

However, a safety program based solely upon saving the employer money is erroneous at its core. The writer of the above needs to accept his/her responsibility to educate their employer to the fact that safety is much more than just money. It is an ethical responsibility. A true safety culture cannot be established in a facility on a foundation of saving money alone.

Click Box

2.3 Ethics

Ethics holds up a positive vision of what is right and what is good. It defines what is worth pursuing as a kind of guiding star for one's decisions and actions. Organizations that base their workplace safety on ethics will spend their energy articulating and pursuing positive principles, values, and virtues. Observing regulatory boundaries and reducing expenses from injuries are important, but they are secondary to the pursuit of the right and good.

NASP salutes those in the business of regulatory compliance for their substantial contribution to workplace safety. We thank those who gave us the tactic of using monetary savings to help justify our safety budgets. However, we affirm the higher purpose of our ethical and moral responsibility to be driven by what is right and proper to protect employees from death, injury, and illness in the workplace. This is the only foundation upon which a true safety culture can be established in any workplace.

Click Box

2.4 NASP/IASP Safety Principles

A properly managed safety culture based on these Eight Principles of Workplace Safety will produce employees who participate actively in training, identify and alert each other and management to potential hazards, and feel a responsibility for their safety and the safety of others. Accepting safety as an ethical responsibility demonstrates a sincere concern for each employee, which establishes the foundation for an effective safety culture.

Principle #1 | Principle #2 | Principle #3 | Principle #4 | Principle #5 | Principle #6 | Principle #7 | Principle #8

#1 Safety is an Ethical Responsibility

At its core, ethics holds up a positive vision of what is right and what is good. It defines what is "worth" pursuing as guidance for our decisions and actions. Workplace injuries and deaths are too often seen in the abstract as statistics. When it happens to someone we love, we suddenly see the reality of the horrible pain and suffering and its widespread effect. It is our ethical responsibility to do what is necessary to protect employees from death, injury, and illness in the workplace. This is the only foundation upon which a true safety culture can be established in any workplace.

HOVER OVER THE PRINCIPLE ABOVE

2.4 NASP/IASP Safety Principles

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Principle #1 | Principle #2 | Principle #3 | Principle #4 | Principle #5 | Principle #6 | Principle #7 | Principle #8

#2 Safety is a Culture, Not a Program
The combined commitment and participation of the entire organization is necessary to create and maintain an effective safety culture. Every person in the organization, from the top management of the corporation to the newest employee, is responsible and accountable for preventing injuries.

HOVER OVER THE PRINCIPLE ABOVE

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Principle #1 | Principle #2 | Principle #3 | Principle #4 | Principle #5 | Principle #6 | Principle #7 | Principle #8

#3 Management is Responsible
Management's responsibility is to lead the safety effort in a sustained and consistent way, establishing safety goals, demanding accountability for safety performance, and providing the resources necessary for a safe workplace. Managing safety is the responsibility of every supervisor, from the first line supervisor to the Chairman of the Board.

HOVER OVER THE PRINCIPLE ABOVE

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Principle #1	Principle #2	Principle #3	Principle #4	Principle #5	Principle #6	Principle #7	Principle #8

#4 Employees Must Be Trained to Work Safely
Awareness of safety does not come naturally; we all need to be trained to work safely. Effective training programs both teach and motivate employees to be a productive part of the safety culture.

HOVER OVER THE PRINCIPLE ABOVE

2.4 NASP/IASP Safety Principles

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Principle #1 | Principle #2 | Principle #3 | Principle #4 | Principle #5 | Principle #6 | Principle #7 | Principle #8

#5 Safety is a Condition of Employment
The employer must exhaust every reasonable means to lead, motivate, train, and provision employees to maintain a safe workplace. In the event the employee refuses to take the actions required to work safely, the employer must utilize a system of progressive discipline to enforce safety requirements and ensure the cooperation of the employee or the removal of the employee from the workplace to protect the employee and their coworkers.

HOVER OVER THE PRINCIPLE ABOVE

2.4 NASP/IASP Safety Principles

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Principle #1	Principle #2	Principle #3	Principle #4	Principle #5	Principle #6	Principle #7	Principle #8

#6 All Injuries Are Preventable
Sometimes accidents occur without the apparent indication of fault or blame. There is always some chain of events that occurred leading up to the accident that, had we realized the eventual outcome, someone could have interceded. The fundamental belief that injuries are, by their nature, preventable is a catalyst that encourages us to prevent injuries. Even if we believe that some injuries are not preventable, it is better for our safety programs to assume they are in order that every effort is exhausted to prevent accidents and injuries.

HOVER OVER THE PRINCIPLE ABOVE

2.4 NASP/IASP Safety Principles

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Principle #1	Principle #2	Principle #3	Principle #4	Principle #5	Principle #6	Principle #7	Principle #8

#7 Safety Programs Must Be Site Specific, with Recurring Audits of the Workplace and Prompt Corrective Action
The purpose of the workplace audit is to discover and remedy the actual hazards of the site before they can injure workers. Recurring hazard analysis, comprehensive inspections, and aggressive investigation of accidents or near misses discover potential workplace hazards and identify weaknesses in safety plans, programs, policies, and procedures. Safety regulations and generic safety programs are not sufficient means to discover hazards because they are not specific to the individual workplace. A safety audit program is site specific. Whenever a safety deficiency is found, prompt action is required both to overcome the hazard and to reinforce the message that safety is a priority.

HOVER OVER THE PRINCIPLE ABOVE

2.4 NASP/IASP Safety Principles

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Principle #1 | Principle #2 | Principle #3 | Principle #4 | Principle #5 | Principle #6 | Principle #7 | Principle #8

#8 Safety is Good Business
Reducing workplace injuries and illnesses reduces the costs of workers' compensation, medical expenses, potential government fines, and the expenses of litigation. Effective workplace safety is not an expense; it is an asset.

HOVER OVER THE PRINCIPLE ABOVE

2.5 Benefits of a Safety Program

The following are the primary reasons for having a safety program. We will discuss each of these in more detail in the next few slides:

- Employee Safety
- Avoiding Civil Liability
- Avoiding Criminal Liability
- Regulatory Compliance
- Improving Personnel Morale
- Lowering Insurance Cost

Click Box

2.5.1 Employee Safety

The first reason is, of course, employee safety. Maintaining employee safety whether a regulation states that we must is simply the right thing to do and is the primary reason for having safety programs as we have discussed in detail on the previous slides.

Click Box

2.5.2 Avoiding Civil Liability

Another reason for having a safety program is protection from civil liability. These days, one can expect a lawsuit when almost anything goes wrong. The Great American Dream seems to be “sue someone and get rich." The US is an extremely litigious society. Worker’s Compensation laws help limit lawsuits, but they still occur often. Losing such a suit can devastate a company financially. Losing a personal suit can devastate an individual financially.

Most lawsuits are based on a failure to warn. That’s why there are so many warning stickers on the goods that Americans purchase. The idea that a hair dryer comes with a warning that states “DO NOT USE AS A HEATING DEVICE” seems silly but be assured that someone probably tried this, and the outcome was not good. When it comes to workplace safety, the safety trainer is the primary “warner.” This individual can help protect himself and his company from civil liability by being sure that the training is thorough, complete, and well documented.

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2.5.2 Avoiding Civil Liability

There are two types of civil liability. Professional liability is when a company is sued and/or employees are sued for acting on behalf of the company. If the individual loses this type of suit, the company pays the award and the company pays for the attorneys. Personal liability is when the individual is sued and not as an agent for the company. Judges seldom allow these types of suits, but they do happen.

2.5.3 Avoiding Criminal Liability

The News & Observer

'Let me out!' victims scream

Fire at Hamlet chicken-processing plant kills 25

49 injured as doors bar safety routes

Anguished families of victims ask why

Deaths shock Hamlet residents

Imperial Food processing plant

Plant never had safety inspection

Criminal liability is a much greater concern than many people realize. People can and do go to jail for safety violations. Most of the time, the charge is not a direct violation of an OSHA regulation but is the violation of a state law prompted by the failure to adhere to an OSHA regulation. An example is charging a manager or supervisor with a state murder charge when someone was killed in the workplace. The following are examples of criminal liability cases:

Hamlet, NC Fire

Back in the early 1990s, an employer, Imperial Foods, a processor of chicken nuggets, locked the exit doors to control stealing. There was a hydraulic line that ruptured and hydraulic fluid spilled onto heating elements that were used to cook heating oil. This caused a massive fire where 25 employees lost their lives. The owner, plant manager, and director of operations were charged with involuntary manslaughter. The owner was sentenced to 19 years, 11 months in prison. He served approximately 4 years of actual jail time.

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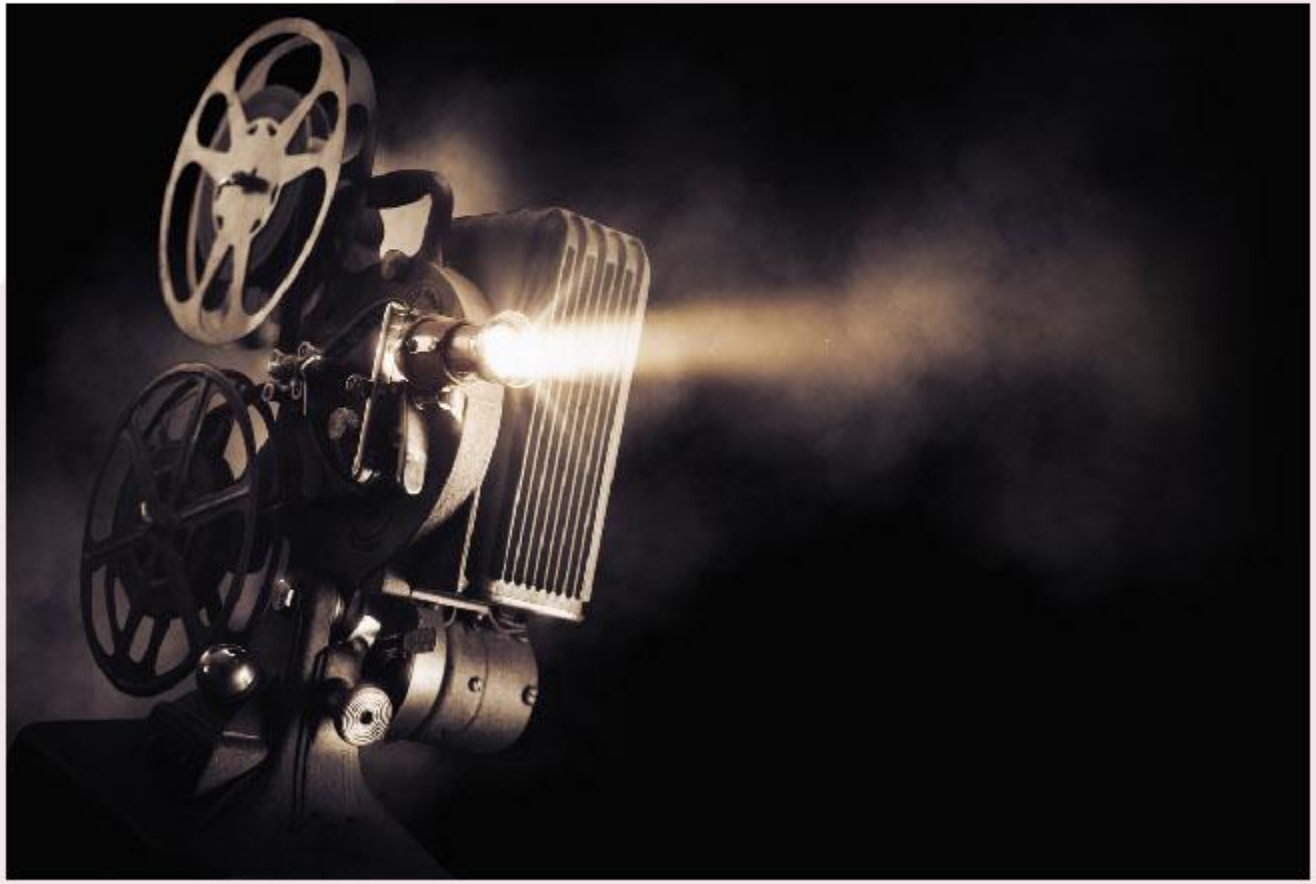
2.5.3 Avoiding Criminal Liability

Illinois vs. Film Recovery Systems
Employees were removing silver from photo film. They were untrained and had no proper PPE. A Polish employee died from acute cyanide poisoning. The president, plant manager, and a foreman were charged with murder and sentenced to 25 years in prison.



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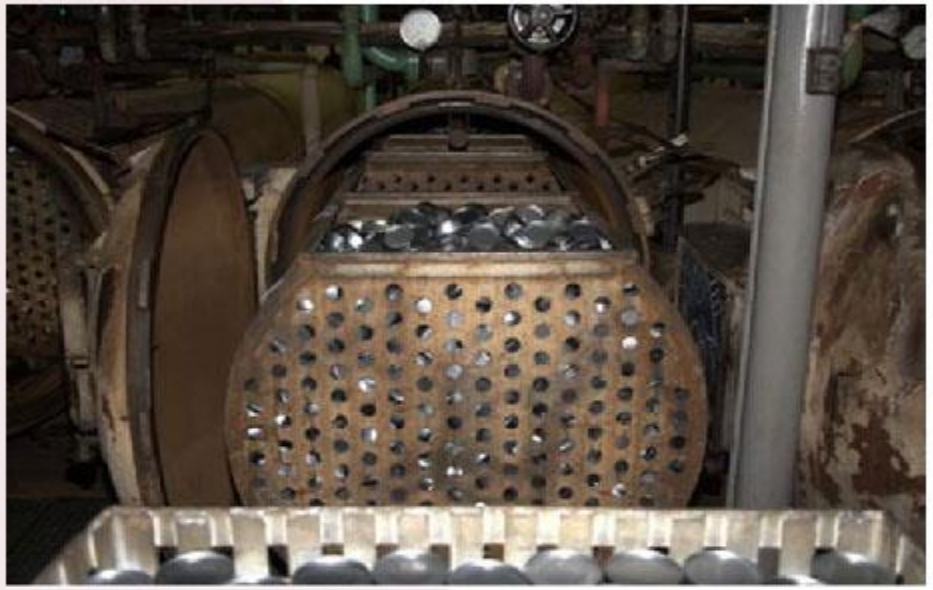
2.5.3 Avoiding Criminal Liability

Bumble Bee Tuna
A worker was cooked alive in a steam cooker. The Director of Operations and the Safety Trainer were charged and convicted with "willfully violating LOTO procedures." The retort (cylindrical steamer) was also not properly defined as a permit required confined space. Initially charged with involuntary manslaughter, they were ultimately given probation, community service, and a $19,000.00 fine.

Massey Energy Co.
The CEO, Don Massey, was charged with the death of 29 workers in a mine explosion in West Virginia. In this case, it was determined that there was a deliberate cover up of safety violations (ventilation and dust control, numerous MSHA violations). He was initially sentenced to up to 39 years in prison, but it was later reduced to misdemeanor with a one year prison sentence.



2.5.3 Avoiding Criminal Liability

Lying to OSHA

In 2016, a Pennsylvania based roofing contractor who lied to OSHA in the aftermath of an employee death caused by a fall from scaffolding was sentenced to 10 months in prison. He was charged with four counts of making false statements, one count of obstruction of justice and one count of willfully violating an OSHA rule. Basically, he was accused of falsely telling inspectors that employees had been provided fall protection and instructed employees to lie as well.

These are simply examples of criminal liability. Overall, criminal liability in the matter of workplace safety has been trending upward. In late 2015, this statement was made by then head of OSHA, David Michaels: “A recent agreement between the Departments of Labor and Justice will launch a “new world of worker safety” by holding managers and supervisors criminally accountable for violations of the law.”

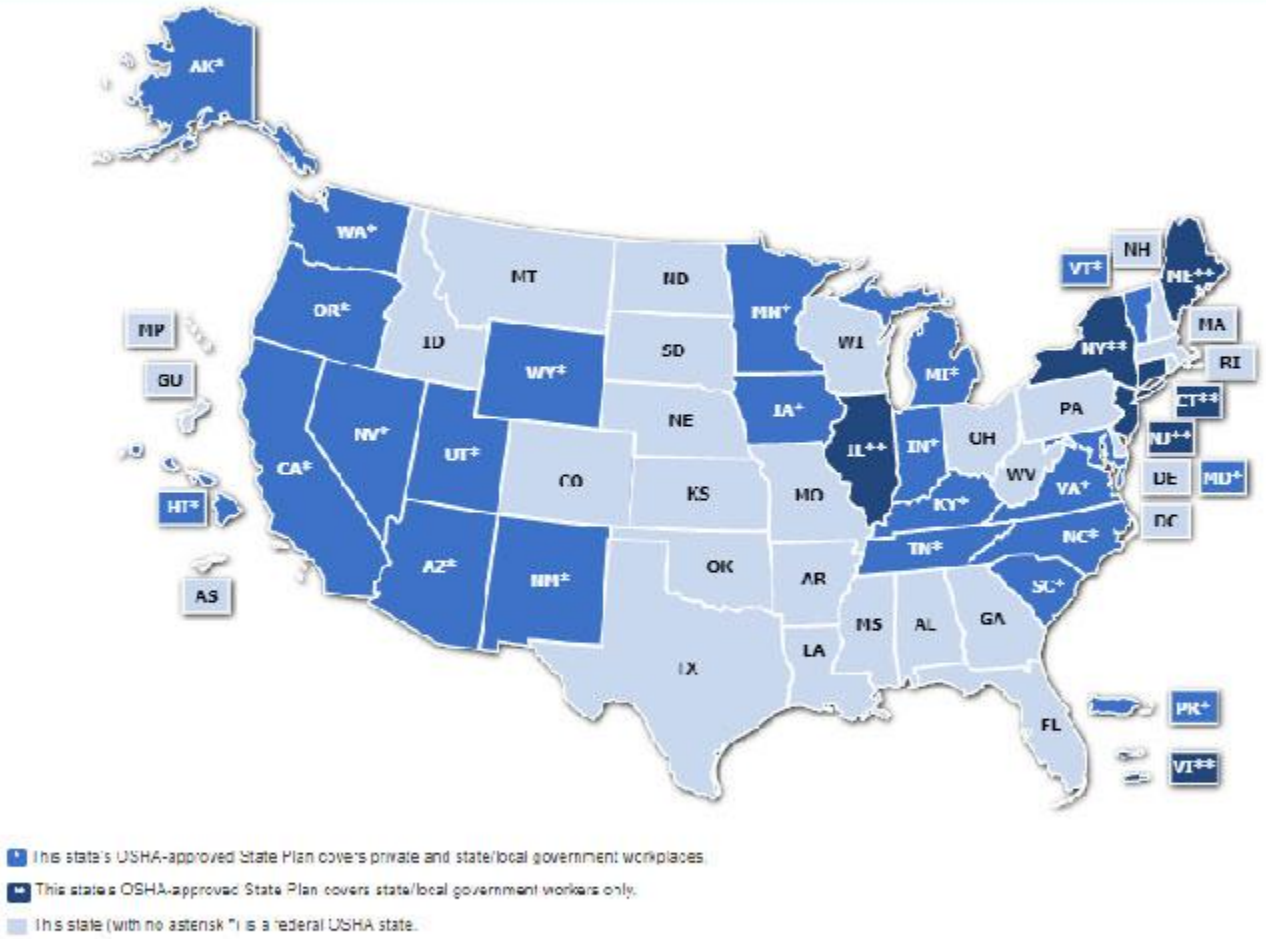
Click Box

2.5.4 Regulatory Compliance

We have firmly established the fact that there is much more to workplace safety than OSHA, but OSHA is a very important part of workplace safety. So now let's examine OSHA. The Occupational Safety and Health Administration (OSHA) is an agency of the United States Department of Labor. Congress established the agency under the Occupational Safety and Health Act, which President Richard M. Nixon signed into law on December 29, 1970. OSHA's mission is to "assure safe and healthful working conditions for working men and women by setting and enforcing standards and by providing training, outreach, education and assistance." The agency is also charged with enforcing a variety of whistleblower statutes and regulations.

OSHA covers most private sector employers in all 50 states, the District of Columbia, and other U.S. jurisdictions—either directly through federal OSHA or through an OSHA approved state plan.

2.5.4 Regulatory Compliance



* This state's OSHA-approved State Plan covers private and state/local government workplaces.
* This states OSHA-approved State Plan covers state/local government workers only.
* This state (with no astersk *) is a federal OSHA state.

State plans are OSHA-approved job safety and health programs operated by individual states instead of federal OSHA. Federal OSHA approves and monitors all state plans and provides as much as fifty percent of the funding for each program. State-run safety and health programs are required to be at least as effective as the federal OSHA program.

The following 22 states or territories have OSHA-approved state programs: Alaska, Arizona, California, Hawaii, Indiana, Iowa, Kentucky, Maryland, Michigan, Minnesota, Nevada, New Mexico, North Carolina, Oregon, Puerto Rico, South Carolina, Tennessee, Utah, Vermont, Virginia, Washington, and Wyoming.

Federal OSHA provides coverage to certain workplaces specifically excluded from a state's plan, for example, work in maritime industries or on military bases.

Click Box

2.5.4 Regulatory Compliance

OSHA's mission was defined in its enabling legislation by, what we now call, the General Duty Clause. Cited as 5(a)(1) the General Duty Clause states: "Each employer shall furnish to each of his or her employees employment which is free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees." OSHA's mission is to see that this happens. Consider the words "recognized" and "likely" – recognized by whom and likely in whose opinion? The legislation does not specify.

Click Box

2.5.4 Regulatory Compliance

We can see from this legislation that employers are required to protect employees even if a specific standard does not exist or if some hazard still exists after a standard is complied with. In these cases, OSHA compliance officers will write a citation based on the General Duty Clause. Typically, OSHA will cite consensus standards, sometimes referred to as 'voluntary' standards. However, it certainly should NOT be considered voluntary if OSHA can cite and fine an employer using one of these standards. Common consensus standards include, but are not limited to:

- ANSI (American National Standards Institute)
- ASTM (American Society of Testing and Materials)
- ASME (American Society of Mechanical Engineering)
- AGCIH (American Governmental Congress of Industrial Hygienists)
- NFPA (National Fire Protection Association)
- CGA (Compressed Gas Association)
- IIAR (International Institute of Ammonia Refrigeration)
- CI (Chlorine Institute)

NFPA®

ASTM INTERNATIONAL

CGA

Compressed Gas Association

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2.5.4 Regulatory Compliance

OSHA can also cite and fine companies for not complying with Operator Manuals for certain types of equipment or for not complying with internal standard operating procedures written by a company. Never write a policy, plan, program, or procedure that is not going to be enforced.

There is another section of the General Duty Clause that states employee's responsibilities in the workplace. Cited as 5(b) it says, "each employee shall comply with occupational safety and health standards and all rules, regulations, and orders issued pursuant to this Act which are applicable to his own actions and conduct." OSHA does not write citations to employees who violate this part of the General Duty Clause, but they do sometimes recognize that an employee is responsible for an injury and accept employee misconduct as the reason.

Click Box

2.5.4 Regulatory Compliance

Employee Misconduct

Since this law requires employees to follow all safety rules and regulations, employers have a very strong standing in disciplining employees who violate their safety requirements. OSHA states that one cannot terminate an employee for getting hurt and has stiff punishment for employers who try to do so; however, an employee can and SHOULD discipline an employee who blatantly does not follow safety rules.

Therefore, if OSHA cites an employer and the employer feels that violation was the result of an employee failing to follow safety policy, the employer may claim an "Employee Misconduct Defense." If the employee did fail to follow required safety procedures, the employer must then prove two additional things. First, they must prove that they have met all OSHA requirements relative to the situation, and second, they must use ***progressive discipline*** to enforce safety rules. Progressive discipline is an important element of a successful safety culture. Negative reinforcement is a motivation, plain and simple. Employees need to know there are repercussions for their actions. If all three elements are proven, OSHA may drop the citation based upon employee misconduct. OSHA still does not act against the employee, but they may refrain from taking action against the employer. This may also prove useful in proving employee negligence and protect the company from civil or even criminal liability.

Click Box

2.5.4 Regulatory Compliance

Employee Rights Guaranteed by OSHA

- Right to a safe and healthful workplace
- Right to know about hazardous chemicals
- Right to information about injuries and illnesses in your workplace
- Right to complain or request hazard correction from employer
- Right to training
- Right to hazard exposure and medical records
- Right to file a complaint with OSHA
- Right to participate in an OSHA inspection
- Right to be free from retaliation for exercising safety and health rights

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Workers' Rights

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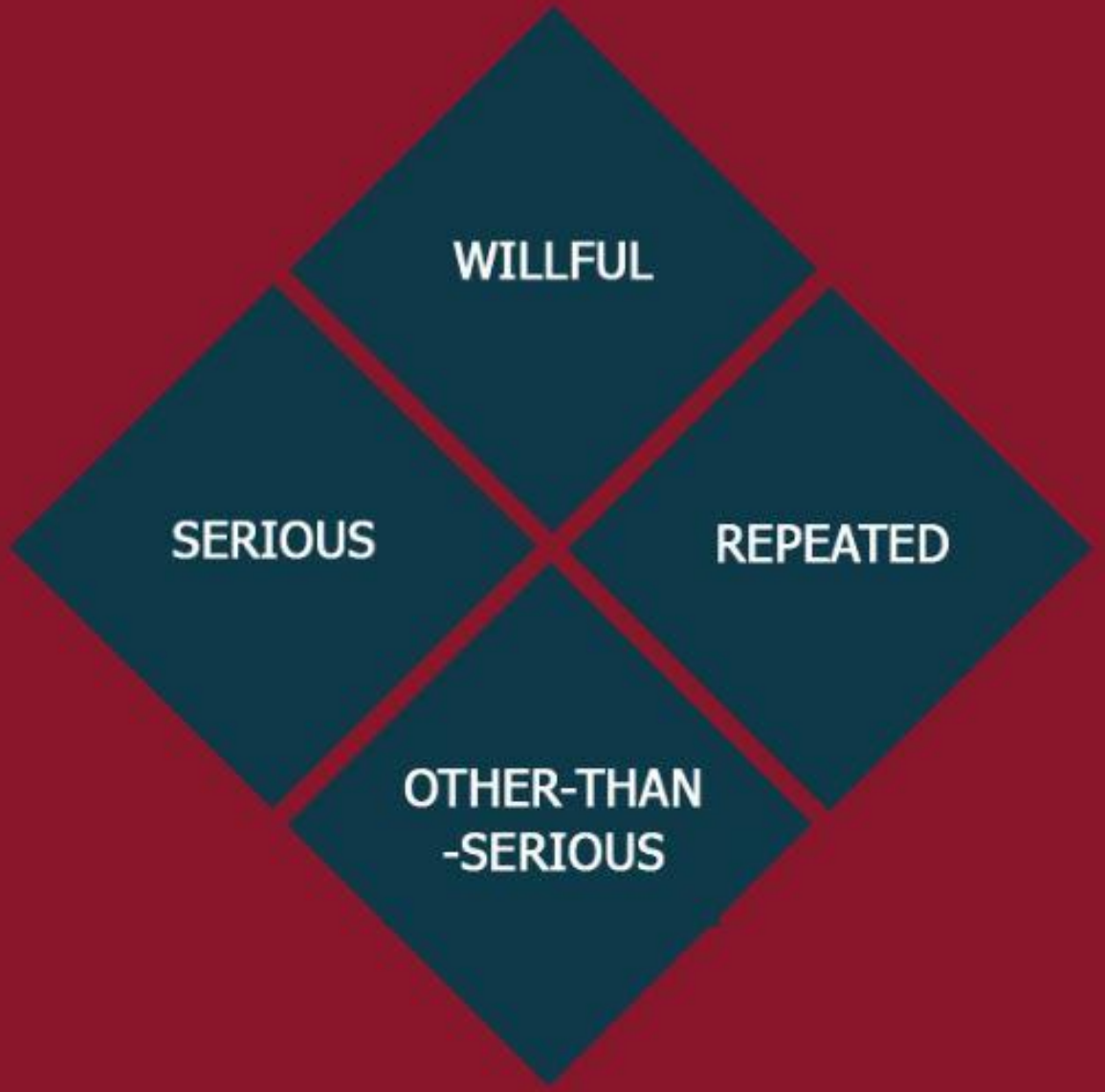
OSHA Citations and Fines

There are four general types of citations that OSHA may issue based on the severity of the violations found:



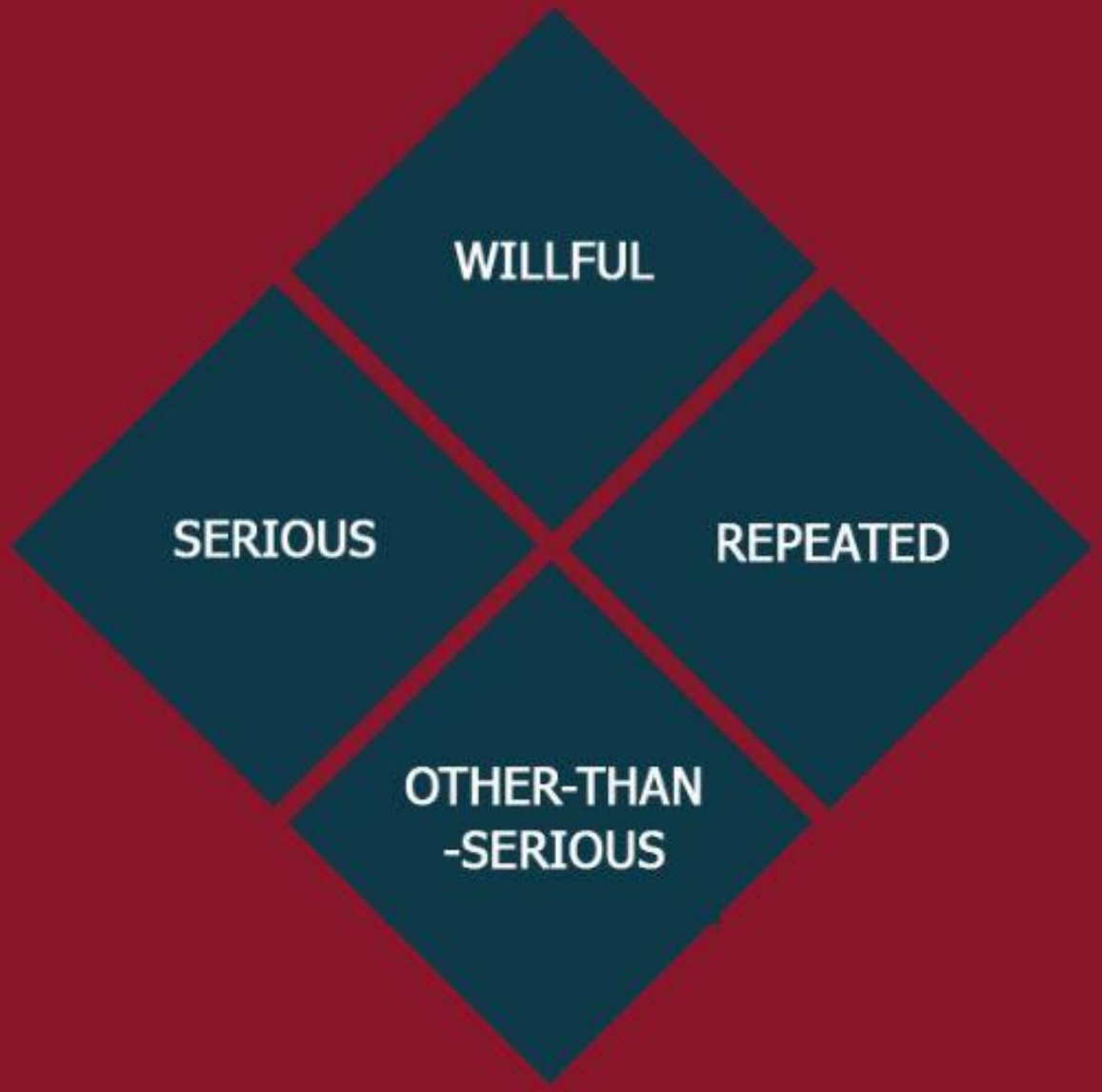
WILLFUL

A willful violation is defined as a violation in which the employer either knowingly failed to comply with a legal requirement (purposeful disregard) or acted with plain indifference to employee safety. Note, that willful also can indicate that the employer 'should have known better'; ignorance is no excuse of the law. Examples of this may include lack of compliance with the consensus standards mentioned previously or a facility being fined by OSHA and the parent company not fixing the discovered hazard at other facilities. If OSHA visits a different facility and finds the same type of hazard, they can fine them for a willful violation. Therefore, communication at a corporate level (if dealing with multiple facilities) is key.

CLICK BOXES TO SEE MORE INFORMATION

OSHA Citations and Fines

There are four general types of citations that OSHA may issue based on the severity of the violations found:



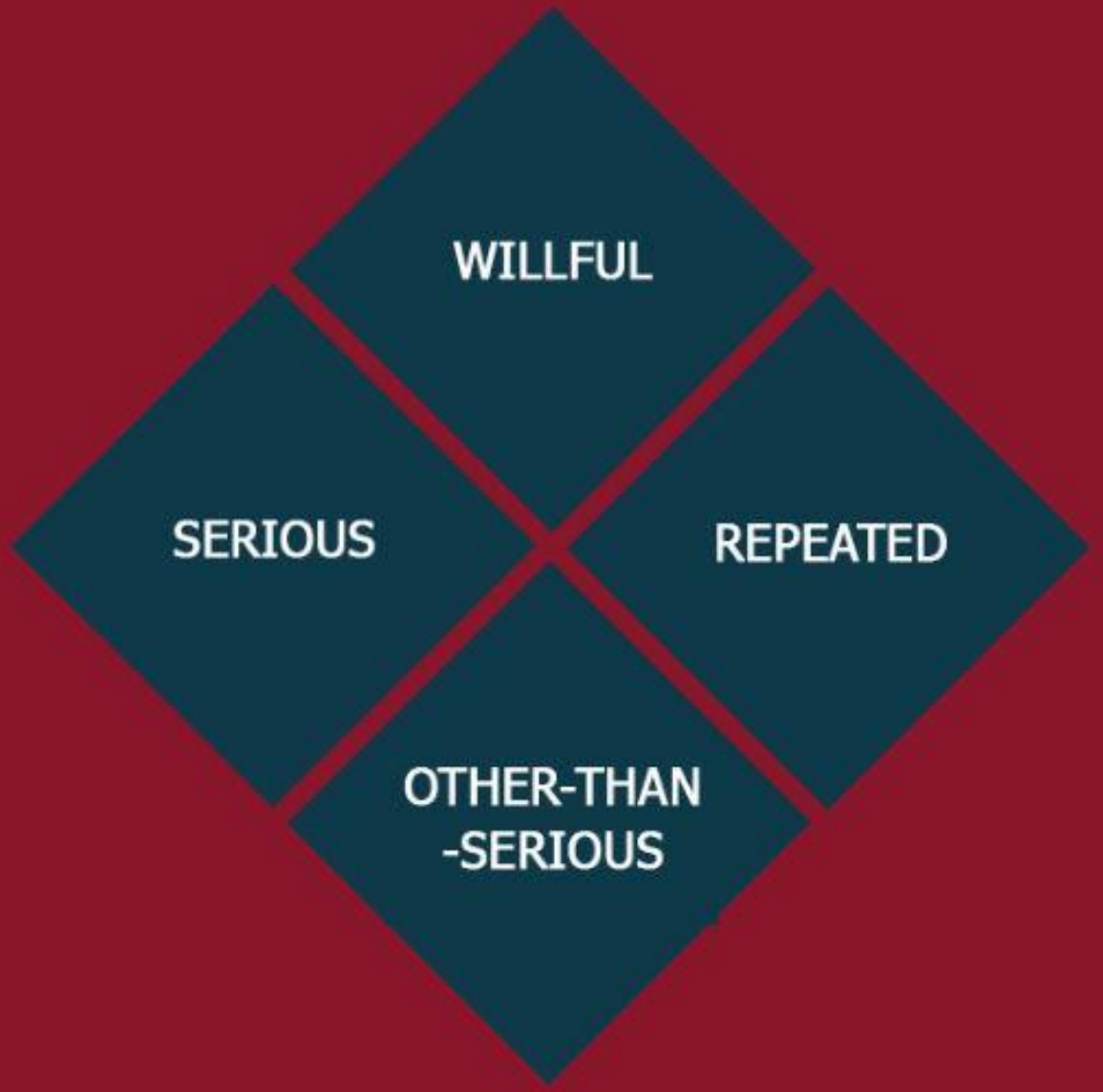
REPEATED

A Federal agency may be cited for a repeated violation if the agency has been cited previously for the same or a substantially similar condition and, for a serious violation, OSHA's regionwide inspection history for the agency lists a previous OSHA Notice issued within the past five years; or, for an other-than-serious violation, the establishment being inspected received a previous OSHA Notice issued within the past five years.

CLICK BOXES TO SEE MORE INFORMATION

OSHA Citations and Fines

There are four general types of citations that OSHA may issue based on the severity of the violations found:



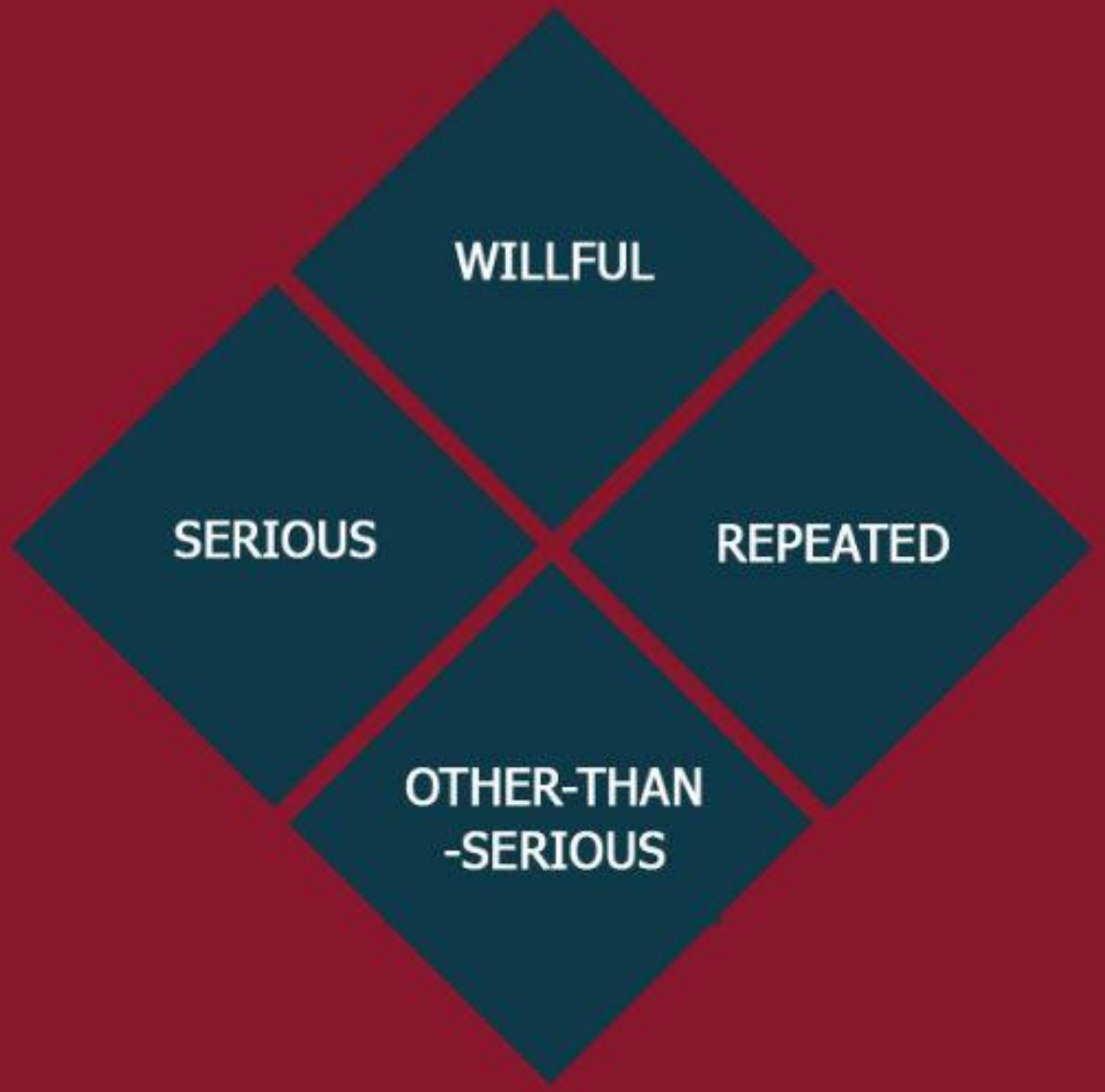
OTHER-THAN-SERIOUS

A violation that has a direct relationship to job safety and health, but is not serious in nature, is classified as "other-than-serious."

CLICK BOXES TO SEE MORE INFORMATION

OSHA Citations and Fines

There are four general types of citations that OSHA may issue based on the severity of the violations found:



SERIOUS

A serious violation exists when the workplace hazard could cause an accident or illness that would most likely result in death or serious physical harm unless the employer did not know or could not have known of the violation.

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Drag and drop the following OSHA Violation with its correct description.

A violation in which the employer either knowingly failed to comply with a legal requirement (purposeful disregard) or acted with plain indifference to employee safety.

A violation when the workplace hazard could cause an accident or illness that would most likely result in death or serious physical harm, unless the employer did not know or could not have known of the violation.

A citation issued for a repeated violation that has been previously cited for, or a substantially similar condition.

A violation that has a direct relationship to job safety and health but is not serious in nature.

2.5.4 Regulatory Compliance

Penalties

Prior to 2016, OSHA's highest penalty was $70,000 per violation. However, they increased the maximum penalty by 78.2% that year to adjust for the Consumer Price Index, since citation amounts had not been adjusted for inflation in the previous 26 years.

OSHA Penalties

Below are the maximum penalty amounts, with the annual adjustment for inflation, that may be assessed after Jan. 15, 2023. (See OSHA Memo, Dec. 20, 2022).

Type of Violation	Penalty
Serious Other-Than-Serious Posting Requirements	$15,625 per violation
Failure to Abate	$15,625 per day beyond the abatement date
Willful or Repeated	$156,259 per violation

Click Box

OSHA's Inspection Priorities

OSHA seeks to focus its inspection resources on the most hazardous workplaces in the following order of priority:

#1 Imminent Danger

Defined as "any conditions or practices in any place of employment which are such that a danger exists which could reasonably be expected to cause death or serious physical harm immediately or before the imminence of such danger can be eliminated through the enforcement procedures otherwise provided by the OSH Act."

As OSHA's number one priority, any knowledge of imminent danger will result in quick action by OSHA, which will usually be a visit by an OSHA Compliance officer. OSHA inspectors have been trained, for example, to drive past construction sites, and look for 'imminent danger' hazards, including what they refer to as the Fatal Four in construction, which include falls, electrical, crushed by and caught between hazards.

CLICK BOXES TO SEE MORE INFORMATION

OSHA's Inspection Priorities

OSHA seeks to focus its inspection resources on the most hazardous workplaces in the following order of priority:

#2 Catastrophes, Fatalities

Catastrophe is defined as "the hospitalization of three or more employees resulting from a work-related incident or exposure; in general, from an accident or an illness caused by a workplace hazard." (Note that reporting requirements for reporting catastrophes were changed in 2015 to one employee hospitalization and will be discussed in more detail in recordkeeping requirements lesson). A fatality is defined as "an employee death resulting from a work-related incident or exposure; in general, from an accident or an illness caused by or related to a workplace hazard." As OSHA's number two priority, a catastrophe or fatality will almost certainly result in an investigation by OSHA.

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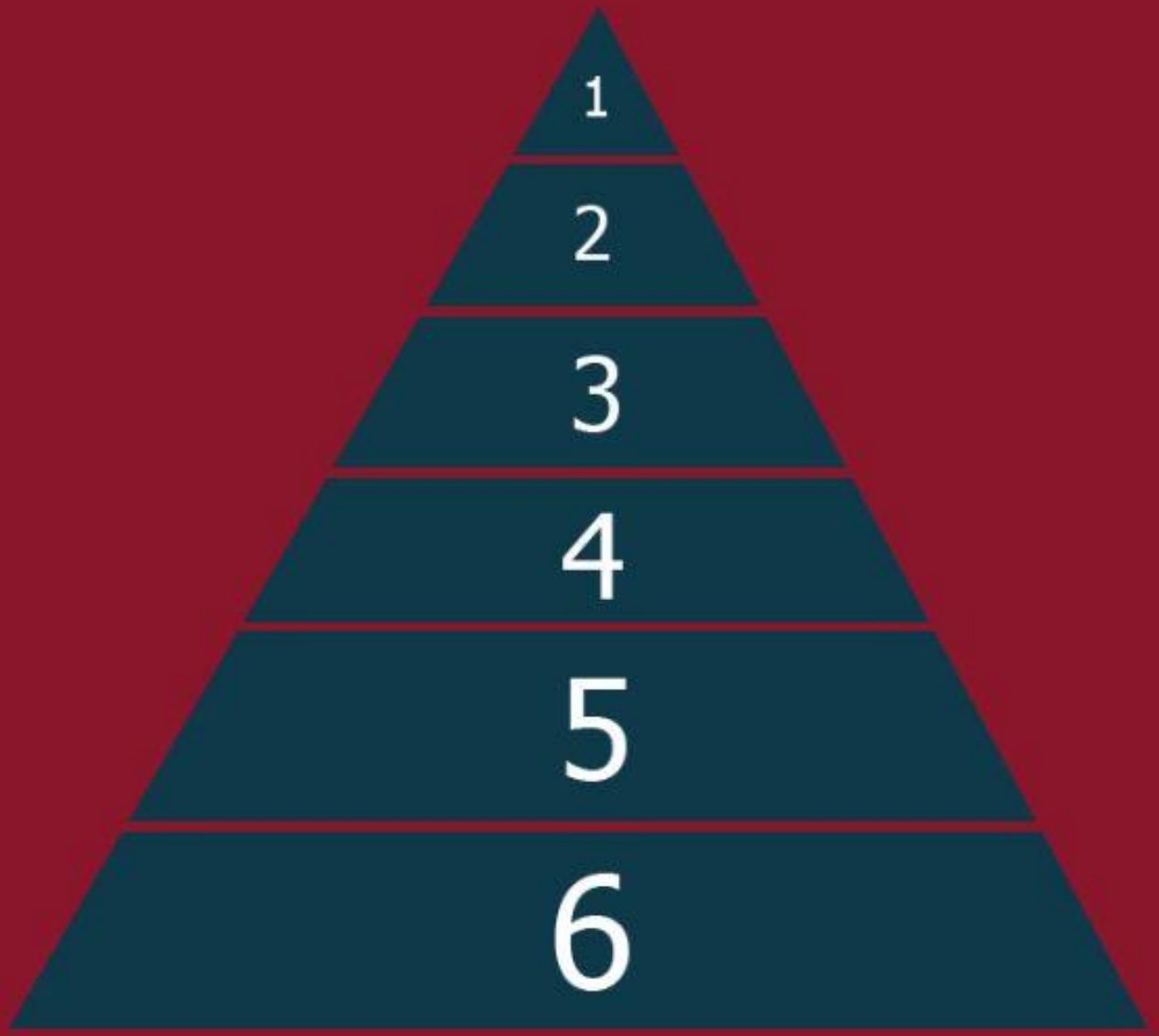

OSHA's Inspection Priorities

OSHA seeks to focus its inspection resources on the most hazardous workplaces in the following order of priority:

#3 Complaints

Complaint means a complaint from an employee. These are sometimes handled by mail. If the employee wants OSHA to visit the facility, they must file a written, signed complaint of a serious hazard. Many false complaints are filed by employees who desire to damage their employer. Because there are so many complaints, OSHA cannot visit each site. As OSHA's third priority, an employee complaint is not always likely to result in a visit from OSHA.

CLICK BOXES TO SEE MORE INFORMATION

OSHA's Inspection Priorities

OSHA seeks to focus its inspection resources on the most hazardous workplaces in the following order of priority:

#4 Referrals

Referrals are referrals from other government agencies that see a hazard in your workplace and report it to OSHA. These could be referrals from other agencies that may be inspecting your facility for compliance issues such as DOT, EPA, or the local fire marshal. As OSHA's fourth priority, they may not respond to every referral. Whether OSHA comes to a facility will depend on the seriousness of the hazard. These are often handled through the mail.

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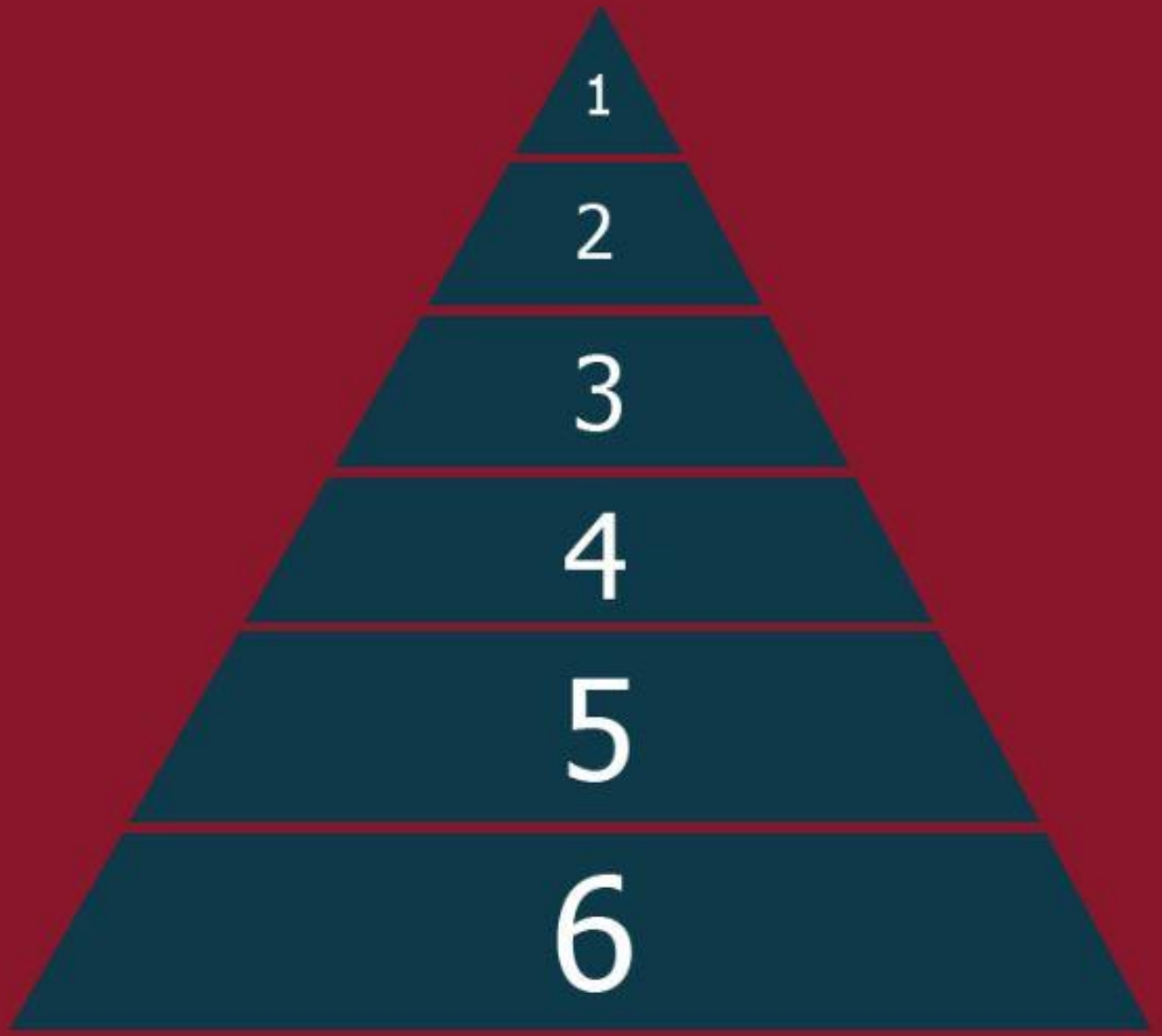

OSHA's Inspection Priorities

OSHA seeks to focus its inspection resources on the most hazardous workplaces in the following order of priority:

#5 Programmed Inspections

Programmed Inspections are those planned by OSHA and it often just means that it's your turn. In the past, it was based on a facilities' SIC code (Standardized Industrial Code) now known as an NAICS (North American Industrial Classification System). If a workplace had a worker's comp rate that was 1.5 higher than that of other industry in its SIC code, OSHA would automatically pay that facility a visit. These days, OSHA specializes in NEP or National Emphasis Programs, commonly referred to as "target inspections" and these are based on high hazard industries such as meat processing, healthcare, and heavy chemical processing. As OSHA's fifth priority and considering OSHA's limited resources, these types of inspections will take a lower precedence.

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OSHA's Inspection Priorities

OSHA seeks to focus its inspection resources on the most hazardous workplaces in the following order of priority:

#6 Follow-Up Inspections

Follow-Up Inspections are those when OSHA checks to make sure some hazard they have cited is indeed corrected. These are OSHA's sixth priority, but often are addressed by mail.

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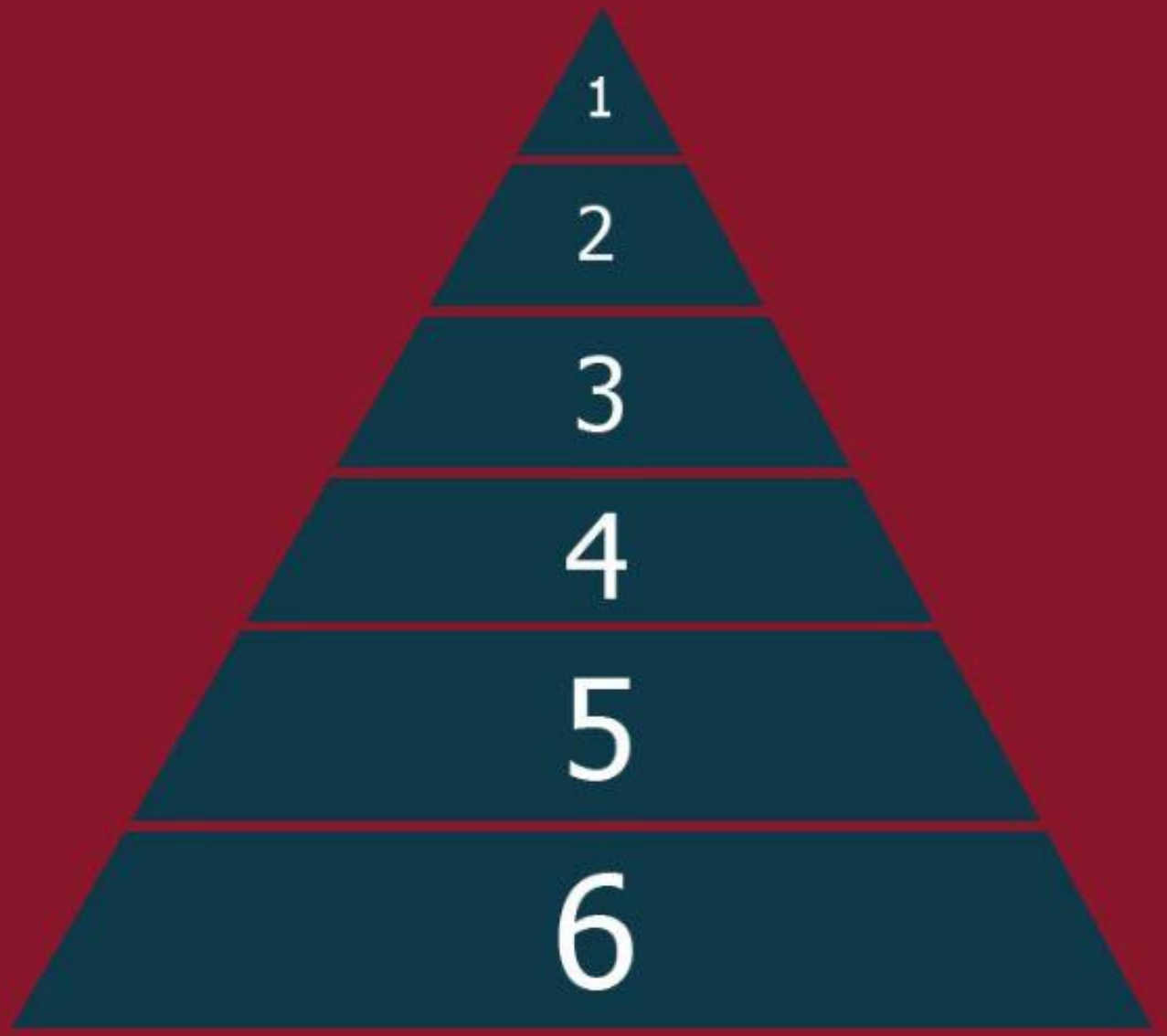


2.5.4 Regulatory Compliance

OSHA Resources in FY 2020

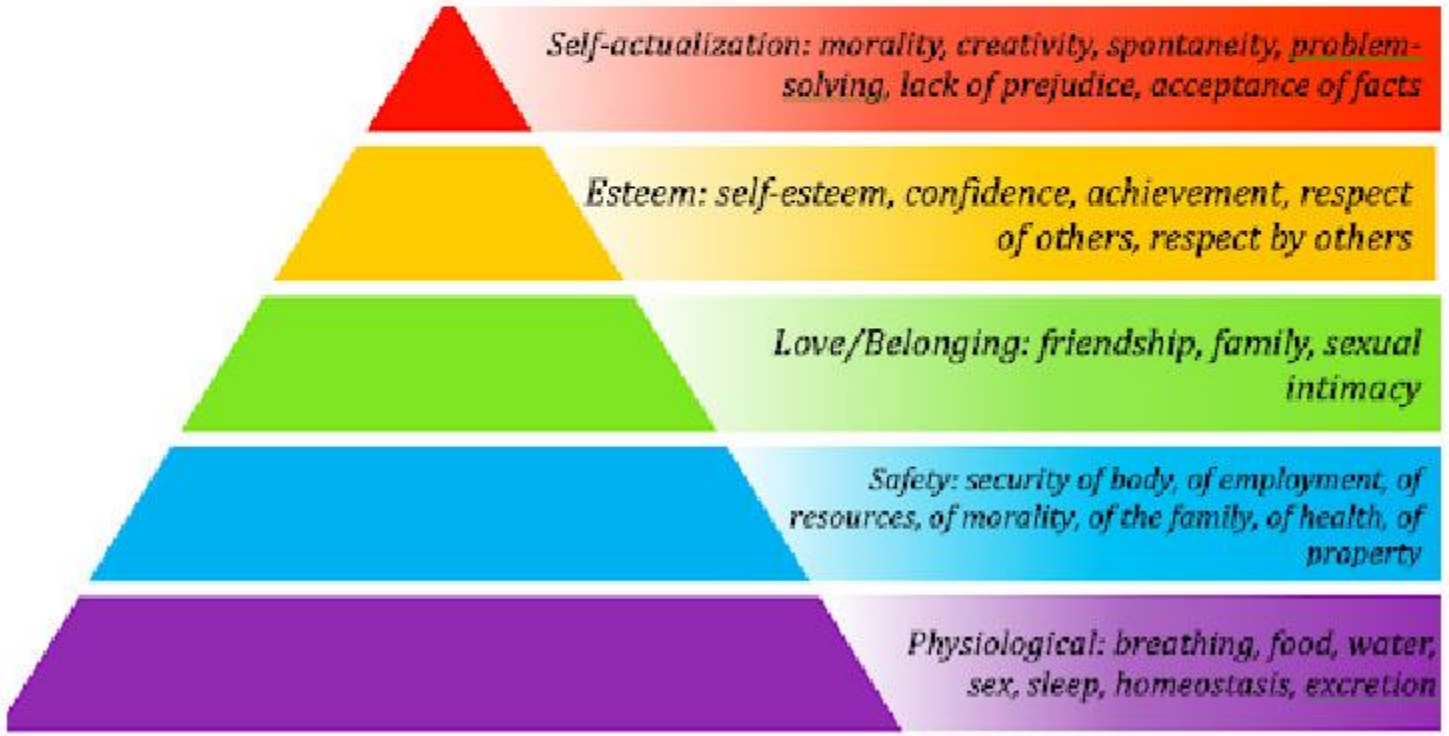
While OSHA is certainly a factor in safety compliance, they are a relatively small entity. To put this in perspective, consider this:

- There are only 2,100 inspectors (federal and state) to inspect over 8 million workplaces
- Federal OSHA has enough inspectors to inspect workplaces once every 145 years
- State OSHA plan States have enough inspectors to inspect workplaces once every 97 years
- There is one OSHA inspector for every 74,760 workers
- FY 2020 Budget is $581.8 Million (Compare that to EPA's $9.05 Billion)
- The current OSHA budget amounts to $3.71 to protect the safety and health of each American worker

Click Box

2.5.5 Improving Personnel Morale

An unsafe workplace effects personnel morale. A human being's need to feel safe is one of our most basic needs. No matter how many perks an employee receives, they will not be happy if they think they are unsafe. Consider Maslow's Hierarchy of Needs pyramid shown here. Maslow, a psychologist, created this pyramid of needs with the largest, most fundamental levels of needs at the bottom, whereas the need for self-actualization and self-transcendence at the top. Notice where the need for safety lies – near the bottom along with the physiological requirements like the need for food and water. The fact is this: employees are more productive in a safer work environment because this innate need is being met. Often, the 'safe' work environment can be accomplished any number of simple means such as better lighting, improved housekeeping, reduced noise, proper guarding of equipment and matching the workstation to the individual.



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2.5.6 Lowering Insurance Cost

Worker's compensation rates are based upon the history of injuries in your workplace. If injury and illness rates are lowered and maintained, then premiums will go down. Keep in mind, often OSHA will review “experience modifier rates” to determine whether they will visit a particular type of facility. An Experience Modification Rate (EMR) has a strong impact upon a business. It is a number used by insurance companies to gauge both past cost of injuries and future chances of risk. The lower the EMR of your business, the lower your worker compensation insurance premiums will be. An EMR of 1.0 is considered the industry average. If your business has an EMR greater than 1.0, the reasons are simple. There has been a worker compensation claim that the insurance provider has paid. To mitigate the insurance company’s risk, they raise the worker compensation premiums. The bad news is this increased EMR typically remains for 3 years or more based on the state.

Workers compensation is one type of “direct cost.” Direct costs include workers’ compensation, medical expenses, civil liability or litigation costs, and property losses. “Indirect costs” can be much more expensive. For every dollar in direct costs, indirect costs could be as much as $2 to $7, depending upon factors such as the severity of the accident and the type of industry. Indirect costs include workplace disruptions, loss of productivity, worker replacement, training, increased insurance premiums and attorney fees. Using this math, if it is assumed that a single, fatal workplace injury can cost approximately $1.42 million in direct costs (which studies tend to support), then direct and indirect costs can skyrocket into the tens of millions per incident.

3.0 Elements of a Safety and Health Management System Part I

A safety and health management system (also known as, or I2P2) is recommended for any company wishing to take workplace safety to the highest level. Agencies worldwide use this as a proven, flexible approach to address workplace safety and health issues proactively and continually. OHSAS 18001, ANSI Z10, ISO 45001, and I2P2 (Injury and Illness Prevention Program), are all examples of a safety management system. It provides the overarching framework for planning, implementing, evaluating, and improving all workplace safety and health management efforts. By systematically advancing safety throughout the organization, it maximizes the effectiveness of hazard-specific programs, such as those addressing hazardous materials, lockout tagout, violence prevention, bloodborne pathogens, and material handling. The system encompasses all workplace hazards, not just those covered by OSHA standards.

What are the benefits? A safety and health management system can help you bring a “culture of safety” into your facility, with potential benefits for all personnel, laborers, and management alike. With a safety and health management system, protecting safety and health evolves from being an isolated, sporadic activity to one that is integrated into all business and operational processes and activities. Safety and health is not delegated to only a few people–it is distributed across the workforce and backed up by significant management responsibility, commitment, and attention. Everyone takes ownership of the goal of improving the organization’s safety and health performance.

Click Box

3.0 Elements of a Safety and Health Management System Part I

A safety and health management system helps ensure that hazards are identified earlier, effective controls are put in place, people are adequately trained and empowered, and work processes are designed and carried out in a manner that delivers more consistent safety and health performance. A safety and health management system can help a company realize a wide range of benefits that have been discussed in this lesson:

- Fewer injuries, illnesses, and infections
- Reduced costs for workers' compensation claims and lower health insurance premiums
- Less absenteeism and higher return-to-work rates following injury or illness
- Improved work practices, leading to increased efficiency and greater patient safety and satisfaction
- Higher job satisfaction, morale, and employee retention
- Enhanced reputation

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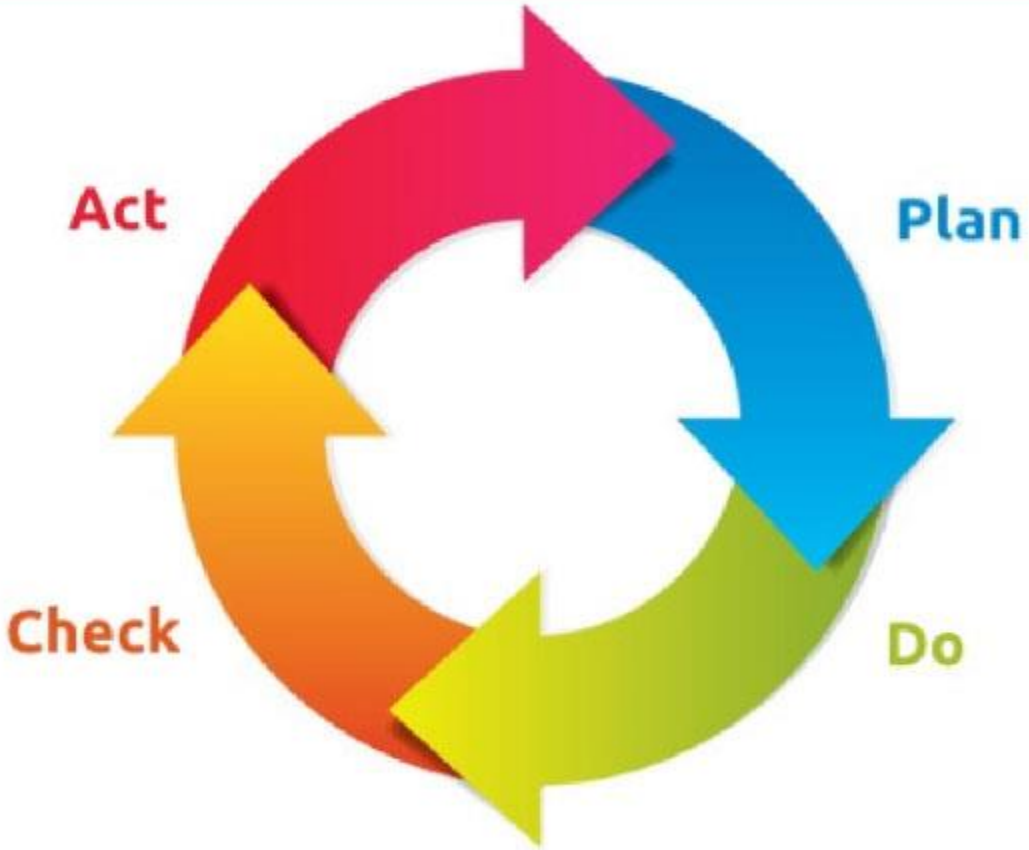
3.0 Elements of a Safety and Health Management System Part I



The foundation of all safety and health management systems is the Plan-Do-Check-Act (PDCA) cycle, popularized by W. Edwards Deming and used by many employers to manage their other business processes, such as product quality and environmental protection. All management systems are built on these fundamental concepts of planning, understanding the processes at your workplace, making adjustments where necessary, and continually evaluating outcomes. A safety and health management system incorporates basic PDCA methods within a broader set of core elements.

Click Box

3.0 Elements of a Safety and Health Management System Part I

Introduction

Almost all successful injury and illness prevention programs include six core elements:

Click each tab above to learn more.

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3.0 Elements of a Safety and Health Management System Part I

Management Leadership

Managers demonstrate their commitment to improved safety and health, communicate this commitment, and document safety and health performance. They make safety and health a company value (versus a priority, as priorities change), establish goals and objectives, provide adequate resources, and support, and set a good example.

3.0 Elements of a Safety and Health Management System Part I

Employee Participation

Employees, with their distinct knowledge of the workplace, ideally are involved in all aspects of the program. They are encouraged to communicate openly with management and report safety and health concerns.

3.0 Elements of a Safety and Health Management System Part I

Hazard Identification and Assessment

Processes and procedures are in place to continually identify workplace hazards and evaluate risks.
There is an initial assessment of hazards and controls and regular reassessments.

3.0 Elements of a Safety and Health Management System Part I

Hazard Prevention and Control

Processes, procedures, and programs are implemented to eliminate or control workplace hazards and achieve safety and health goals and objectives. Progress in implementing controls is tracked.

3.0 Elements of a Safety and Health Management System Part I

Education and Training

All employees have education or training on hazard recognition and control and their responsibilities under the program. This will be covered thoroughly later in the "Training Methodologies" topic in this CSM Course.

3.0 Elements of a Safety and Health Management System Part I

System Evaluation and Improvement

Processes are established to monitor the system's performance, verify its implementation, identify deficiencies and opportunities for improvement, and take actions needed to improve the system and overall safety and health performance. These six elements can be adapted and implemented to fit the needs of workplaces of all different types and sizes, including construction, general industry, government, and healthcare.

3.1 What Management Leadership Involves

Effective management leadership begins by adopting safety and health as a primary business objective, having status within the organization equal to productivity, profitability, service quality, and client satisfaction. Doing so requires management to recognize and acknowledge the value of a safe and healthful workplace, and the costs of one that is not safe or healthful. Management's commitment is often communicated and documented in a formal safety and health policy.

Click Box

3.1.1 Establish Goals

An overall safety and health policy can contain broad goals, such as implementing a safety and health management system, maintaining compliance, and achieving continuous improvement in safety and health performance. These broad goals then guide the development of more specific goals and objectives as hazards are identified and priorities for action are established. Management should avoid setting specific goals until a hazard assessment is complete. Often, underlying issues or problems that have remained undetected are uncovered through this process. Problems, or potential problems, that were not readily apparent may come to light through a systematic approach. The goals and objectives set following the hazard assessment should be realistic and attainable. They should be aimed at areas of performance that can be measured or verified—so that they can be "checked" in the Plan-Do-Check-Act cycle.

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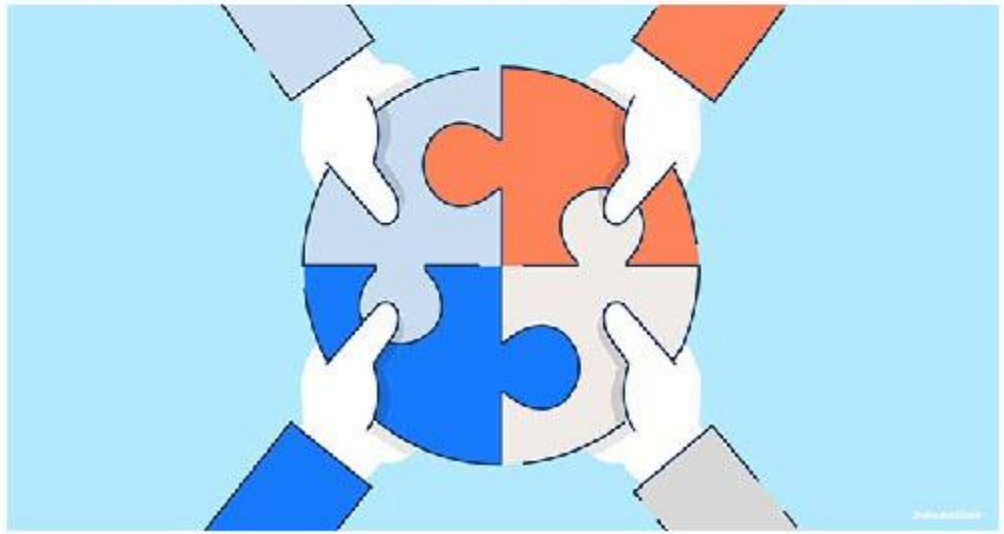
3.1.2 Allocate Resources



Management is responsible for providing and directing the resources needed to implement the organization's safety and health management system and control measures, including quick fixes. Although the level of resources will vary with organizational size, complexity, and starting point, they must be sufficient to allow managers and employees to fulfill their safety and health responsibilities. Resource needs often go beyond financial needs to include access to information, personnel, time, training, tools, or equipment.

Click Box

3.1.3 Expect Performance

Management sets and upholds safety and health performance expectations in several ways:

- Holding managers and employees accountable for safety and health responsibilities in the workplace and giving them the authority to do so
- Leading by example
- Communicating to managers and employees about safety and health issues
- Discussing worker safety metrics, benchmarks, and goals with the board of directors

Click Box

3.1.3 Expect Performance

Top-level management should decide who will implement each component of the safety and health management system. Management should also give individuals enough authority to carry out their assigned duties effectively. Without authority, employees may not feel empowered or motivated to fulfill their assigned responsibilities. Supervisors or others who lack authority may find it difficult to motivate action. Authority can be granted formally (e.g., by inserting written responsibilities and authority into position descriptions and performance agreements) or informally via simple verbal direction. Either way, it is important that these authorities and division of responsibility be clearly communicated and understood by all.

In an organization with multiple layers of management, top management also demonstrates its commitment by holding middle managers, supervisors, and employees accountable for the implementation and success of the safety and health management system. This ensures their active involvement and encourages them to become creative safety and health problem solvers.

3.1.3 Expect Performance

To lead by example, a manager needs to know the safety and health operating procedures and practices that employees must follow and understand why they are important. He or she also needs to follow any safety and health practices and procedures that employees are expected to follow. For instance, employees tend to take notice when management wears hearing protection even during a brief walkthrough of a high-noise area, such as a compressor or utility room. When managers fail to follow safety and health procedures, the credibility of the entire safety and health management system can be damaged.

Managers demonstrate their commitment by clearly communicating to each employee how he or she is expected to contribute to the safety and health management system and why that contribution is important. An effective system holds managers and employees accountable for implementing their assigned duties and responsibilities, often through formal performance evaluations.

Click Box

3.1.4 How Managers Demonstrate Leadership

Management leadership can be demonstrated in many ways. For example, managers can:

- Conduct safety rounds and ask individual workers if they have any safety concerns or issues
- Follow proper handwashing procedures and other standard precautions
- Lead investigations of any incidents
- Approve purchases or expenditures that will improve safety and communicate the reasons for doing so
- Walk around the business and stop to compliment employees who are following safe procedures
- Keep employees from taking dangerous shortcuts, such as failing to use standard precautions to prevent electrocution or falling
- Halt work immediately to investigate or correct a serious hazard

3.1.4 How Managers Demonstrate Leadership

- Conduct housekeeping inspections of work areas
- Ask workers informally about their safety and health concerns
- Involve contractor and temporary workers in all aspects of the safety and health management system
- Respond in person to employees' concerns
- Provide access to occupational health services for any workplace-related injuries and illnesses
- Begin meetings with discussions of the safety and health management system and what it is achieving
- Attend meetings of the safety and health committee (if one is used)
- Become a visible proponent of safety and health management system outside the organization
- Include safety and health messages and reminders in their public statements, written products, and web page

Click Box

3.1.4 How Managers Demonstrate Leadership

These are just a few examples of the many techniques managers can use to demonstrate safety and health leadership—to "walk the talk." The key is for management's commitment to the safety and health management system to be visible, regular, and consistent—making it clear that employee safety and health not only matters but comes first.

Click Box

3.2 What Employee Participation Means

Employee participation in a safety and health management system means that:

- Employees participate in designing, implementing, and evaluating the system, investigating incidents, and making recommendations for improvement.
- The safety and health management system incorporates employees' distinct understanding of workplace hazards and how to protect employees from those hazards.
- The safety and health management system clearly spells out management's responsibilities for supporting employee involvement.
- Employees trust that management will take their concerns seriously. They do not fear reprisal for voicing concerns.

Management leadership and employee participation go hand in hand to build a workplace culture that fosters safety and health.

3.2.1 Why Employee Participation is Important

The success of any safety and health management system depends on employee support because:

- All employees in the organization play a crucial role in safety and health.
- Employees are a tremendous safety and health resource— they have a distinct perspective about safety and health hazards in their workplace.
- Employees are more likely to support and use a system that they helped to build.
- Employee involvement in safety and health decisions results in better decisions and more effective protection.

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3.2.1 Why Employee Participation is Important

There is a clear consensus among employers, employees, and safety and health professionals, in both the public and private sectors, that employee participation saves lives and prevents injuries and illnesses. The more employees are involved in a safety and health management system, the greater the likelihood of success. After all, who has better knowledge of workplace hazards and possible solutions than the employees who face those hazards during their work? Who has more incentive to design and implement effective safety and health practices than the employees who are likely to be injured? Who can better judge whether the system is working effectively?

Active participation empowers employees and gives them a sense of responsibility and ownership in the system that ultimately translates into consistent concern for their own and their coworkers' safety and health. Employee participation can also have broader organizational benefits. Employees tend to be more satisfied and productive when they are encouraged to offer their ideas and when they see their contributions being taken seriously. Engaging employees in dialogue with management and each other about safety and health can lead to improved relationships and better overall communication. By listening to workers, employers might find that they can obtain more valuable information than they would from hiring expensive safety and health professionals.

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3.2.2 What Employee Participation Involves

The best approach to employee participation in a safety and health management system varies among workplaces, depending on such factors as the nature of the hazards, workplace size and structure, the workplace safety and health culture, past experience with employee participation, available resources, the presence or absence of a union, and relevant OSHA standards and state or local laws. At each workplace, management will need to consult with its employees to determine the best way for employees to participate. At unionized workplaces, union support is critical for meaningful employee involvement. Experience has shown that conditions for employee participation are optimal when:

- Both management and employees are committed to elevating workplace safety and health to the highest priority and to building a culture of safety throughout the organization.
- Management and employees can work in an atmosphere of mutual respect and trust.
- Employees are involved in the safety and health management system as broadly as possible from the very beginning.

Click Box

3.2.2 What Employee Participation Involves

- Employee participation is active—for example, they develop system goals and objectives, develop rules and procedures, identify and resolve issues, and make presentations at safety and health meetings.
- Employees are convinced that management wants their participation and will take their input seriously.
- At unionized sites, authorized representatives work jointly with managers and employees to develop and implement the safety and health management system.
- Employees are aware of their rights of protection from harassment or retaliation when they get involved in safety and health activities or report safety and health concerns.

3.2.3 Involve Employees in all Aspects of the Safety and Health Management System

Virtually every aspect of a safety and health management system can benefit from employee involvement. For some areas, such as hazard identification, hazard control, and incident investigation, employee involvement can be critical to the program's success. Therefore, management should ensure that employees are encouraged and able to participate throughout all stages and in all aspects of safety and health management system design and implementation.

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3.2.3 Involve Employees in all Aspects of the Safety and Health Management System

Employee involvement can take many forms, depending on the situation and needs of the workplace. For example, employees can:

- Report hazards and be involved in finding ways to correct problems
- Serve on joint labor-management safety committees and other advisory groups
- Analyze routine hazards in each step of a job or process
- Document safe work practices
- Conduct workplace inspections
- Develop and revise safety rules
- Participate in injury and close-call incident investigations
- Train current coworkers and new hires
- Develop, implement, and evaluate training programs

3.3 Give Employees Access to Safety and Health Information

Where possible, employers should offer employees every piece of information they can use to understand safety and health hazards and risks and identify protective measures. In particular, employers must continually provide convenient access to the most up-to-date information employees need to protect themselves from workplace hazards. This information may include Safety Data Sheets; chemical and equipment manufacturers' safety recommendations; injury, illness, and infection data, and results of any environmental exposure monitoring conducted in the workplace. This is especially important in workplaces where frequent changes in materials, processes, or procedures may introduce new hazards or increase existing ones.

Employers also should consider giving employees access to information they would not otherwise have—information normally considered within the realm of management only— such as results of incident investigations. Sharing relevant safety and health information from these sources fosters trust and allows employees to do their own analyses and back up their recommendations with facts. This gives employees greater confidence to contribute ideas. It also promotes broader consensus on the most important safety and health risks and most appropriate protective measures at a facility. This, in turn, leads to a more effective safety and health management system and greater employee participation in its implementation.

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3.4 Encourage Reporting of Safety and Health Concerns

Employees are often in the best position to notice safety and health concerns—for example, workplace hazards, unsafe work practices, or actual incidents. ("Incident" means an accident, an injury, a serious illness, or a close call.) Whatever the hazard, the safety and health management system cannot operate optimally without employees reporting these concerns. To encourage reporting, management must provide clear mechanisms for employees to voice concerns. To overcome this barrier, management must foster a culture in which employees understand that management will only use the reported information to improve workplace safety and health and never for any type of retribution. Management can promote this type of culture by, for example, providing a timely response to employee concerns, clearly communicating this response to employees, and involving employees in correcting problems.

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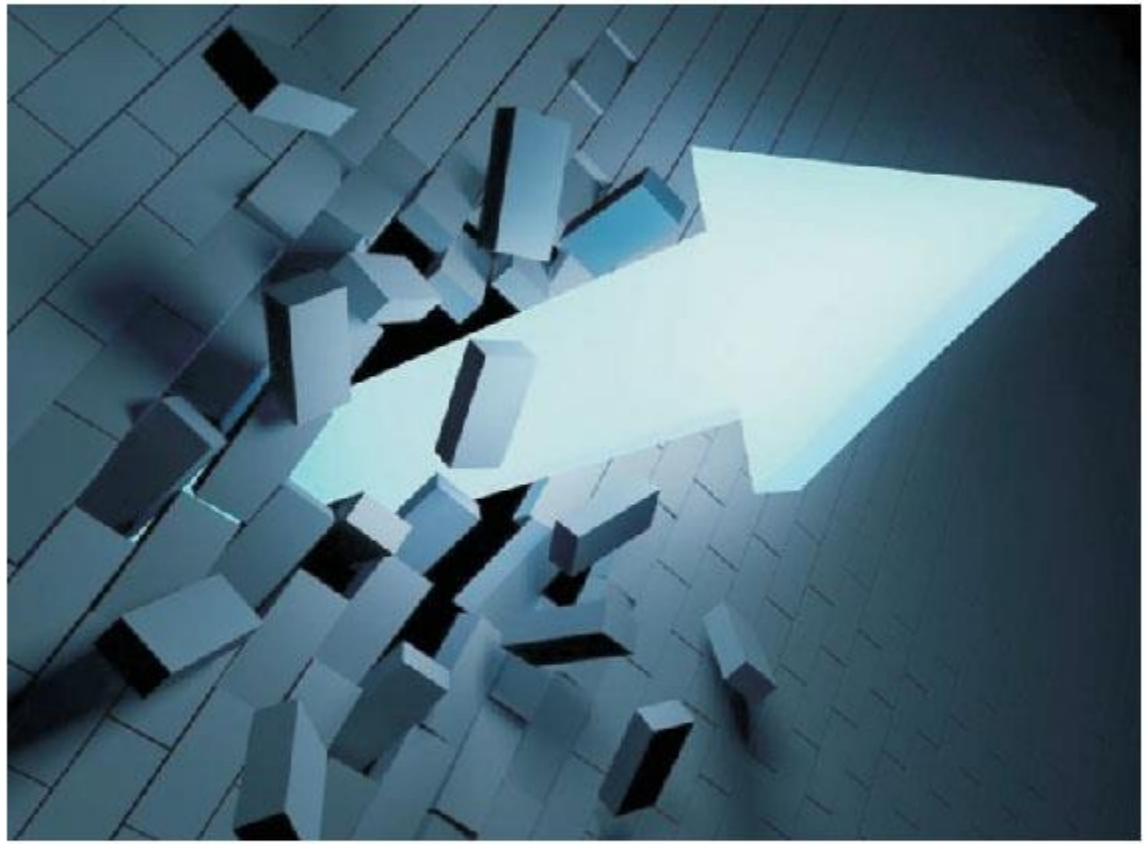
3.4.1 Remove Barriers to Participation

Engaging in prejudicial treatment of employees for reporting safety and health problems is illegal. Even without obvious discrimination, some employer practices may discourage employees from fully participating in the safety and health management system. To participate meaningfully, employees must trust the process. They must perceive the safety and health management system's design and implementation as an open process and believe that there will be no retaliation from managers or their peers for voicing or reporting their safety and health concerns. They must feel that all ideas are welcome and will be given due consideration. During incident investigations, for example, employees who perceive the investigation to be a full and open search for the "root cause" (even if that cause points to a management failure) are much more likely to participate and contribute. Managers need to ensure that employees from all levels of the organization can participate, regardless of their skill level, education, or language proficiency. They also need to ensure that existing programs and policies (such as incentive, drug testing, and disciplinary programs) do not create barriers to participation.

3.4.1 Remove Barriers to Participation



For example, an incentive program that awards supervisors or employees a bonus or other rewards for maintaining an injury-free workplace could discourage reporting of injuries or other safety and health concerns if employees perceive that their supervisors or coworkers will retaliate if they report an injury. Employees may be concerned that reporting may jeopardize compensation or performance appraisals for them or others (such as supervisors), or that they will be transferred, demoted, or harassed in some other way. These types of programs should be reviewed and modified or discontinued if they send the wrong message to employees. However, incentivizing activities that strengthen employee participation in the safety and health management system (e.g., involvement in safety and health committees, reporting good catches) can send the right message to employees and should be considered.

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3.5 What Hazard Identification and Assessment Means

In identifying and assessing hazards, an organization:

- Provides access to and makes use of all available sources of information on hazards and potential hazards in the workplace
- Combines this information with the results of workplace inspections, job hazard analyses, injury and illness investigations, input from workers, and other techniques used to identify hazards
- Assesses and prioritizes hazards, considering the effectiveness of current controls
- Continually monitors for and responds to the introduction of new hazards

The prioritized hazards are addressed using the strategies described under the next core element, Hazard Prevention and Control.

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3.5.1 Why Hazard Identification and Assessment is Important

It was mentioned previously that, under the General Duty Clause of the Occupational Safety and Health Act, employers are required to keep employees “free from recognized hazards that are causing or are likely to cause death or serious physical harm.” To fulfill this obligation and meet several OSHA standards, management needs to consider whether its facilities, equipment, materials, or work processes could expose employees to recognized hazards. Failures to identify or recognize hazards are a frequent “root cause” of workplace injuries and illnesses, which can have serious business and other consequences. To protect employees’ safety and health, there must first be an active, ongoing effort to identify and assess hazards.

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3.5.1 Why Hazard Identification and Assessment is Important

The results of hazard identification and assessment provide a critical foundation for other parts of the safety and health management system. In particular, identifying hazards and understanding their characteristics is essential to making smart decisions about preventing, eliminating, or controlling those hazards. Awareness of hazards and their characteristics also helps structure employee education and training programs.

Effective hazard identification and assessment requires the active cooperation of management and employees. Although management is responsible for controlling hazards, workers have a critical role in identifying and assessing workplace hazards, because of their knowledge and familiarity with facility operations and processes. Cooperation between workers and employers in identifying and assessing hazards is the foundation of an effective safety and health culture, which is at the heart of a successful safety and health management system.

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3.5.2 What Hazard Identification and Assessment Involves

To identify and assess hazards, an organization:

- Reviews its information on hazards present and then, typically, conducts a walkthrough of the workplace to identify, confirm, and document all hazards.
- Analyzes hazards to understand their source, nature, and seriousness; the number of employees who may be exposed to them; and the frequency of the exposures.

Hazard identification and assessment is most effective with a systematic approach—that is, when the organization implements processes to become aware of workplace hazards and evaluate each hazard's nature, including its seriousness relative to others.

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3.5.3 Observe Workplace Hazards

Ideally, an initial hazard identification and assessment exercise will encompass the entire worksite. When planning this activity, it is important to include ancillary activities, such as facility and equipment maintenance, purchasing and office functions, and activities of on-site contractors. Common mechanisms for these exercises include facility walkthroughs or worksite inspections, often using checklists that highlight “things to look for.”

Many hazards can be identified using common knowledge, common sense, and available tools. For example, hazards such as broken stair rails, tripping hazards, and frayed electric cords can be easily identified and their seriousness readily understood. For more subtle hazards, such as chemical exposures, excessive noise levels, and confined spaces, employers may need time to learn how to identify and assess these hazards.

3.5.3 Observe Workplace Hazards

Workplace inspections are a core tool used to identify and assess workplace hazards. Many employers, particularly larger ones with more complex hazards, also use tools such as employee exposure monitoring and job hazard analysis (JHAs).

In addition to conducting a comprehensive initial hazard identification and assessment, it is critical to set up mechanisms to anticipate new hazards and to ensure that they are also evaluated. Changes to existing processes or the introduction of new materials or processes often create new hazards. Ideally, such changes will be evaluated for potential hazards before they are made in the workplace, and this evaluation will become part of the hospital's standard operating procedures.

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3.5.4 Assess Identified Hazards and Prioritize Them for Control

Employers must establish and implement a plan to control hazards in accord with an applicable OSHA standard or if they are causing or likely to cause death or serious physical harm. Once identified, hazards must be assessed to prioritize them for control. Assessing hazards involves reviewing all applicable standards and regulations, available information, and observations about the hazards to fully understand how employees are exposed, the level of risk that the exposure presents, and the consequences of this exposure. This understanding is essential for immediately implementing effective controls or, for hazards that the employee cannot control immediately, providing interim controls to protect employees.

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3.5.4 Assess Identified Hazards and Prioritize Them for Control

For some hazards, permanent controls (e.g., redesigning a process, installing new equipment, or evaluating alternative products to eliminate a hazard) may take time to design, procure, and fully implement. Employers must prioritize hazards so that those presenting the greatest risk can be dealt with first. This means considering three factors (which make up risk):

- **How severe is the injury or illness that could result from the hazard?** Hazards that could cause a severe, life-threatening, or debilitating injury (such as death, dismemberment, or permanent or long-term disability) or serious illness (such as hepatitis or occupational cancer) should be rated highest. Hazards that could cause temporary illnesses and injuries (such as skin rashes or strains and sprains) can be considered "moderately severe" if they might result in one or more days away from work, or of "minor severity" if they would likely not result in lost time.

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3.5.4 Assess Identified Hazards and Prioritize Them for Control

- **How likely is the injury or illness?** Hazards associated with an operation that is repeated many times per day have a higher likelihood of occurrence than those associated with a less frequent operation. Similarly, a situation in which one mistake can cause a serious injury has a higher likelihood of injury than one in which several simultaneous errors must occur for an injury to result. Likelihood can be assessed as very high, probable, not likely, or remote.

- **How many employees are exposed to the hazard?** When two hazards are equally serious and equally likely to occur, the hazard to which more employees are exposed should receive the highest priority for control.

Risk Matrix

Likelihood		Very Likely	Likely	Unlikely	Highly Unlikely
Consequences	Fatality	High	High	High	Medium
	Major Injuries	High	High	Medium	Medium
	Minor Injuries	High	Medium	Medium	Low
	Negligible Injuries	Medium	Medium	Low	Low

4.0 Elements of a Safety and Health Management System Part II

Under this core element, organizations take several steps to prevent and control workplace hazards.
On an ongoing basis, they:

- Identify and evaluate control options for workplace hazards
- Select effective and feasible controls to eliminate, reduce, or contain these hazards
- Implement these controls in the workplace
- Follow up to confirm that these controls are being used and maintained properly
- Evaluate the effectiveness of controls and improve, expand, or update them as needed

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4.1 Why Hazard Prevention and Control is Important

Effective prevention and control of workplace hazards is critical to protecting employee safety and health and avoiding workplace incidents. Prevention and control allow employers to minimize or eliminate safety and health risks and liabilities as well as to meet their legal obligation to provide employees with a safe and healthy work environment. Hazard prevention and control reduce costs, improve efficiency, and boost product or service quality. Prevention and control can also help improve an organization's relationships with its stakeholders and enhance its image as a responsible organization.

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4.1.1 What Hazard Prevention and Control Involves

Hazards can only be prevented or controlled after they have been identified. Therefore, most hazard prevention and control take place after workplace hazards have been systematically identified and assessed. If the hazard identification process finds serious hazards that are not yet controlled, employers should implement interim controls without delay and investigate further options during the hazard prevention and control process.

Hazard prevention and control is an ongoing process. Prevention and control measures are periodically assessed, and changes or updates are made as needed to ensure that these measures continue to be effective in light of changing control technologies or changing workplace conditions. Effective control techniques are often easy to identify and implement for common, well-understood workplace hazards. However, the best control options for more serious and complicated hazards may not be self-evident. In such cases, employers often use interim controls until they have identified, implemented, and selected more permanent control options. Where possible, the chosen hazard control methods should address root causes and be effective both upon implementation and in the long term.

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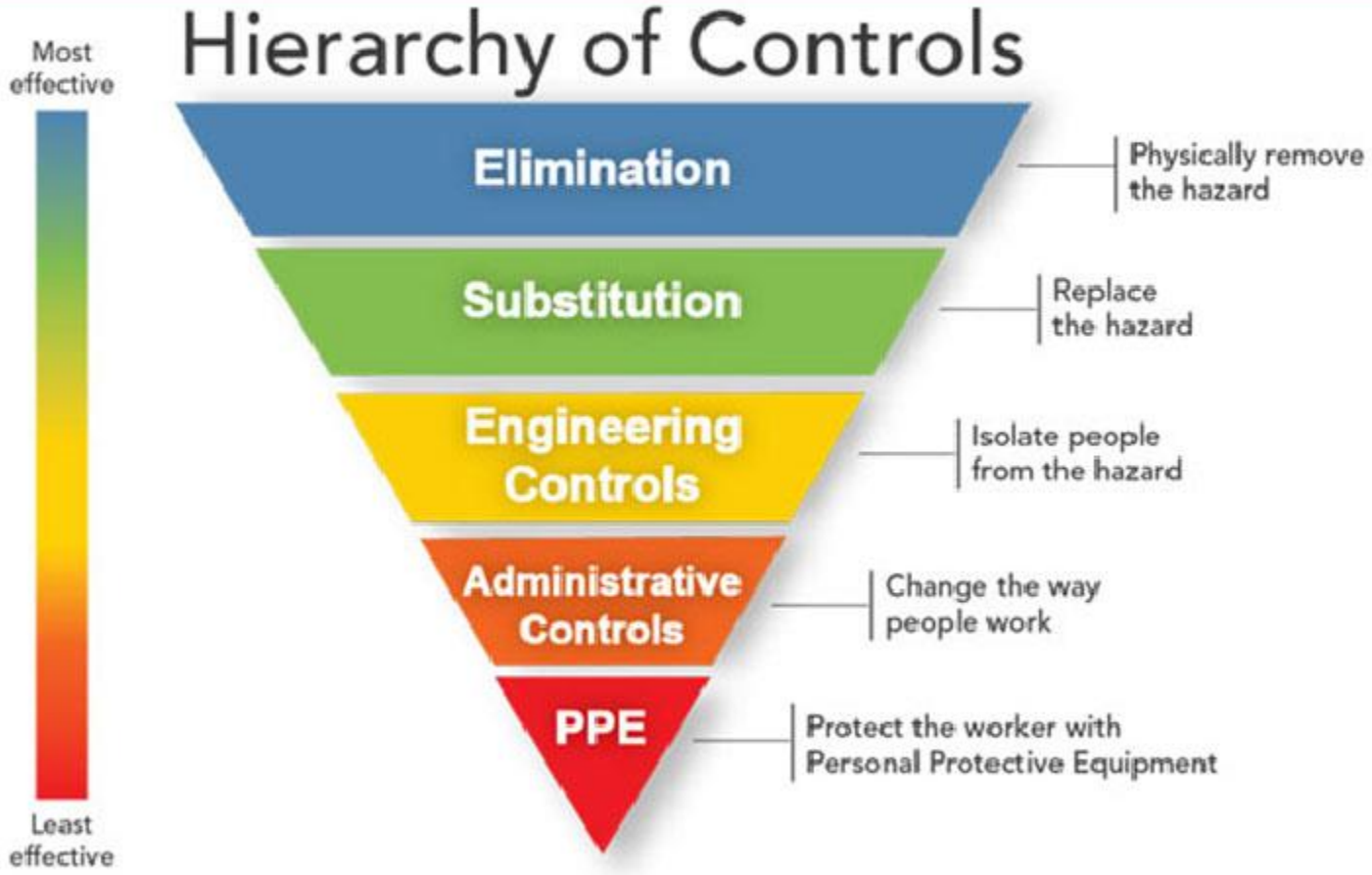
4.1.2 Identify Control Options and Select Controls



Hazard prevention and control begins with gathering information to understand how all identified workplace hazards can be prevented and controlled. For many hazards, several control options are usually available and it is valuable to examine the pros and cons of each. Prevention and control information can be obtained from many sources, including OSHA standards and technical guidance, industry trade and professional associations, safety-related publications, and equipment and service vendors and suppliers. Employees often provide valuable input; they may have seen or heard of control measures being used elsewhere, and they may be able to suggest unique solutions based on their familiarity with the facility, equipment, and work processes. Once employers understand available options, they can choose the most effective and feasible measures for their workplace.

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4.1.2 Identify Control Options and Select Controls

Where appropriate, employers sometimes consult with qualified safety and health professionals, including specialists in OSHA's On-Site Consultation Service or here at NASP to gain more information and perspective as they consider these types of questions and examine options. At a minimum, organizations must implement all hazard prevention and control measures required by applicable OSHA standards and the General Duty Clause. Where possible and appropriate, employers are encouraged to implement additional safety and health measures that go beyond the OSHA requirements. According to OSHA—and to widely accepted safety and health principles—hazard prevention and control measures must be chosen according to the hierarchy described below. Engineering controls are the most effective because they reduce reliance on human factors to achieve protection. Safe work practices and administrative controls would follow, with PPE being the last line of defense. This will be discussed in greater detail later in this course.

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4.1.3 Implement Controls According to the Priorities Established During Hazard Identification and Assessment

Once hazard prevention and control measures have been selected, they need to be implemented. The first step is to develop a written implementation plan. Implementation plans typically specify, for example:

- What hazards need control?
- What measures will be implemented?
- In what order?
- Who will implement them?
- By when?
- Should a written operating procedure (e.g., standard operating procedure, or SOP) be developed?
- What employee training is needed?
- When and how will implementation be confirmed?
- When and how will effectiveness be evaluated?
- When and how will routine inspections be conducted to ensure that hazard prevention and control measures remain operational?
- When and how will preventive maintenance be conducted?

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4.1.3 Implement Controls According to the Priorities Established During Hazard Identification and Assessment

In more advanced safety and health management systems, a written plan helps ensure that managers and employees have a road map for effective implementation. It also provides a framework that management can use to track progress. When resources are limited, employers may not be able to implement all permanent controls at once. In these cases, employers should, where feasible, implement measures on a “worst-first” basis according to the hazard ranking priorities established during hazard identification and assessment. In other words, measures that protect employees from the highest priority hazards are implemented first, followed by controls for other hazards, in order of decreasing priority. Interim controls must be implemented as necessary to protect employees while permanent controls are not in place. Employers are also encouraged to rapidly implement all measures that are easy and inexpensive, regardless of the level of hazard they control.

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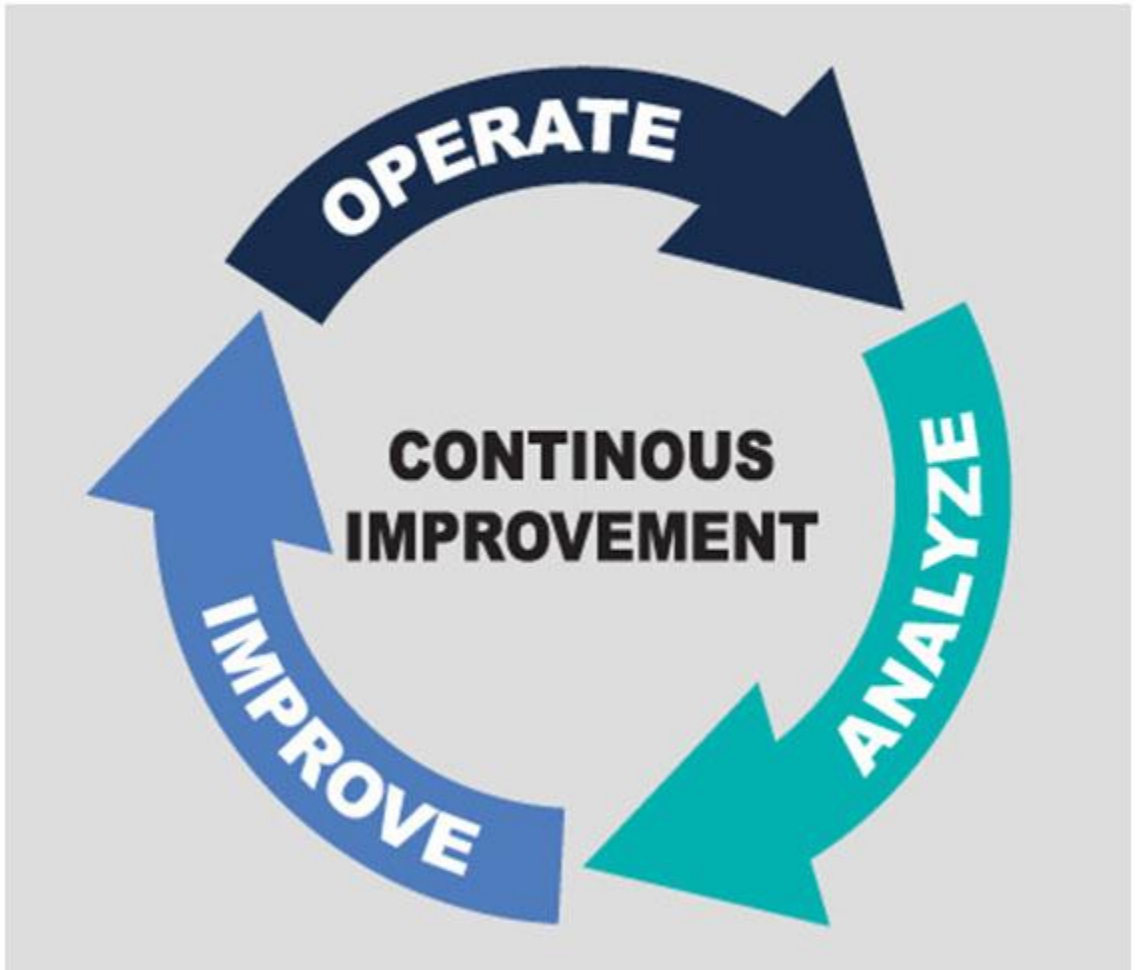
4.2 What System Evaluation and Improvement Means



System evaluation and improvement is one of the most important—and often neglected—elements of an effective safety and health management system. It involves:

- Activities and processes to determine whether a safety and health management system is operating as intended and achieving the organization's goals
- Identifying and correcting deficiencies
- Continually improving safety and health management system performance

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4.2 What System Evaluation and Improvement Means

Effective system evaluation and improvement involves several critical management processes and activities. These include:

- Monitoring and measuring to track whether workplace safety and health conditions are improving, and goals are achieved
- Monitoring injury and illness experience to identify problem areas
- Conducting inspections to determine if controls, processes, and other elements in the safety and health management system are being consistently implemented
- Investigating safety and health management system deficiencies
- Ensuring that effective corrective and preventive actions are promptly chosen and implemented
- Evaluating the safety and health management system as a whole and by its components to determine whether it operates and functions effectively
- Top management review of the safety and health management system's effectiveness and its continued ability to meet the organization's evolving needs

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4.2.1 Why System Evaluation and Improvement is Important

System evaluation and improvement is critical to ensure that a safety and health management system is effective. By implementing these processes, programs, and procedures, an organization will have a high degree of assurance that its safety and health management system is operating as intended, achieving stated goals and objectives, reducing employee safety and health risks, and continuously improving. System evaluation and improvement also provides a mechanism to identify implementation problems, correct deficiencies, and improve the system.

All safety and health management systems encounter problems and inconsistencies, especially in their early stages. For example, the implementation process often reveals weaknesses that could not be anticipated during the system's design phase. Further, a system needs to be refined in response to changing workplace conditions and to capitalize on opportunities to improve its performance. System evaluation and improvement also offer opportunities for management to demonstrate leadership and responsibility. When employees see that their organization's leaders care enough about their safety to conduct periodic inspections and evaluations, honestly communicate the results, and take steps to improve the system, they will be more likely to trust the organization's leadership and participate in the safety and health management system.

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4.3 What System Evaluation and Improvement Involves

To monitor the effectiveness of a safety and health management system, organizations often track various measures (or indicators) connected with safety and health. These include lagging indicators, such as the number and severity of injuries and illnesses; levels of employee exposure to a workplace hazard; employee opinions about the safety and health management system's effectiveness; and the amount paid out in workers' compensation. Also useful are leading indicators, such as the level of employee participation in safety and health management system activities; the number and frequency of management walkthroughs; and the amount of time taken to respond to employee reports of hazards. Changes in these types of measures after a safety and health management system is launched can indicate that the safety and health management system has helped improve workplace safety and health. Organizations can also track administrative measures associated with safety and health management system implementation. These measures include, for example, the number of deficiencies in the safety and health management system noted during an inspection, the number of employees who have completed required safety and health training, and the number of days needed to take corrective action after a workplace hazard is identified or an incident occurs.

Indicators can be both quantitative and qualitative. However, care must be taken to select indicators that are measurable and that reflect the safety and health management system's goals and areas of interest or concern to management or employees. Where appropriate, organizations should document their monitoring activities and results.

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4.3.1 Investigate Incidents

Incidents provide the clearest indication of where the safety and health management system is inadequate. Investigating them thoroughly will improve safety and health management system performance and provide a road map to avoiding fatalities, injuries, and illnesses associated with similar incidents in the future. The purpose of the investigation must always be to identify the root cause of the incident.

Effective investigations require thinking ahead before any incident occurs. Develop a clear plan and procedure so you are ready to begin the investigation immediately. The plan should cover such things as what types of incidents need to be investigated; who needs to be involved; lines and means of communication; materials, equipment, and supplies needed; and reporting forms and templates. Earmark and have available supplies that are to be for investigation use only, such as a digital camera, barrier tape, a tape measure, and notepads.

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4.3.1 Investigate Incidents

Those involved in the investigation need to remain objective and open-minded throughout the process. Where possible, investigations should be conducted by a team that includes both management and employee representation. Ideally, those involved will be familiar with, but not directly involved in, the operations that led to the incident. After an incident, the immediate first steps are to provide first aid and emergency care for the injured worker(s) and to take any measures necessary to prevent others from being injured. Emergency response plans should already cover what to do in a medical emergency. Once these immediate needs are taken care of, the investigation should begin promptly, under the supervision and direction of qualified personnel or responding authorities.

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Investigate Incidents

The basic steps in an incident investigation are:

#1 Report as required

Determine who needs to be notified, both within the organization and outside (e.g., authorities). Understand what types of incidents must be reported, and what information needs to be included. If the incident involves hazardous materials, additional reporting requirements may apply.

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Investigate Incidents

The basic steps in an incident investigation are:

#2 Isolate witnesses

Eyewitnesses to the incident will be a critical source of information. Where possible, prevent witnesses from discussing the incident with each other until you have had a chance to interview them individually.

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Investigate Incidents

The basic steps in an incident investigation are:

#3 Preserve the scene

The condition of the workplace at the time of the incident needs to be documented. Avoid any disturbance to the site until investigators have had a chance to go over it.

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Investigate Incidents

The basic steps in an incident investigation are:

#4 Collect physical evidence and make observations

Document the condition of the workplace at the time of the incident, including where it occurred and the physical placement and configuration of key elements of the scene (equipment, location and position of the injured employee, location of other employees, proximity to doorways, etc.). Photos, videotape, measurements, and sketches or scale drawings may be effective tools for documenting the scene. Take samples of any materials such as liquids, dusts, etc., that are suspected of being involved, and label the containers to indicate the time and location of the sample collection.

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Investigate Incidents

The basic steps in an incident investigation are:

#5 Conduct interviews

When it is appropriate to do so, and as soon as possible, the injured employee(s) should be interviewed, and their statement(s) taken. Eyewitnesses should also be interviewed as soon as possible. Put the interviewee(s) at ease and reassure them that the objective of the interview is to find facts and determine what needs to be fixed, not to assess blame. Use open-ended questions to elicit more information.

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Investigate Incidents

The basic steps in an incident investigation are:

#6 Collect and review other information

Depending on the nature of the incident, records related to training, maintenance, inspections, audits, and past incident reports may be relevant to review.

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Investigate Incidents

The basic steps in an incident investigation are:

#7 Assemble and analyze information

Once all the relevant information has been collected and assembled, the investigation team should evaluate the information with a view to determining (a) the logical chain of events that led up to the incident (e.g., what happened?), (b) the apparent cause(s) that led to the incident, (c) the root cause(s) of the incident, and (d) corrective action recommendation(s) that will prevent a similar incident in the future.

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4.3.1 Investigate Incidents

As well as investigating all incidents resulting in a fatality, injury, or illness, you should promptly investigate any close call (a situation that could have resulted in death, injury, or illness.) Close calls are caused by the same conditions that produce more serious outcomes, and signal that some hazards are not being adequately controlled, or that previously unidentified hazards exist.

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4.3.2 Verify Implementation and Operation Periodically Through Workplace Inspections

The Hazard Identification and Assessment element of this road map addresses the importance of ongoing and periodic workplace inspections to identify new and emerging hazards and associated risks. The Hazard Prevention and Control element addresses how organizations can design and implement control measures to reduce employee hazards. To ensure that hazards are brought under control once these measures are implemented, all hazard control measures need to be systematically and periodically inspected. These inspections determine whether controls are followed and effective in reducing hazards. In a well-functioning safety and health management system, organizations establish inspection procedures and schedules for all control measures, periodically conduct inspections, and document the results.

Compliance Evaluation

Achieving compliance with applicable safety and health regulations is an important goal for any safety and health management system. Compliance also establishes a good foundation for developing and improving a safety and health management system. Organizations need to periodically evaluate whether they comply with safety and health laws, regulations, and other requirements

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4.3.2 Verify Implementation and Operation Periodically Through Workplace Inspections

Corrective and Preventive Action

An organization also needs to periodically conduct "systems-level" evaluations of its safety and health management system. This is done to ensure that the overall safety and health management system is operating as intended, is effective in reducing identified hazards and risks, and is achieving the organization's safety and health goals and objectives. Whenever a problem is identified in any part of the safety and health management system, it is critical for the organization to take prompt action to correct the problem and prevent its recurrence. Often, a tracking system is developed to document the actions taken and their effectiveness in addressing the deficiency.

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4.3.3 Identify Opportunities to Improve the Safety and Health Management System

The procedures described in the first two sub-elements address activities related to evaluating and improving safety and health management system components. These activities are essential but not sufficient to ensure the safety and health management system's effectiveness.

When conducting a systems-level evaluation, organizations should go beyond an inspection or workplace audit. They can do this by proactively questioning whether the safety and health management system core elements have been adequately implemented and are effective in protecting employee safety and health. For example:

- Has management demonstrated its leadership effectively?
- Have all hazards been identified? If not, is there a plan to do so over time and is the plan being followed?
- Are the identified hazards being adequately controlled?

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4.3.3 Identify Opportunities to Improve the Safety and Health Management System

- Are employees consistently following safe work practices?
- Are management and employees fulfilling their responsibilities under the system?
- To what extent are employees participating in the system?
  For example: Are employees identifying potential hazards? Are they using the reporting system?
- Are there any barriers to employee participation?
  For example, are employees reluctant to report hazards because they receive mixed signals from their supervisors or managers about the importance of such reporting?
- Have injuries and illnesses continued to occur?
  Are incidents and close calls being investigated?

4.3.3 Identify Opportunities to Improve the Safety and Health Management System

A safety and health management system needs to be evaluated and reviewed in its entirety at least once a year. This can be done as a single annual evaluation of the entire system, or as a series of evaluations of all the various system components conducted during the course of a year. The scope and frequency of systems evaluations will vary depending on the complexity, maturity, and nature of the safety and health management system and the types of hazards and risks it must control. In addition, the safety and health management system needs evaluation when operations change significantly (such as changes in raw materials, equipment, key personnel, or work practices) or management has reason to believe that the system or any part of it is ineffective. For example, a workplace undergoing many process changes or experiencing rapid turnover may need more frequent evaluations to ensure its effectiveness. Similarly, an increase in incidents in one area of a facility would suggest that an evaluation is warranted. Review and improvement should include the following:

- Opportunities to refine, fortify, and improve the safety and health management system
- New and revised goals and objectives for safety and health
- The types and quantity of resources needed to effectively implement the safety and health management system
- Needed changes to the organization's safety and health policy
- New and revised roles and responsibilities for implementing the safety and health management system

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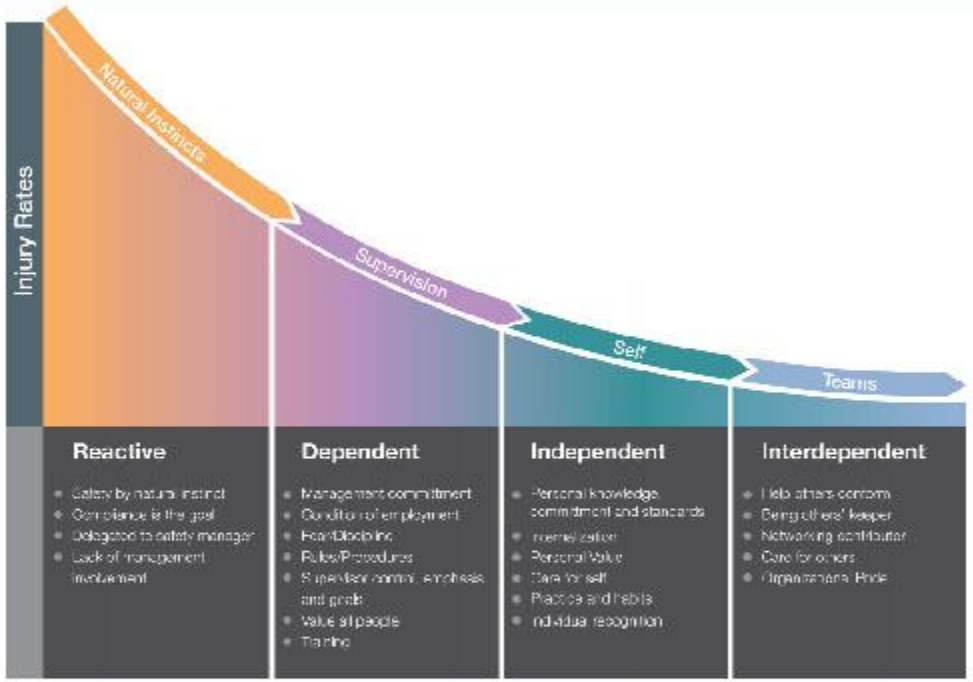
4.4 Progression of an Effective Safety Culture: The Bradley Curve



The Bradley Curve is simply one method of measuring where a company may lie within their safety culture. It was first introduced by DuPont and was based upon three stages of individual participation in the safety process. These are labeled dependent, independent, and interdependent. Ideally, these would be the stages a safety culture should go through as it progresses. Many organizations rate their own safety culture according to where it currently is on the curve. The overlaid idea is that progression through these three stages will correlate to decreases in lagging indicators such as recordable rates.

The underlying core of the curve is this: a person cannot be a contributing member of a group without first developing the ability to function independently. Thus, a person must become independent before becoming able to collaborate and team up with others who also are capable of independence. The resulting uniting of independent persons forms the last category called interdependence. In this state, people benefit from others without diminishing or depending on them. This is a measure of relative culture strength. A brief description of each stage is as follows:

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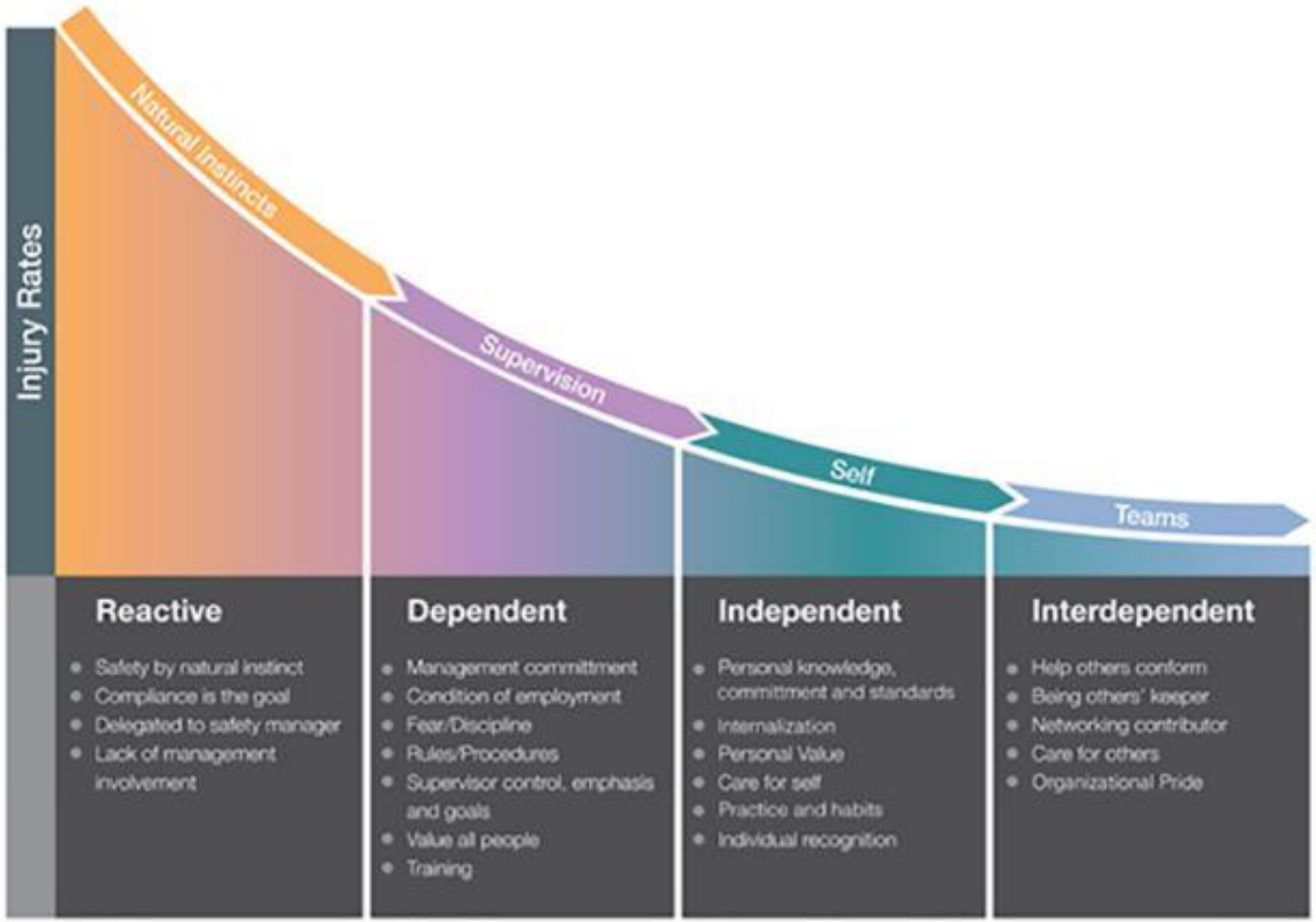
DuPont Bradley Curve

The basic steps in an DuPont Bradley Curve are:



Reactive Stage

People do not take responsibility. They believe that safety is more a matter of luck than management and that "accidents will happen." Over time, they do.

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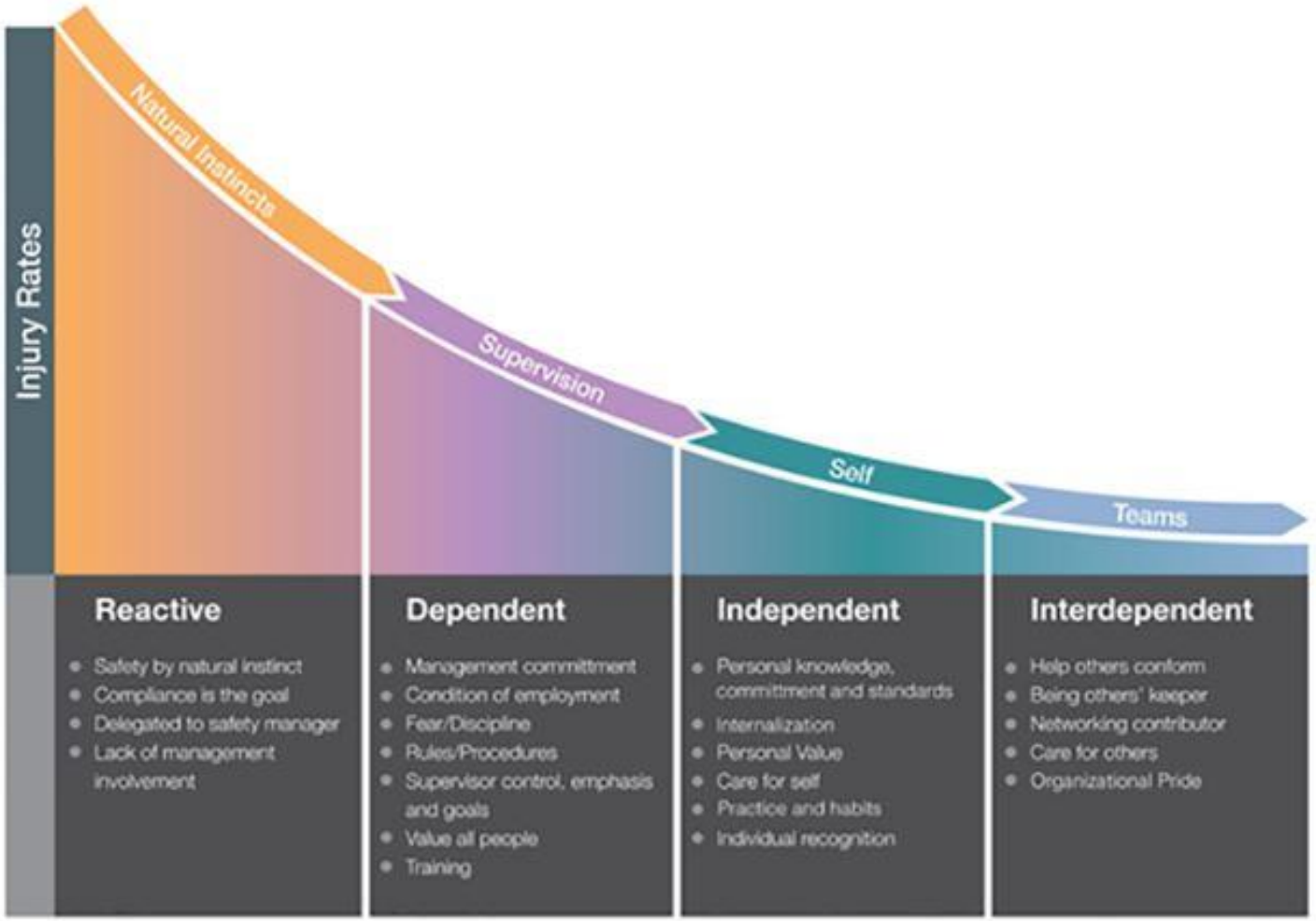
DuPont Bradley Curve

The basic steps in an DuPont Bradley Curve are:



Dependent Stage

People see safety as a matter of following rules that someone else makes. Accident rates decrease and management believes that safety could be managed "if only people would follow the rules."

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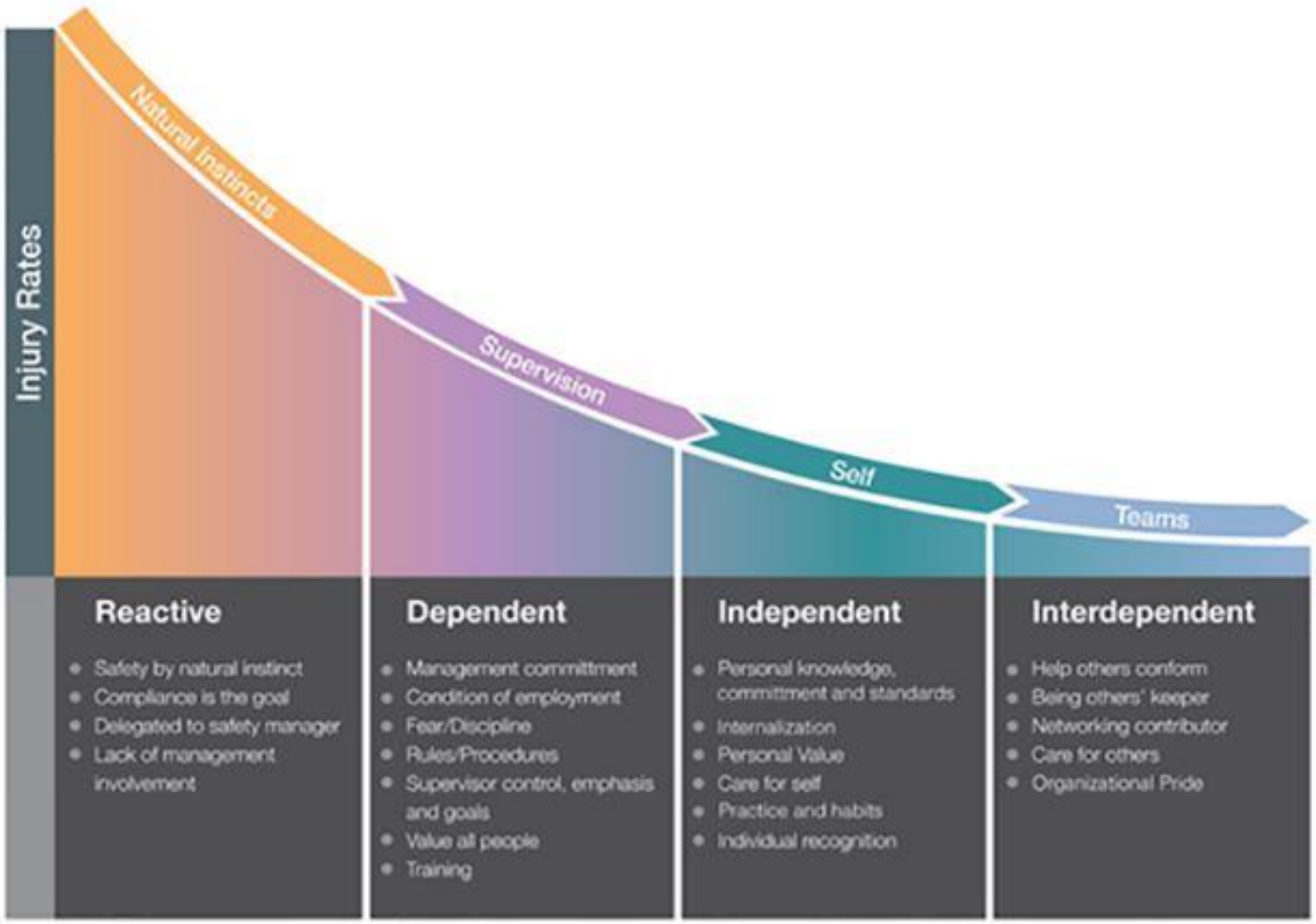
DuPont Bradley Curve

The basic steps in an DuPont Bradley Curve are:



Independent Stage

Individuals take responsibility for themselves. People believe that safety is personal and that they can make a difference with their own actions. This reduces accidents further.

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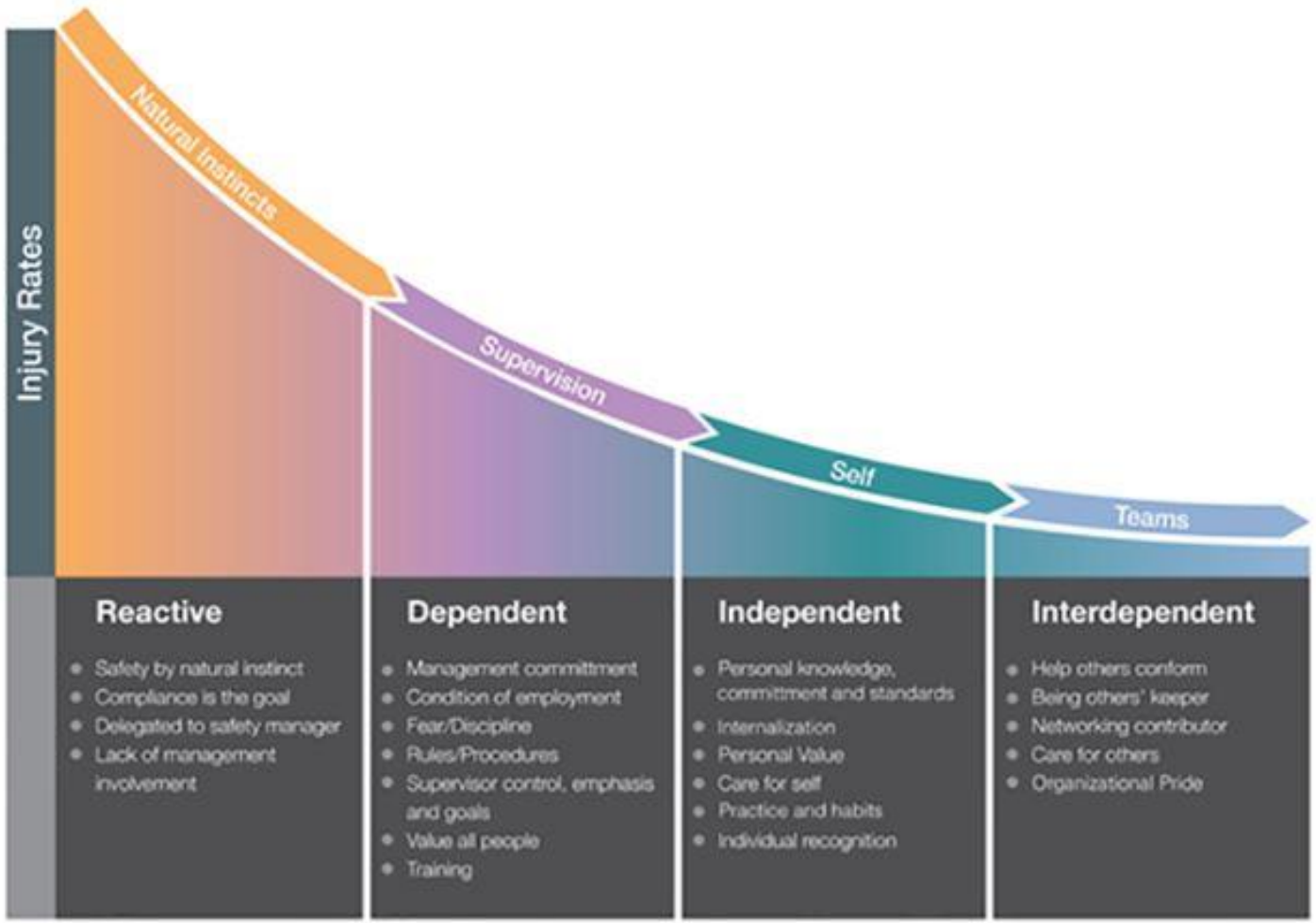
DuPont Bradley Curve

The basic steps in an DuPont Bradley Curve are:



Interdependent Stage

Teams of employees feel ownership for safety and take responsibility for themselves and others. People do not accept low standards and risk-taking. They actively converse with others to understand their point of view. They believe true improvement can only be achieved as a group, and that zero injuries is an attainable goal.

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4.4 Progression of an Effective Safety Culture: The Bradley Curve

After Word

You are taking this course because you are or want to be responsible for the safety of employees in the workplace. We hope this section has set for you a strong determination to perform this function for the right reasons. You are neither an advocate for the employee or the employer. You are not an advocate for OSHA or any other regulatory agency. Instead, you are an advocate for anything that will help prevent injuries and illness in the workplace. You are an advocate for the child that could lose his or her parent to a workplace hazard. You are an advocate for the man or woman that could lose their spouse to a workplace hazard. You are an advocate for any person that could be injured in the facilities or on the grounds for which you are responsible. Let them live.

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