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The Development of OSHA

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Abstract

The Occupational Safety and Health Administration, also known as OSHA, has been protecting workers safety and health since 1970. This allowed federal protection of workers safety and health rights. For many years, federal protection of workers safety was nonexistent. President Richard Nixon signed the Occupational Safety and Health act in 1970 after President Lydon Johnson's failed attempt of establishing the act three years prior. It was a very long and difficult process for the OSHA act to come to order. OSHA has protected workers in a variety of industries such as, construction, manufacturing, and general industry. I will be discussing what the workforce was like before the act was established and what inspired our nation's desire for federal safety and health. I also will be discussing the history of the OSHA bill and why it took so long for it to become established. As well as how it has benefited the workforce and made it what we now know it as today. I will also mention many of the important figures who have influenced the occupational safety and health movement we know today. I have also provided a timeline on important moments that happened in OSHA since the act has been implemented in 1970. The article also provides many diagrams and figures to demonstrate the importance of safety in the workplace. Without OSHA, the workforce would not be what it is today. Employers cared very little about their workers safety and health, especially if safety and health protection interfered with production. OSHA has saved an incredible amount of workers lives.

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Introduction

To ensure a safe and healthy work environment for all workers, congress created the Occupational Safety and Health Act of 1970. Industries such as construction, manufacturing, and general industry have had fewer injuries and fatalities since the act has been implemented. I will be diving into the development of the Occupational Safety and Health Act, commonly referred to as OSHA, and how it has improved the work force over the years. I will also be looking at research about the improvement in different workplace industries since standards have been put in place.

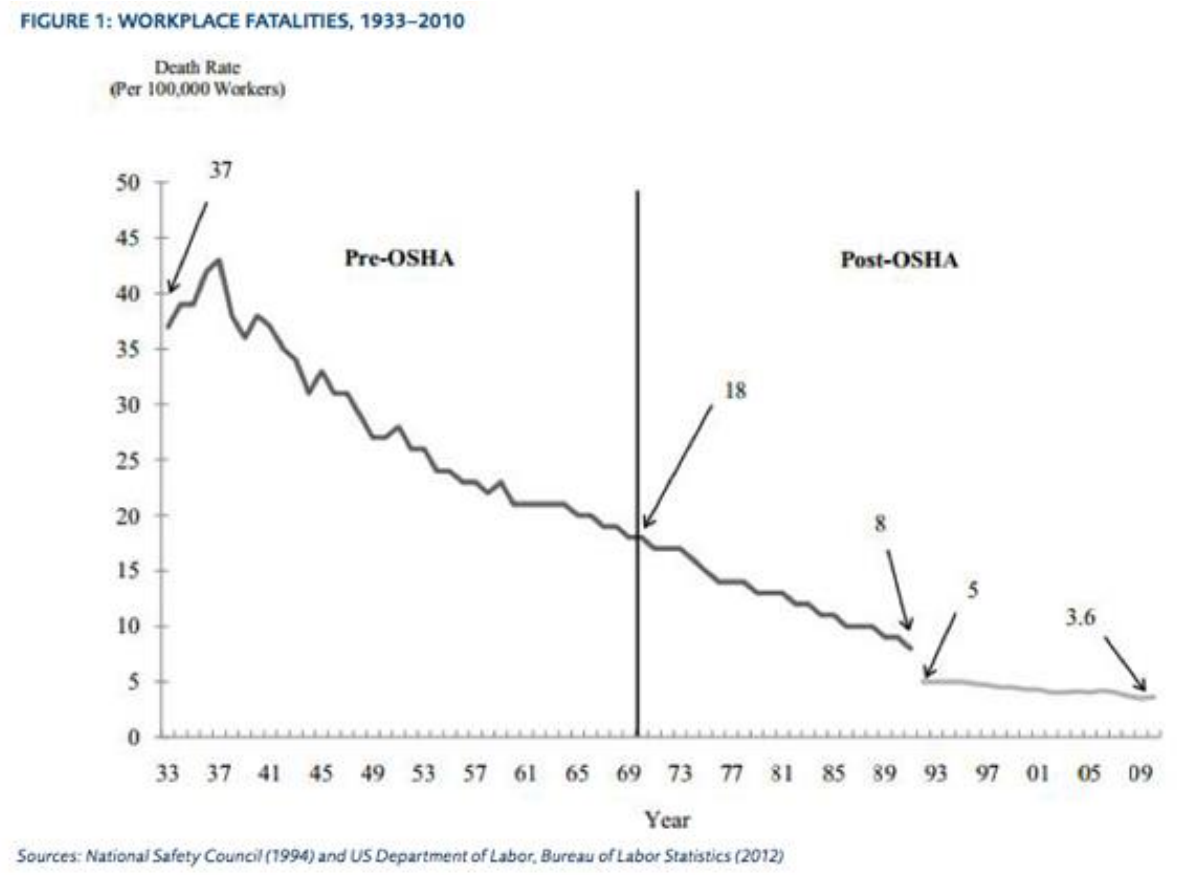
The importance of workplace safety began in the 19th century. The William-Steiger Occupational Safety and Health act of 1970 was a long and difficult process in legislation. The development of this act began in 1968 when President Lyndon Johnson attempted to create the OSHA act, however, was unsuccessful. It ended up being a three-year battle of legislation before the bill was enacted. The act was eventually signed on December 29, 1970, by President Richard Nixon. This gave the federal government the ability to create laws that enforced safety and health needs for workers throughout the nation.

It’s very common for both employers and employees to consider OSHA standards to be unnecessary and overreaching, however, the workforce is in a far better place than it was before the act was implemented. Before the OSHA act was developed, the workforce cared very little about its workers. Meaning workers were forced to work in some dangerous and unhealthy situations leading to fatal injuries and illnesses. Since there were no regulations or standards put in place on what type of equipment was needed, employers would commonly try to cut costs at

the expense of their employees. Also, employers and employees were not knowledgeable on toxic chemicals and toxic air fumes that could become hazardous. This led to workers becoming sick for unknown reasons and injuring themselves due to improper equipment.

OSHA has changed the workforce for the better. Before it developed there was no regard for workplace safety whatsoever. Since there were no regulations, workers were overworked and forced to work in some hazardous environments. Even though it's easy to complain about all the tedious standards OSHA puts into place, we should reconsider how much it has improved the workforce and where we would be without it.

Figure 1



Note. Table indicating the number of fatalities caused in the workplace before and after OSHA.

The General Public's Concern for Occupational Safety

After the Civil War, factories would often hire very inexperienced young workers and force them to work in dangerous conditions. It was not uncommon for workers to be surrounded by toxic chemicals and dust, cluttered work environments, and dangerous equipment that they were not familiar with. Around this time, the state bureaus reports were filled with tragic accidents. A labor movement developed due to the abundance of industrial accidents that were reported by the State labor bureaus, leading to state factory safety and health laws. In 1877, Massachusetts passed the first factory nation law after the Bureau of Statistics of Labor insisted on legislation to do something about the lack of ventilation in the manufacturing industry in 1870. The first factory inspection law required sufficient fire exits, protection on elevators, and guarding of belts, shafts, and gears. This led to the development of a multitude of state factory laws. According to Judson MacLaury in the article, *The Job Safety Law of 1970: Its Passage Was Perilous*, “By 1890, nine States provided for factory inspectors, 13 required machine guarding, and 21 made limited provision for health hazards,” (MacLaury). After the development of the first state factory laws in Massachusetts, many states began to follow suit.

Figure 2

Note. Photograph of factory workers in the late 1800s.

Even though there was a splurge of newly developed state factory laws that covered a wide range of safety precautions, they were still very flawed, causing them to have to amend laws too often to cover new hazards. The piecemeal system had many holes leading to many hazards being left uncontrolled. There was not enough funding to enforce these regulations. Also, inspectors were often appointed, but were not always given legal protection to enter the workplace. Safety regulations also began to affect production, leading to those states with more safety and health laws to lose industry to those with less strict regulation. This caused legislation to care less about occupational safety. An article published by the US Department of Labor titled, *Factory Inspection Legislation* states, "The New York labor statistics bureau pointed out that the safety and health information the states published justified legislation to protect workers. The 1890 report of the New Jersey bureau noted labor agitation for healthier conditions in factories and stressed that 'whatever tends to increase the constructive power of the labor force, or prolong the life of the individual worker, operates for the general good,'" (The US Department of Labor). This was published in attempt to gain public attention through the media and to get a reaction from the public, leading to a demand for action. The article also stated, "'It

is not probable,' the report concluded, 'that any radical changes will occur, or effective remedies be applied, unless there are some drastic measures adopted by the State,'" (The US Department of Labor). In 1891 the Maryland chief of labor statistics called for creation of a factory inspection system in his state.

Every state was not initially pro factory legislation. The commissioner of labor statistics did not believe that factory inspection and safety laws should be allowed, although the state of Connecticut had already had laws established on fire and railroad safety in the 1880s. He did not think employers would be likely to support random safety and health inspections. He knew employers would fear a decrease in production since they would now be forced to follow safety and health guidelines in fear of punishment.

A period of US history began in 1890 to 1920 known as the progressive era, which began intense social and political reform through mass media. This era helped shed light on the lack of protection of workers safety and health and helped forge a national movement towards workers' rights. In 1907, what's known as the worst US mine accident to ever occur, happened in Monongah, West Virginia. A massive explosion occurred causing 362 coal miners to die. At this time, West Virginia did not have as many regulations as a lot of the other coal mining states did, largely due to its economic status. The cause of this horrendous accident is still unknown; however, many believe that a spark was ignited by methane gas, which then ignited the highly flammable coal dust that was spreading throughout the coal mine. The news of the explosion spread rapidly, since it occurred amid the progressive era, leading to a wave of concern of minor safety. Stories of the incident was published throughout many new papers. The Washington Times published an article in 1907 titled *Four Hundred Dead in a Mine Explosion* and described the devastation of the workers being trapped in the explosion due to debris. The author wrote,

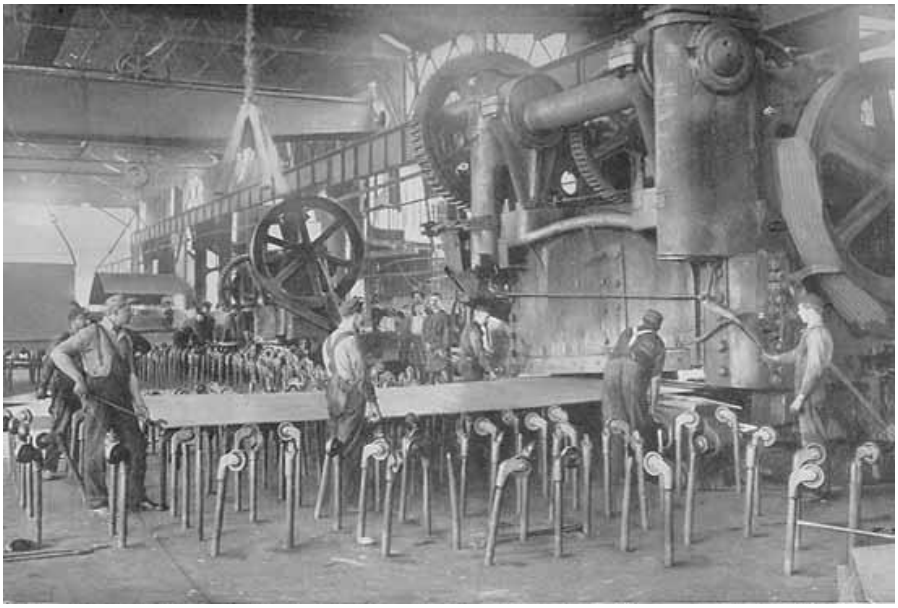
"If, on the other hand, they are imprisoned in the interior of the mine by the passage and entries becoming closed by debris because of the explosion, the men have little chance to escape because not fresh air can be forced into this mine either. The explosion, the men have little chance to escape because no fresh air can be forced into the mine either. The explosion wrecked the monster fan house, and it is said to have been placed out of commission completely," (The Washington Times). Many details of how this accident could have been prevented were revealed to the country. This incident shocked the nation and led to the creation of the US Bureau of Mines in 1910, which protected miners' safety. According to the Mine Safety Health and Administration also known as MSHA, "Public Law 61-179 created the Bureau of Mines within the Department of the Interior after a decade in which coal mine fatalities exceeded 2,000 annually. The Bureau's safety and health role was limited to research and investigation, without inspection authority," (MSHA).

In 1907, the same year as the Monongah coal mining incident, a journalist named William B. Hard published an article in Everyday Magazine titled, *Making Steel and Killing Men*, based on his experience at a Chicago mill. In his article he points out important issues in the workforce such as, "When the American Institute of Social Service tells us that 536,165 Americans are killed or maimed every year in American industry, our minds are merely stunned," (Hard 6). Hard's purpose for writing this article was to persuade the steel industry to use the technical information he provided about the casualty rate of deaths in the industry. The US steel industry had already begun collecting accidents statistics and mounting accident tolls. There was an estimate that 1,200 workers were seriously injured or killed out of 10,000 workers in the workforce. After this article was published, the steel industry began to advocate for a safer work environment for its employees. This was the beginning of a "safety first" movement which

became highly successful. The success of this mentality inspired other industries to follow suit, leading to the development of the National Safety Council in 1915. This was an organization established with a goal to eliminate all the leading causes of injury and death in the workplace.

In 1907, there was a detailed study on the working and living conditions in Allegheny County, Pennsylvania known as the *Pittsburgh Survey*. The investigation was sponsored by the Russell Sage Foundation, and it had a big impact on the safety and health movement. The survey exposed how most industrial accidents could be prevented and in many cases is the employer's fault. Workers who were severely injured had to suffer the financial devastation that their injury caused, although it was often the employer's fault. The survey suggested that companies should provide financial compensation to those who have suffered workplace injuries and those who have had a family member killed in the workplace. This would give employers more of an incentive to eliminate workplace hazards. The introduction of *The Pittsburgh Study* stated, "Electric cranes pick up steel rails or fifty-foot girders as jauntily as if their tons were ounces. These are the things that cast a spell over the visitor in these workshops of Vulcan. The display of power on every hand, majestic and illimitable, is overwhelming; you must go again and yet again before it is borne in upon you that there is a human problem in steel production," (The Pittsburgh Study).

Figure 3



Note. Photograph of workers cutting steel plates with hydraulic sheers. Published in the Pittsburgh Survey.

Worker Compensation Began

The first workers compensation program was developed in Germany by Prince Otto von Brismark in 1884. It didn't take long for this idea to spread throughout Europe. Americans were always fond of the idea of employers compensating workers who were injured at the workplace through an insurance fund, although it was never promoted as a preventative measure until the Pittsburgh Survey was published. A few states in the United States tried to develop early compensation programs, however organized labor opposed the concept largely because it was introduced as a palliative remedy rather than a preventative measure. It wasn't until 1908 that congress passed federal workers compensation law while Theodore Roosevelt was president. After this law was passed, many states hired study commissions to review the compensation law. It wasn't until after the Pittsburgh Survey that workers compensation could be viewed as a

humanitarian measure. Before then, it was mainly viewed to aid those who have been injured rather than a way to prevent future injuries since employers don't want to face the financial burden that workers compensation pertains to.

The Pittsburgh Survey was a key component of the worker compensation movement, since the idea that compensation could be used as an economic incentive measure resonated with a large majority of the population. The labor industry rallied in support of this idea. Wisconsin became the first state to successfully create a workers compensation program in 1910. Just after one year, nine different states followed suit and by 1921 most states had established workers compensation programs.

Unfortunately, the rates that insurance companies provided with good safety records were only slightly lower than it would be without them. This led to companies becoming hesitant to invest in safety improvements. The idea that workers compensation could be utilized as an incentive for companies was failing. Also, very few states provided compensation for occupational diseases, even though there was already an abundance of information known on these illnesses. Although, worker compensation didn't improve the workforce as much as everyone hoped, it still provided a little bit of morality in the safety movement with the help of insurance companies.

Even though the idea of workers compensation acting as an incentive for companies to provide a more safety conscious environment, another idea was created alongside it that provided more long-lasting benefits. According to Judson MacLaury the idea was, "If the States would create industrial commissions with authority to establish specific safety and health regulations, it would not be necessary to go back to the legislatures and amend the factory laws in order to cover new hazards or change requirements," (MacLaury). John R. Commons from the University

of Wisconsin was encouraged by this idea after learning about this system being used in Europe and was an advocate for the United States replicating this system. This led to the first permanent state industrial commission in Wisconsin. The commission would retain feedback from the company and its employees and develop and enforce safety and health regulations. This idea was widely successful and paved the way for future state and federal occupational safety and health.

The Federal Government's Involvement

Until the era of workers compensation, the federal government was not very involved in the workers safety movement. In 1790, the sea merchant's act was passed by congress, which gave the right to a crew of a ship at sea to port at the nearest vessel if the crew members viewed the sea as dangerous. This was congress' first time playing a hand in protecting workers safety rights. In 1887, congress then created the Commerce Commission, which is a federal agency that protected and enforced laws pertaining to fair trading, competition, and credit contracts. Congress was encouraged to create this agency, due to the amount of railroad workers who were injured or killed on the train tracks. The commission and railroad unions urged congress to ban the very dangerous method of coupling cars known as the link and pin method. According to the article *Tools of Trade,* "Link and pin couplers were particularly dangerous because the brakeman or switchman would have to work between moving cars to join them up. If an inexperienced person didn't get their hands out of the way in time, they could lose a finger or a hand and often did. Also, there were many fatal accidents when men were caught between the two moving cars and crushed, 518 men were killed in 1888 alone," (Tools of Trade). In 1893, congress passed the Railroad Safety Compliance act, which prohibited the use of the link and pin method and made automatic couplers along with air brakes mandatory.

At the start of the 1900s, the federal government began to study industrial diseases. In 1903, the US Bureau of Labor began to publish safety and health topics, specifically related to studies regarding diseases in dusty trades. A labor law advocate named John B. Andrew, published a study on the horrific disease called phosphorus necrosis (see figure 1), typically referred to as “phossy jaw,” which was caused by white phosphorus. Phossy jaw cause people's jaws to become disfigured and can even become fatal. Workers working in match factories commonly suffered from this since at this time matches were made by dipping the end into a mixture containing white phosphorus. The US Bureau of Labor published Andrew’s study and it created an uproar across the nation, leading to a quick change to action. Congress passed the Esch Act in 1912, which prohibited tax on white phosphorus matches. This led to The Diamond Match Company to release a safe substitute for the public to use.

Figure 3

Note. Photograph of a person who suffered from phosphorus necrosis.

At the 1910 European conference on occupational accidents and diseases, Dr. Alice Hamilton who is now considered one of the founders of industrial medicine, crossed paths with Charles Neil the US Commissioner of Labor. At the time Hamilton was the director of Illinois Occupational Disease Commissions and was developing investigations in the lead trade. After conversing with Neil, he then invited her to work as a special investigator for the Bureau of Labor. Hamilton accepted the position and worked there until 1921. During her time at the US Bureau of Labor, she investigated many hazardous workplaces throughout the country, such as lead smelters and storage battery plants. She found many neglected and foul work environments. However, many facilities would not allow her to enter due to moral suasion. Hamilton published

a study of the white lead industry in 1910. This was one of the first of a serious labor report known as the Federal Survey.

The department of labor was formed in 1913, and its purpose was to improve working conditions. William B. Wilson had been appointed as the Secretary of Labor who was a former mine union official and coal miner. His duties included reporting industrial accidents and diseases. In 1903, Wilson wrote a poem titled *The Explosion* to highlight how horrendous coal mine accidents can be. For instance, Wilson writes, “Stalwart men were but as feathers, / Driven with a cyclone's fire. / Fast their flesh and sinews shriveled, / Scorched and roasted with the fire,” (Wilson). Wilson was a good fit for Secretary of Labor since he had an understating of how dangerous working conditions can be through experience. During his time in office, the US Bureau of Labor, began to compile accident statistics, starting with the iron and steel industry. Wilson had the idea to make dangerous and unhealthy occupations safe and healthy.

After the United States entered World War I, war production industries were hard-pressed, creating horrendous work environments and a downfall to the occupational health and safety movement. In attempt to fix these terrible conditions, congress created the Working Condition Service. The service worked with companies to reduce hazards by providing workplace inspections at production sites. It also helped states develop and enforce health and safety laws. The service ended after World War I was over in the year 1918.

Health and Safety Standards Develop

Frances Perkins, the first woman cabinet member, was appointed Secretary of Labor by President Theodore Roosevelt in 1933. She held the position for twelve years, longer than anyone ever has held the position. It was her mission to assure that the workplace would has safe

and healthy as feasibly possible. In 1934, Perkins went on to create a Bureau of Labor Standards, which was also the first Federal agency created to advocate for safety and health in the entire workforce. State government was able to improve their safety and health laws after the agency was established.

Between the years 1933 and 1939, President Roosevelt started what is know as "The New Deal," which was serious of new regulations, public reforms, and public work projects. This movement lead to the Federal Government developing a role in protecting workers in the workplace. In 1935, congress passed The Social Security Act, which gave the US Health Service the ability to fund industrial health programs that were funded state health departments. Even though the Public Health Service had been doing studies since 1914, The Social Security Act made it the national leader in its field. The Fair Labor Standard Act, which was enacted in 1938, banned exploited child labor by giving the labor department the inability to hire workers under the age of eighteen to work in dangerous fields. This act also set a minimum wage requirement. The Walsh-Healy Public Contracts Act of 1936, banned contractors to work in hazardous conditions. Congress passed an abundance of new standards and regulations throughout Roosevelt's New Deal period.

Frances Perkins had developed a partnership between federal and state, however by the late 1950s, it was no longer adequate to deal with the continuous growth of threat to workers safety. In 1958, congress passed an amendment to the Longshoreman and Harbors Workers Compensation Act, giving the Labor Department to set safety standard for longshoremen and harbor workers. This amendment gave protection to workers working in the most hazardous fields. It also gave the Secretary of Labor the ability to penalize willful violators, but not those who accidentally did not follow the regulations through carelessness. In 1960, the department

began to hold public hearings which led to them enforcing standards. Accident rates began to decline after good compliance.

In December of 1960, the Department of Labor began to publish their own set of health and safety standards under the Walsh-Healey Act, shortly after the Longshoreman and Harbors Workers Compensation Act. These standards were published by the department in an informal guideline also known as the green book. The green book is still being used today and the most recent one was published in 2021, title *Greenbook: Standard Specifications for Public Works Construction.* These guidelines were created to provide reference for federal and state inspectors. After the establishment of the green book, states were encouraged to provide health and safety inspections for federal construction sites and to enforce these standards. Contractors were no longer able to apply their own rules and regulation, and now had to follow the federal standards. This was the first time that federal occupational safety and health guideline were implied to the entire workforce.

Majority of the population were not fond of these rules and regulations, considering there was no announcement prior to these standards being put in place. The labor industry was very caught off guard and were not prepared to apply these regulations at their job sites. This led to businesses protesting the fact that these regulations were mandatory. The National Safety Council took the criticism into consideration and decided to propose revisions in October of 1963. The hearings for the revisions took place in March 1964.

Businesses nationwide had built up a great deal of disdain for the new federal standards and was at a peak at the hearings in 1964. Their anger towards the federal government had been building up for three years at this point. The hearing went on for two weeks, and the transcript was 1,347 typed pages. Majority of the over 100 witnesses were from the labor industry.

Business owners expressed how they felt that not only should these regulations be illegal, that they were inhibiting their production and innovation. They also, argued that the federal regulation would indirectly undermined state regulations that had been put in place to correlate with the safety and health issues in that direct area. They also felt that the new policy weakened the already established pattern of voluntary safety procedure that had been in works for years.

The Department of Labor was intensely examining all their safety regulation after the insane wave of criticism that was happening during the 1964 hearings. They began to work towards a more coordinated regulation system that the whole nation could agree upon. The department collection of safety programs was too fragmented, according to a study during this time. The same study recommended arranging all these laws and recommendations under a single agency, which was sort of done in 1966.

While the Labor Department was trying to figure out ways to improve and expand safety and health protection for workers, a movement was created to protect the natural environment from the developing technologies from mankind. To spread information and to create awareness of the dangers that businesses can inflict onto the environment, congress created a large-scale Federal water and air pollution control programs.

After the environmental movement, Dr. William H. Stewart, who worked for the Public Health Service was inspired, and published a report in 1966 titled, *Protecting the Health of Eighty Million Americans.* This report highlighted the technological dangers that were being found during that time. The report brings discuses a collection of different diseases that are being caused in the work force. For instance, “Among significant segments of the working population, particularly those in the dusty trades, job exposures are known to cause respiratory disease. The Division's recent study of bituminous coal miners in the Appalachian region has shown that one

miner out of ten has coal miners' pneumoconiosis and that about one in five inactive miners has the disease. In older men, the rate of disease is much higher. Bronchitis and emphysema are also major health hazards in this occupational group. Silicosis is still a hazard to metal miners and other groups, and recent evidence has shown asbestos inhalation to be associated not only with pneumoconiosis but with the development of lung cancer," (Stewart). The report supplied evidence that there was a correlation between the workplace and cancer, since a new chemical enters the workplace every twenty minutes. The report also advocated for the enforcement of the Walsh-Healy Act.

After the publication of Dr. William H. Stewart's report, The American Federation of Labor, and Congress of Industrial Organization, also known as the AFL-CIO, encourage President Lyndon Johnson to follow the report's recommendations. Johnson told a group labor reporter on May 23, 1966, "the time has ... come to do something about the effects of a workingman's job on his health," (Johnson). This led to legislation developing a program through The Department of Labor and Health, as well as Education and Welfare to create a joint task to propose to President Lyndon Johnson. Unfortunately, this did not end up working out since Labor and Department of Health Education and Welfare, also known as the HEW, could not agree on what department would control the national program. By 1966 the joint task ended up failing.

An unusually high number uranium minors had died from lung cancer from the 1940s. It was revealed in 1967 that almost one hundred had diseased and thousand more were expected to die. According to a study done by NIOSH titled, *Workers Health Study Summaries-Uranium Miners,* there was an "increased risk for lung cancer in white uranium miners. We expected about 64 deaths but found 371. This means we found about 6 times more lung cancer deaths than

expected. There was an exposure-response relationship with exposure to radon daughters in the mines. When radon daughters are breathed in, they decay radioactively in the lung. This can cause lung cancer," (NIOSH). The Atomic Energy Commission discovered dangerously high radiation levels, while investigating large-scale uranium mines in 1947. The Commission and the Public Health Service began studying the long-term health effects of these miners. There was very little enforcement of the safety and health of these uranium miners, considering majority of the federal agencies had limited jurisdiction over them and none had full responsibility of them.

After the revelations of 1967, majority of the public's attention being focused on the Federal Radiation Council since the federal government was failing on acting upon the health concerns for uranium miners. The Federal Radiation Council was created in 1959 to inform the president on radiation hazards as well as advise him on what preventative and protective measure were needed. The council was made up of representatives from other concerned agencies. The council did conduct a study after all the revelations in 1967 and was expected by the public to create a standard shortly after. The council met on May 4, 1967, to create the standard, however no progress was being made between them and the Atomic Energy Commission, since they were advocating for a tougher one that was recommended by the Labor Department.

Secretary of Labor William Wirtz, was initially reluctant to act upon the uranium mining industry issues since he did not believe that would be a Department of Labor issue. However, he began to grow impatient with what little action was being had over the situation. The day after the Federal Radiation Council met to discuss a standard for the uranium mining industry, Wirtz created a standard under the Walsh-Healy act that he previously unsuccessfully advocated for before the Federal Radiation Council was established. This was a bold move for Wirtz, considering he had not held any public hearings before establishing the standard. Wirtz

impulsive move had a very influential impact on shaping the occupational safety and health laws that we have today, since the Department of Labor and the Department of Health, Education and Welfare promoted their proposal. Also, the Bureau of Budget accepted the Department of Labor's recommendations.

Johnson Bill

President Lyndon Johnson wanted congress to pass an occupational safety and health program like the one created the Labor Department. Johnson was disappointed that still in the modern nation more than 14,000 workers were killed and 2.2 million were injured in the workplace every year. He blamed our nations inadequate standards, poor law enforcement, slow research, shortages of personal protective equipment, and ineffective federal laws. Johnson very much wanted to establish new effective safety and health laws.

The initial idea of the Johnson proposal was to be introduce as legislation, and to give the responsibility to the Secretary of Labor to establish and enforce safety and health standards to protect 50 million workers. He also gave the bill a general duty clause that required employers to maintain a healthy and safe work environment. It also gave the legal authority for inspectors to enter the workplace without permission from the employer. If caught violating the health and safety standards put in place employers would be fined or jailed. Even companies that held government contracts that violated the standards would be black-list transgressors. This also meant that the Labor Department would help states establish their own safety and health standards like the federal one. The Department of Health, Education, and Welfare would coordinate with the Labor Department and help with the scientific material needed for these new safety and health laws.

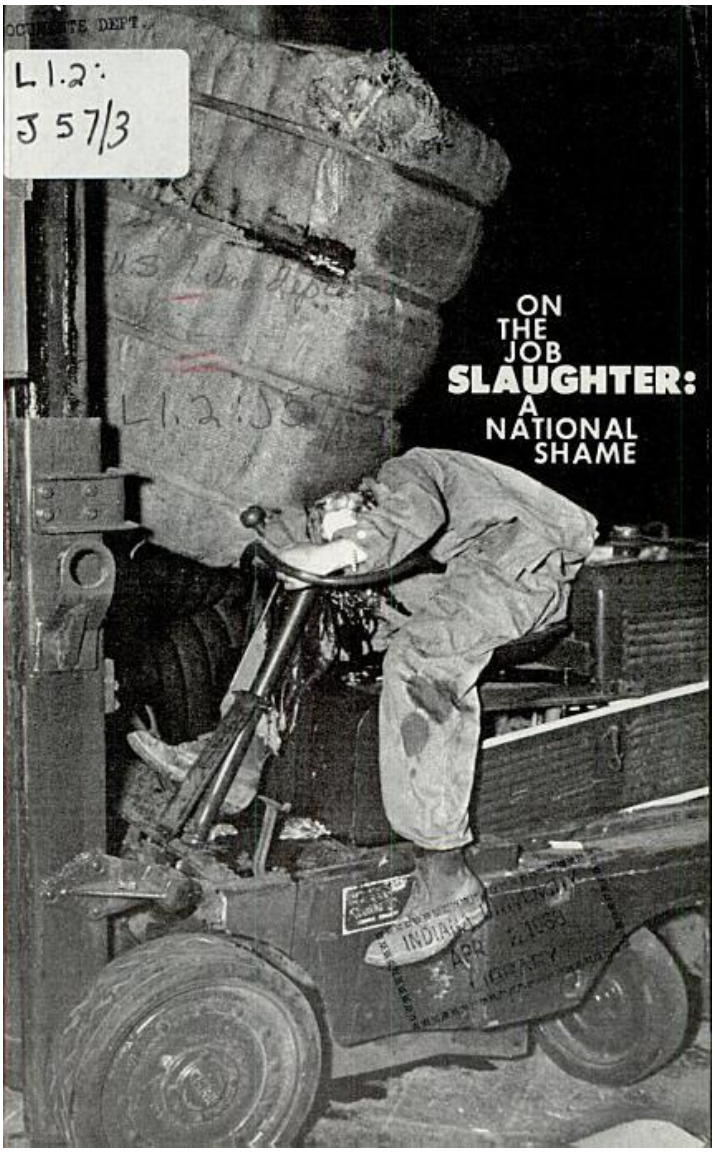
In February of 1968, the congressional committee hearings for the Johnson proposal began. The hearings were led by the current Secretary of Labor, William Wirtz. At the hearings, Wirtz cited two of Americas causality list, such as the military toll in Vietnam and the industrial toll at home. He also claimed that three out of four teenagers entering the workforce are prone to suffer from one or more injuries that causes minor disabilities during their entire work life. Wirtz also showed horrific photographs of gory industrial accidents. His biggest worry was whether congress was going to step in and that it was going to continue because people, “can't see the blood on the food that they eat, on the things that they buy, and on the services, they get,” (Wirtz). In other words, people are not going to boycott companies that are exploiting workers if they are unaware of the horrible conditions that they are forcing their employees to work in. This means companies are not losing any profit and will be less likely to change their horrendous working conditions.

After the hearings for the proposal, there was a lot of strong opinions from very opposite point of views, however organized labor supported the bill. The American Federation of Labor and Congress of Industrial Organization, also known as the AFL-CIO, President George Meany was at the congressional hearings and provided a long list of union witnesses. Irving R. Selikoff, a profound occupational health researcher of Mt. Sinai School of Medicine, as well consumers’ advocate Ralph Nader, supported the proposal at the hearings. Unfortunately, industry that was led by the US Chamber of Commerce, very strongly opposed the proposal, since they did not agree that the Secretary of Labor should have that much control. This led to the industry campaigning against this rapid proposal.

Strangely, the Labor Department itself was hurting the progress of this bill even though it was proposed to help fix the labor industry. In March 1968, the Labor Department published a

booklet titled, *On the Job Slaughter: A National Shame,* where they exposed the many dangers of the workplace. The booklet stated, “Safety training programs based on research and experience can help put an end to the deadly game of Russian Roulette that American workers find themselves playing daily on their jobs,” (United States Department of Labor). The booklet contained similar photos to the ones Secretary Wirtz displayed while testifying at the congressional hearings. It was then revealed that those photographs were up to twenty to thirty years old, which prompted the Labor Department to be accused of deception.

Figure 4



Note. The cover of the booklet titled *On the Job Slaughter: A National Shame.* Published in 1968.

After all that, the Johnson proposal ended up failing in 1968. There were several factors that distracted the public from the occupational issues our nation was facing leading to the failure of the proposal such as: Johnson not running for re-election, demonstrations against the Vietnam War, and domestic violence in the inner cities. The bill ended up never being voted in congress.

The Proposal of the Safety and Health Board

The idea of general job safety and health being a universal right had taken a hold by 1969. After 1965, congress passed several laws to protect workers safety and health in various industries. There were missing components in the providing protection for government contractor employees in the Service Contracts Act of 1965 and the Federal Construction Safety and Health Act of 1969. Then in 1966, congress passed Metal and Non-metallic Mine Safety Act to protect non-coal miners. In Farmington West Virginia, there was a mine explosion in 1968 causing 78 deaths. The US Department of Labor published an article titled, *Mine Disaster: 1968 Farmington Explosion Anniversary* which states, "the Federal Coal Mine Health and Safety Act mandated regular inspections of coal mines and fines for all violations found. Eight years later, in 1977, the Federal Mine Safety and Health Act strengthened and expanded rights for miners, required mine rescue teams to be established, and created the Mine Safety and Health Administration," (US Department of Labor). This inspired Congress to establish the Coal Mine Health and Safety Act of 1969.

In August 1969, President Richard Nixon decided to take federal action by creating his own version of a comprehensive job safety and health program to congress. Nixon called on his cabinet departments to review his campaign speeches for election year progresses after his inauguration. The purpose of doing this was to have them report to him on what was needed to meet these pledges. Secretary of Labor James D. Hodson had an interest in occupational safety and health and was excited to find that the presidential candidate had a speech in Cincinnati calling for federal action on safety and health rights in the workplace. Hodson was then asked by the White House to prepare a bill himself. He began working on it soon after and consulted with labor and management for insight.

The Nixon Administration proposal sparked the question on whether Labor or the Department of Health, Education and Welfare or the five-person board that would create and enforce health and safety standards that Nixon had in mind. The Department of Health Education and Welfare would conduct research while the Labor Department would conduct workplace inspections. One of Nixon's main emphases was to use existing efforts by private industry and state government. The federal government would oversee enforcing health and safety research, education, and training. States will oversee regulation of these safety and health standards.

Hearings for the Nixon proposal began shortly after legislation brought it upon congress. This was the second consecutive year where there were hearings for national job safety and health programs. There were hundreds of witnesses at the hearings from various industries such as, government, labor, industry, and the safety and health community. The witnesses gave thousands of pages of oral and written testimonies. There were field hearings all over the country in addition to the ones in Washington, with testimonies from workers in steel mills, automobile plants, and other industries. George Shultz, Secretary of Labor, advocated that the Nixon bill will be a key component of the continuous historical process in the occupational believed this since this was the first time there had finally been a consensus on there being the need of a federal law a morality in the workplace.

Labor vs. Businesses

The bill struck up some strong objections on both democratic and republican congressmen, however mainly democratic. Many worried that since there were already two departments involved in protecting safety and health, that the bill will cause administrative confusion. Labor union supporters wanted any safety and health programs to be identified with

the Labor Department and did not support the same boards the Nixon Bill had suggested. There was also controversy regarding the plan for enforcement, since it would only penalize those who were willing violating the standards. People felt that employers would often ignore the Federal safety and health standards and would only fix them when they knew an inspection was coming in soon, taking aways much of the deterrent effect. There was a three-year delay on when the bill would become effective, with exception from small business owners. This was enacted to give businesses time to update their equipment and work environment to become equipped with the new safety and health laws. There also had to be a consensus on each standard put in place. These two details created a large democratic opposition.

Although organized labor enthusiastically supported the Johnson bill, they strongly opposed the Nixon bill. They agreed with the critics who believed that the Labor Department should be the primary and only source for providing health and safety regulations. The unions also believed that a strong measure needs to take place to deal with hazards in the workplace, especially alarming new chemicals that were being used at the time. A worker from the Oil, Chemical, and Atomic Workers named Anthony Mazzochi stated, “The mad rush of science has propelled us into a strange and uncharted environment . . .. We grope in the dark and we can light only a few candles,” (Mazzochi).

Ironically, the U.S. Chamber of Commerce who were opposed to the Johnson bill, switched sides very abrupt in support of the Nixon bill. There were also other industries that decided to support the Nixon bill such as, the National Association of Manufacturers. They appreciated how President Nixon’s proposal would create a special safety and health board in charge of the federal program, rather than giving the labor department that duty, which the Johnson bill would have done. This caused a lot of industries to switch sides. A lot of businesses

appreciated the fact that administration listened to what the industry had to say while drafting legislation. Another thing that was behind this change of thought, was that it was inevitable for the federal government to act in safety and health in the workplace, even though they were not fond of idea of federal regulations.

The Battle of the Bill

Two democratic representatives James G. O'Hara of Michigan and Senator Harrison Williams, Jr. of New Jersey presented similar bills to the Johnson bill in the beginning of 1969. In 1970, republicans were introduced to the bill that O'Hara and Williams created on the floors of the House and the Senate right before the congressional elections, even though they attempted to keep the bill between the committee. The opponents were successful in delaying the new labor laws until after the election, in hopes it would prevent the bill from going through.

The first to act in the post-election session in the Senate were the republicans. The republicans suggested an amendment to substitute the Nixon proposal to compromise with the democratic party, however they were just two votes short of being successful. A compromise occurring looked like it was going to happen since the votes were so close. New York Republican, Senator Jacob Javits, came up with an amendment that would appoint the Secretary of labor to set health and safety standards and a separate commission would over see the Labor Department enforcement strategy. This would serve similarly to a court of appeals for parties who didn't agree with the Secretary decisions. The Senate passed this amendment since the Nixon Administration and the democrats agreed this was a good compromise.

The U.S. Chamber of Commerce rallied against the democratic proposal during the election campaign and lost a lot of support in a grassroot effort. This lead republican William A.

Steiger of Wisconsin to suggest an administration backed bill to replace the O'Hara bill that was introduced earlier that same year. The Steiger amendment passed quickly and easily defeating the Labor Department, since they showed little interest in compromising on the matter. This led to a Senate and House meeting to discuss the differences between the two bills in December.

However, it was looking like it was leaning towards the Labor Department's favor in the meeting between the House and the Senate. This was because the conference committee members were discussing the liberal point of view of the democrats with the Senate chairholder who selected all of them. At the conference, the conferees selected the more liberal senate bill with little change. The only significant change was the Senates decision to remove a provision that allowed the Secretary of Labor to close a company if there was a threat to immediate danger. The measure was quickly approved by the senate then sent to the House soon after. It was soon announced by Secretary of Labor Hodgson, that President Nixon approved the bill. After this was revealed, the republican party decided not to go through with their plans to protest the conference committee version, which likely was the reason it passed so quickly.

Both parties were very fond on the final version of the bill. President Nixon praised the bill and noted it as a significant component in social legislation. Even though he didn't agree with every specific provision, he knew it would help obtain the initial goal everyone wanted to see, which was a safe work environment. The Chamber of Commerce considered the bill to be a substantial victory for those in the industry since it was both fair and effective. The American Federation of Labor and Congress of Industrial Organizations President George Meany stated, "a long step ... toward a safe and healthy workplace," (Meany).

The Occupational Safety and Health act of 1970 was signed by President Richard Nixon at the Labor Department. Many labor figures such as, George Meany were present. As well as

prominent members in congress and business leaders. The ceremony acted as a celebration of the end of the three yearlong legislative battle and final political agreement. This was the beginning of a historical movement that initially began in Massachusetts factory act of 1877. According to OSHA's pamphlet, *Workers Rights*, the Occupational Safety and Health Act of 1970 is, "To assure safe and healthful working conditions for working men and women; by authorizing enforcement of the standards developed under the Act; by assisting and encouraging the States in their efforts to assure safe and healthful working conditions; by providing for research, information, education, and training in the field of occupational safety and health," (OSHA p. 2).

The Aftermath of the OSHA Act

The Occupational Safety and Health act has come a long way since it was first established in 1970. According to the US Department of Labor article, *OSHA's 30th Anniversary*, "The U.S. occupational injury rate is 40 percent lower than when OSHA opened for business in 1971. Deaths from occupational injuries are at an all-time low -- 60 percent lower than 30 years ago. The agency has made great progress, but its work is far from done," (The US Department of Labor). Initially OSHA's staff was expected to set federal and voluntary consensus standards for organizations such as, the National Fire Protection Administration, the American Conference of Governmental Hygienist, and the American National Standards Institute. They were given two years by congress to create an initial base of standards by utilizing these widely recognizable standards. Other standards were being created by notice and comment rulemaking, which means they must notify the public before issuing any new standards and allowing the public to comment if they so choose. The first consensus standard was published by OSHA on May 29, 1971. A few of those standards are still being used today, such as the permissible exposure limit for four

hundred toxic substances. The others have been dropped or updated through public rulemaking. Some of the standards dropped due to being pertained to as unnecessary or too specific.

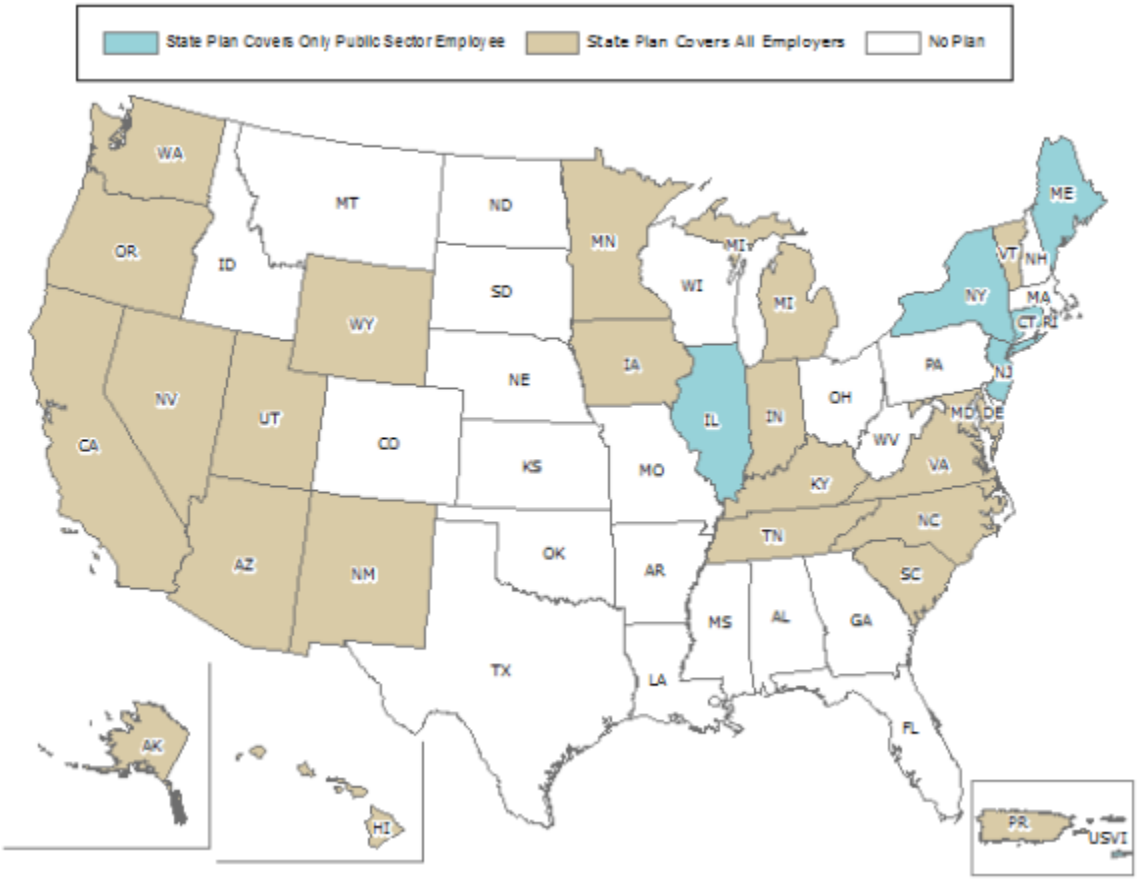
The first original standard OSHA published was set to limit workers exposure to asbestos. Standards for other carcinogens such as, cotton dust, coke oven omissions, vinyl chloride, benzyne, lead, dibromo chloropropane, arsenic, hearing conservation and acrylonitrile. OSHA's early standard were directed towards fixing the well-known issues impacting occupational safety and health movement.

OSHA had several different enforcement tactics during the early years. There initial method emphasized voluntary compliance followed by inspections focused on the horrific accidents and most unhealthful and dangerous work environments. In the late 1970s, OSHA decided to take a more targeted approach based on significant hazards known as the "get tough" method. This meant that 95% of the agencies inspections would be targeted towards the industries with the most serious safety and health problems. Around this time OSHA also established problems that exhibited special emphasis on foundries and grain elevators.

During congress long journey trying to figure out safety and health legislation, they realized that several states were successfully operating safety and health programs on their own. This influenced congress to make sure the law allowed states to run their own OSHA program when creating the Occupational Safety and Health act. However, states were required to receive OSHA's preliminary approvals before establishing their own programs. After receiving approval, states were eligible to receive up to fifty percent funding from OSHA. The programs had to be relatively like the federal one and the standards had to be as effective as the federal ones. Participating states were also require funding local and state government employees on their own. Towards the end of 1972, Oregon, South Carolina, and Montana were the first states to

receive OSHA's approval. Today there is now twenty-four states and two territories operating their own programs, hiring private sector, state, and local government employees. The states that have public employees are New York, New Jersey, and Connecticut. The states with their own OSHA program were able to conduct their own safety and health education and training and perform their own work site inspections. They also hire free onsite consultants to help employers correct any hazardous work environments.

Figure 5:



Note. Map of what state have state plans in the United States.

A training institute was created in Chicago by OSHA. The purpose of this institute was to train employers and employees but mainly instructors. Towards the mid-1970s the agency decided to expand its area of expertise by hiring industrial hygienist in addition to the occupational safety experts to increase training and education on the different workplace illnesses.

Like the free consultant assistants that the state programs provided, in 1975 OSHA established its own federal system to encourage voluntary compliance and to assist employers in limiting workplace hazards. In 1978, OSHA created the New Directions grant program to expand their outreach program. The program was established to offer and develop safety and health training for employers and employees by providing seed money.

OSHA in the 1980's

OSHA in the 1980's focus was minimizing regulatory hassles, with a goal in mind to create a balance between education/training, enforcement, consultation activities, and standard activities. Technology had made improvements, which led to the agency utilizing computers to track its services. Around this time OSHA was also developing a new procedure where employees were requiring access to medical and exposure records. This was also the decade where they established hazard communication, and more rigorous regulations for ethylene oxide, asbestos, formaldehyde, and benzene. Safety standards also began to cover a larger range of issues, such as lockout tagout procedure on hazardous energy sources, field sanitation in agriculture, grain handling, emergency response, and hazardous waste operations.

At the start of the decade, OSHA wanted to rejuvenate their inspection targeting procedure by focusing mainly on the more hazardous industries. Once arriving on the jobsite OSHA inspectors are required to perform an employer's injury records. If an employer's injury

rates were below average, they were exempted from inspection. In 1986, a policy was adopted by OSHA to impose violations on companies with serious violations and raising penalties for those with willful violations. There were several different ways OSHA was trying to improve their voluntary compliance effort. They did this by increasing free consultations and including a one-year exception for companies who had participated in these comprehensive consolation visits. OSHA established the Voluntary Protection Programs in 1982, to honor companies who had archetypal safety and health programs. In 1989, OSHA issued voluntary guidelines for health and safety after reviewing how many sites were being honored through the Voluntary Protection Programs. By the 1980s, many states had already established their own OSHA approved safety and health programs since they all had followed the concurrent federal government. Twenty-five jurisdictions had already had their own OSHA approved safety and health programs by the 1990s.

OSHA in the 1990's

In the 1990s, OSHA wanted to really figure out how to reduce workplace injuries, illnesses, and deaths. They did this by reexamining its initial goals through their government reinvention process and seeking some sort of leverage of change. Their new goal in mind was forcing their inspection on the industries and companies that need it the most. They also buckled down on standards and cut down on some of the red tape. They were determined to receive some sort of results.

As OSHA was continuing to reinvent their system, they decided to focus on pursuing long term strategies that would lower illnesses, injuries, and deaths in the workplace by reorganizing their offices to increase their rapid response goal. This led to them creating phone to

fax policy to have a faster resolution for the complaints and focus more on the real problems which meant focusing more on work site investigations.

Many of the new standards in the 1990s relied more on performance orientations, since they were setting goals for each work force, however they were flexible on how those goals were met. Some of these new standards included, permit required confide spaces, safety management, fall protection in construction, scaffolds, electrical safety work practices. In 1991 OSHA took it to a new level by introducing blood bourn pathogen standards that addressed biological hazards. This was the decade OSHA introduced updated their standards for formaldehyde, asbestos, methylene, personal protective equipment, and respiratory protection. The agency also created workplace guidelines to limit and prevent violence in the workplace for social services, health care, and retail work.

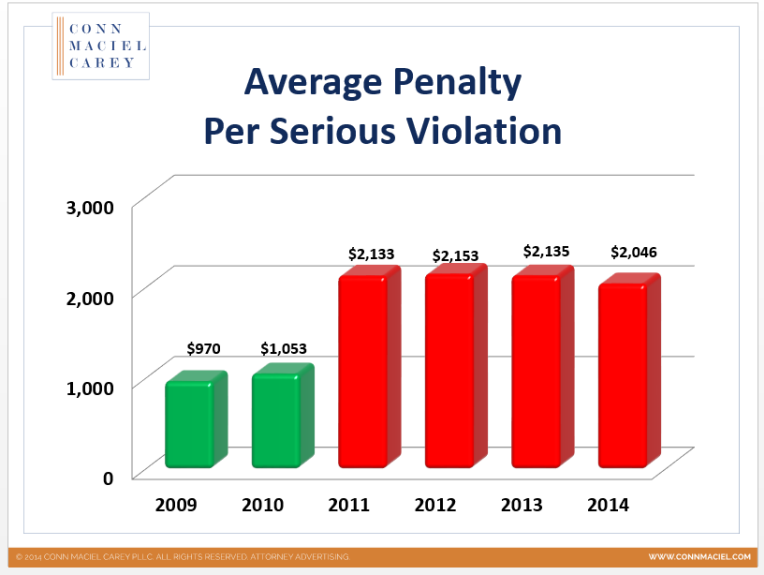
OSHA continued to try to reinvent their inspection targeting system. They did this by continuing to put majority attention on serious violators and proposing larger violations for the violations that generated more of a severe threat to safety and health. The agency also published new guidelines for the meat-packing industry after studying ergonomics. Congress increased the maximum penalties for OSHA violations in 1990. For serious violations the maximum amount increased to $1,000 to $7,000 and $10,000 to $70,000 for willful and repeat violations.

To identify sites with high injury and illness rates, OSHA began collecting data annually from approximately 80,000 employers from high hazard industries by the mid-1990s. In 1999, for the first time, OSHA began targeting the individual workplaces with the worst safety and health records, by directing their inspections towards those specific worksites. This was known as the Site-Specific Targeting System. This led to injury and illness rates declining significantly during the 1990s. Another significant event to occur to OSHA in the 1990s, was their newfound outlook

to focus more on outreach. In 1992 several of OSHA's training courses were available at community colleges and universities to make it more available to the public. The agency did this by selecting schools as OSHA Training Institute Education Centers. This decision led to twelve different schools offering OSHA courses that covered compliance with health requirements and general safety. These courses also covered specific topics, for instance, machine guarding.

In the early 1990s, OSHA launched a website, however, it didn't expand until 1995. By 1995, the website included all the regulations, compliance directors, federal register notices, and additional tools that would be linked to safety and health. OSHA also included an interactive expert advisor software, which included guidance for safety and health standards for employers to view through the internet.

Figure 6:



Note. Bar graph of the average penalty per serious violation from 2009-2014.

Throughout this decade, OSHA decided to put more of an emphasis on partnership. This led to the Voluntary Protection Programs and OSHA's premier effect to increase. Starting with the Maine 200 program, which was a program that encouraged companies who had a lot of injuries at their site to find and fix hazards and establish their own safety and health plan, OSHA wanted to form more partnerships with individual companies. The agency cooperating so much with other companies led to the development of OSHA Strategic Partnership Program. According to the Department of Labor article, *OSHA'S 30th Anniversary,* OSHA Strategic Partnership Program is defined as, "special local partnerships emphasizing effective safety and health programs and focusing on specific hazards or industries," (*OSHA's 30th Anniversary*).

OSHA in the 2000's

At the start of the century, OSHA had hired new compliance assistance specialist at all their office locations to start their new broadening outreach efforts. The new compliance assistance specialist would be required to provide training, safety seminars, and guidance for employers and employees when requested. Also, around this time OSHA improved it's Susan Harwood grant program to persuade nonprofit groups to provide health and safety training for workers in the industry.

In the 2000's OSHA began to utilize its website more, since the internet was becoming more developed and popular. It became a lot easier and quicker for employers and employees to look up any regulation they would possibly need at that time. About 1.4 million people visit the site each month and about 23 million and year. OSHA's Expert Adviser software was a finalist in the 2000's Innovation in Government Award, since nearly 300,000 downloaded it each month. To make the website more organized and easily accessible, OSHA created different pages such as, an improved small business page, a worker's page, and a partnership page. The purpose of the

workers page was for employees to be able to file complaints online if they thought they were in danger at work. OSHA created a joint website to correspond with workplace safety in several other countries, even its counterparts in the European union. At the agency's eight-hundred number, they published a new user-friendly poster. Before the public was only able to report life threatening complaint but now, they were able to report all complaints.

OSHA took advantage in the new advances in technology that was happening in the 2000s. The agency took on distant learning by utilizing satellites and computers as an attempt to broaden their peoples access to workers safety and health training. OSHA's goal was to reach immigrant workers by teaching and training them in a way they could understand and with the advances in technology it made it easier to do so. OSHA also encouraged staff members to improve their customer service around this time.

OSHA had goals of improving their regulations and standards at this time as well. The agency began to work on its ergonomic standards, with a goal in reducing the number of musculoskeletal diseases in general industry. They also released a steel erection rule based on negotiated rulemaking as well as an updated version of their recordkeeping standard. In hopes of enforcing the need for employers to consider utilizing safer medical devices to prevent needles, OSHA revised its bloodborne pathogen standard. These revisions were being revise during the Clinton administration, however, were not enacted until an overall view from the incoming Busch administration in 2001.

OSHA is continuing improving its agency to this day. They are still trying to obtain their goal which is reducing workplace, injuries, illnesses, and fatalities. OSHA is also trying to progress with the future. They are trying to stay up to date on the advancing technologies, knew toxic chemicals, and forming illnesses and diseases. OSHA has changed a lot in the past few

decades. However, one thing that will never change, it their initial goal they had since the Occupational Safety and Health bill was enacted in 1970, keeping workers safety and healthy.

Timeline of Important Events in OSHA

Workplace fatalities have been cut down by 60% and workplace injuries and illnesses have been cut back by 40% since the OSHA establishment has been in works. In addition to this, US employment rates have grown exponentially with 56 million workers to 105 million and 3.5 million to 6.9 million worksites. Below is a timeline of important milestones that has shaped the OSHA establishment into what it is known as today.

- December 29, 1970 - The Occupational Safety and Health Act was signed by President Richard M. Nixon.

- May 29, 1971 – The first standards were created with the basic needs for safety and health protection in American workplaces.

- January 17, 1972 – The OSHA training institute was established to teach future OSHA instructors and the public.

- November-December 1972 – The first states got approved to establish and regulated their own safety and health programs. Those states included South Carolina, Montana, and Oregon.

- May 20, 1975 – The free consultation program was created, which almost 400,000 companies will participate in the next 25 years.

- January 20, 1978 – In order for state plans to be considered fully effective, they must receive compliance from the D.C Court of Appeals.

- April 12, 1978 – A grants program was created titled, New Direction, with the goal in mind to promote occupational safety and health training and education for employees and employers. In the next 22 years, nearly 1 million students will be trained.

- June 23, 1978 – To protect 600,000 workers for byssinosis, also known as brown lung, a new cotton dust standard was established. In the next 22 years, cases of brown lung will decrease from 12,000 to 700.

- November 14, 1978 – In attempt to protect 835,000 workers from damage to their urinary, reproductive, and nervous system, OSHA established a lead standard that would lower permissible exposure by three-quarters.

- February 26, 1980 – Whirlpool affirms workers gets approved by the supreme court to have a right to participate in safety and health related activities.

- May 23, 1980 – Medical and Exposure standard finalized. This is the standard that allowed OSHA and permitted worker to access employer's toxic exposure and medical records.

- July 2, 1980 – The Supreme Court decides not to go through with OSHA's benzene standard. This put and emphasis that OSHA standards must reduce significant risk to be enacted.

- September 12, 1980 – The fire protection standard was updated, and new standards were established for fire brigades. These standards were responsible for putting out 95% of fires in the workplace.

- January 16, 1981 – OSHA applied an update to electrical standard to simplify them in hopes to gain more compliance. This adopted a results-oriented approach to performance standards.

- July 2, 1982 – To recognize worksites with astounding safety and health procedures, OSHA created the Voluntary Protection Program. Today, almost 700 worksites participate.

- November 25, 1983 – A hazard communication standard was enacted to provide information and training of labeling of toxic chemicals for the manufacturing industry. On August 24, 1987, other industries are added to the standard.

- November-December 1984 – The first final approvals were granted to state plans for Alaska, Hawaii, and the Virgin Islands. Which meant the concurrent federal government was giving some of its rights.

- April 1, 1986 – The first time instant by instant proposed against an employer. The first case was in Union Carbide's plant in institute in West Virginia for violations involving respiratory protection, injury, and illnesses.

- December 31, 1987 – A standard for grain handling facilities was established, to protect workers from highly combustible grain dust. This standard protected 155,000 workers and 24,000 grain elevators.

- January 26, 1989 – *The Safety and Health Program Management Guidelines* was published to be used as a resource for employers and employees to create their own voluntary programs. This was inspired by the Voluntary Protection Programs success.

- March 6, 1989 – Hazardous waste operation and emergency response standard was issued. This was issued to protect public and private sector workers who worked in hazardous waste sites or were exposed to toxic spills.

- September 1, 1989 – Lockout-tagout of hazardous energy sources was issued to protect workers from startup equipment or unexpected activation. The standard protected 39 million workers and managed to prevent 120 deaths and 50,000 injuries every year.

- December 6, 1991 – Occupational exposure of bloodborne pathogens standard was issued to protect workers from hepatitis C, AIDS, and other diseases. The standards protected 5.6 million workers and prevent over 9,000 illnesses and 200 deaths each year.

- February 24, 1992 – Process safety management of highly hazardous chemicals standard was issued to limit fire and exposure risk. The standard protected over 3 million workers and 25,000 worksites. Each year, it protects over 250 deaths and 1,500 fatalities.

- October 1, 1992 – The OSHA Training Institute Education Center was established. The goal of the institute was making OSHA training easily accessible to the public. Today, there is up to twelve centers and trained more then 50,000 students.

- January 14, 1993 – A confined space standard was published for workers who enter confined spaces. The standard prevents 50,000 serious injuries and 50 fatalities. Each year, 1.6 million workers enter confined space each year.

- February 1, 1993 – The Maine 200 Program was established with the goal to promote safety and health programs for companies that had a high number of injuries and illnesses.

- June 27, 1994 - GoCad, the first Expert Advisor Software was created with the goal to help employers comply with cadmium standards.

- August 9, 1994 – Fall protection standard was revised for construction. This standard prevents 79 fatalities and 56,400 injuries each year.

- August 10, 1994 – A standard of asbestos was updated. After the update, cut permissible exposure rates by half for around four million workers. The standard also prevents 42 cancer deaths annually.

- September 4, 1995 – OSHA's expanded web page had a formal launch. Now the agency was able to provide standards and compliance assistance through the internet.

- June 6, 1996 – Phone fax complaint policy was enacted in hopes that it would speed up the cycle of complaints from employees working in unsafe or unhealthy environments.

- August 30, 1996 – A standard for scaffolding was established. 2.3 million construction workers use scaffolds. This standard prevents 50 fatalities and 4,500 injuries each year since it has been established.

- November 9, 1998 – OSHA launched a strategic partnership program. The goal was to improve workplace safety through cooperative and voluntary agreements both locally and nationally.

- April 19, 1999 – OSHA established Site Targeting Program to target the industries and businesses that need OSHA's guidance the most. The focused on the worksites with the highest injury and illness rates.

- The year 2000 – The Busch Administration review OSHA final rules and regulations, which covered, ergonomics, steel erection, needle-stick, recordkeeping, and washed cloth.

All these events are what shaped OSHA into the industry that we know today. They didn't have all their standards and regulations written overnight, it was a slow and tedious process. OSHA is still updated their standards to this day with the new developing technologies and new illness and diseases are found every day. For instance, in 2020 OSHA had to create new

standards and regulations during the pandemic that was caused by the rapid spread of COVID-19. The world is changing every day, and OSHA is just trying to keep up with it. At the end of the day, OSHA will always have the same goal; making sure the workplace is a safe and healthy environment for everyone.

The Importance of OSHA

The Occupational Safety and Health bill that was passed by congress in 1970, made it very clear that safety in the workplace should be a basic human right. Since the OSHA agency was established, our nation has seen an exponential amount of progress. Injury, illnesses, and deaths in the workplace have dropped an insane amount since the act has been enacted. According to a pamphlet published by OSHA itself titled, *All About OSHA*, the mission of OSHA is, "to assure safe and healthful conditions for working men and women by setting and enforcing standards and providing training, outreach, education, and compliance assistance. Under the OSHA law, employers are responsible for providing a safe and healthful workplace for their workers," (OSHA p. 6). The agency has made a long-lasting impact of our nation by protection us and our family member from the potential dangers in the workplace. OSHA also makes sure every worker has access to information on the dangers in their industry of work.

Not only has OSHA positively impacted workers safety, but it had also benefited Americas economy. Workers' compensation cost American employers $97.4 billion dollars each year caused by injuries and illnesses in the workplace. Injuries and illnesses can also cause some indirect cost such as, decrease in production, replacement costs, workers training, and investigation time. Also, families of those who have passed away or have been severely injured suffer a great deal psychological and emotional cost. Along with the emotional cost families

suffer from, they may have to work less to take care of their loved one. The cost of caring for a severely injured loved one as well loosing some income, the economy will only weaken even further.

OSHA covers majority of private sector workers, state and local government workers, and federal government workers. However, those who are not included in OSHA's coverages are the self-employed, farm employers of immediate family members, or if hazards that are regulated by another federal agency. For instance, the Coast Guard, Mine Safety and Health Administrations, or the Department of Energy.

All employers are responsible for providing a safe and healthy work environment for all its employees. According to OSHA in the pamphlet, *All About OSHA*, "Employers MUST provide their workers with a workplace that does not have serious hazards and must follow all OSHA safety and health standards," (OSHA p. 11). Employers are responsible for locating and correcting any hazards at their worksite. OSHA also requires employers to firstly try to eliminate then reducing the hazard before resorting to personal protective equipment, also known as PPE. Employers are also responsible for hanging OSHA's job safety and health poster up so that it's viewable to everyone in the workplace. Informing workers of any hazards in the workplace. Training workers on how to safely deal with these hazards. Keeping accurate records of any injury or illnesses that occurred on the workplace. Performing tests that are required by OSHA standards, such as air sampling. Providing PPE to all workers for no cost. Providing any medical test required by OSHA. Post any OSHA citation or data where anyone in the workplace can see it. Employers must notify OSHA within 8 hours in the case of a fatality and 24 hours of any hospitalization, amputation or loss of an eye that was caused at the workplace. Employees have the right to report any complaint they may have of their safety to OSHA and their employer

cannot reprimand them for that in any way. They also have the right to receive any documents that have any regard to their safety and health. OSHA also has been proven to increase productivity. If an employee is happy and healthy in their workplace, they are more likely to work harder and more efficiently.

OSHA standards are regulations they put in place to protect workers safety in a serious of industries such as, construction, general industry, maritime, and agriculture. These are put in place to protect workers from a wide range of hazards. In addition to following OSHA's standards, employers must also follow the General Duty Clause act. This clause in generally cited when no standard applies to the hazard, since it requires employers to keep their workplace clear of any potentially serious hazards. OSHA makes the executive decision to create new hazards, or they gain recommendations from other agencies such as, the National Institute of Occupational Safety of Health also know as NIOSH, local and state governments, national organizations that are known for producing standards, or a representative from the industry. OSHA typically Request for Information or an Advance Notice of Proposed Rulemaking in the Federal Registration to gain the perspective and insight from interested members of the public. The agency also often holds stake meeting with interested people to gain information and opinions on how they should proceed with the new standard. They will also hold public hearings to gain other interested member of the public opinions. OSHA enjoys gaining outside party's opinions and knowledge before settling in on one standard.

OSHA gains most of their compliance from companies through their enforcement strategies. Enforcement play an important role in creating a safe and healthy work environment. OSHA takes strong and direct action when ever they find out about an employer failing to follow the safety and health regulations that have been put into place. OSHA performs inspections on

worksites, typically without and advance notice. Inspections are conducted on-site or over the phone facsimile investigations. Inspectors are highly trained compliance officers. Inspections are scheduled based on immediate danger, workers complaint, catastrophes such as a fatality, high rates of workplace injury and illness, or follow inspections. Workers have the right to file complaint with the request of OSHA inspection if they feel they are in danger at the worksite. The inspection always begins with the compliance officer showing off his credentials. Then he or she would follow up by stating why said company was chosen for inspection and describe how the inspection process will be, procedures for walkaround, and employee representation and interviews. Following the initial discussion, the compliance officer will perform the walk around inspection looking for specific hazards. The compliance officer will then close with a meeting with the employer and the employee representative. If inspectors find a violation, they may write a citation or fines for the employer. The citation will include methods on how to fix the hazard. Employers have the right to protest the citation if they don't feel like the hazard exists. OSHA performing inspections help fix and prevent workplace hazards.

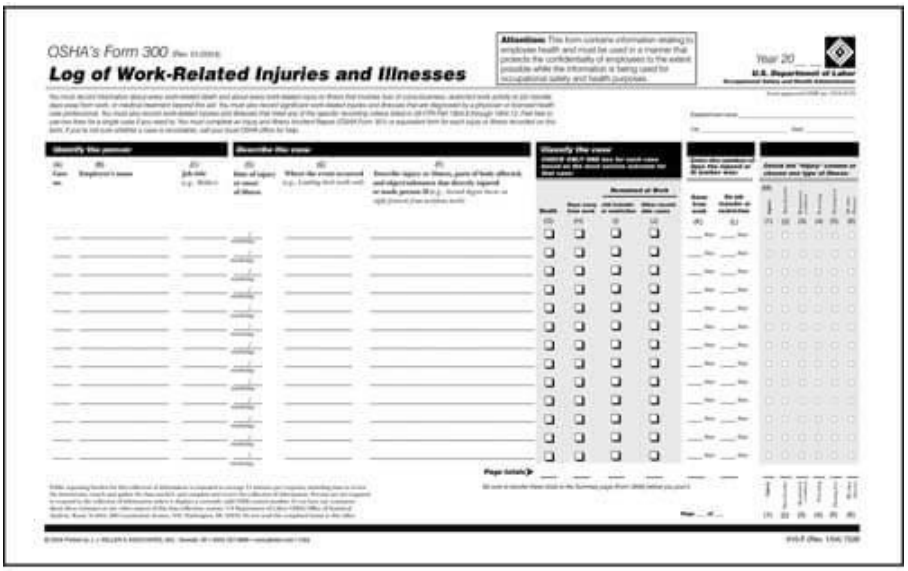
Figure 7:

Note. Chart of the steps taken in the OSHA inspection process.

All employers must report to OSHA for any fatality or serious workplace accident. OSHA keeps records of all the injury, illnesses and fatalities that have been reported. The agency also requires employers report any fatal heart attacks that happened on the job site. However, any incident that occurs in a motor vehicle does not need to be reported, unless it occurs on a construction site. Reports can be made via telephone or employers may visit their nearest OSHA site. OSHA also require industries with high hazard rates to keep track of their own injury records. OSHA's pamphlet title *All About OSHA*, states, "Employers with more than ten employees and whose establishments are not classified as a partially exempt industry must record serious work-related injuries and illnesses using OSHA Forms 300, 300A and 301," (OSHA p. 17). The forms are available on OSHA's website. Employers who were required to

keep their OSH 300 log must also post their OSH 301 log. These forms help keep track with all the workplace accidents. OSHA has recordkeeping regulations, which require specific recording requirements. These records keep employers accountable in seeking preventive measures and limiting workplace injuries.

Figure 8:


OSHA's Form 300

Log of Work-Related Injuries and Illnesses

Note. Example of an OSHA 300 form.

All the tedious little regulations that OSHA puts to protecting our human right to feel safe at the workplace, can seem almost over reaching and unnecessary. However, every single one of those standards are what got the American workforce to become what it is today. Our nation has improved exponentially since the OSHA act has been implemented in 1970. Before then it was rare for employers to care about their employees, they were more focused on production and finances. However, OSHA has forced employers and workers to stop and think about the potential harm they could be inflicting on an individual and their family. Workers are more prone

to show an interest in their profession if it seems like their employer's care about them. Another reason why OSHA has changed the workforce for the better.

Reflecting on where our workforce was in the late 1800's directly after the civil war and to where we are today is astonishing. Back then, workers virtually had no safety rights and now workers safety is protected at all costs. The safety movement that occurred in the early 1900's was a long a difficult process that never seemed like there would be any sort of ending in sight. However, it was much needed to get the workforce where it is today. Even though it is easy to complain about OSHA's tedious regulations, it's important to reflect on what little rights workers had before and how many people who have lost their lives on the job site. OSHA has changed a lot over the years, however one thing that will never change is their goal to make sure everyone gets home safe to their families.

References

2. factory inspection legislation. United States Department of Labor. (n.d.). Retrieved November 18, 2022, from https://www.dol.gov/general/aboutdol/history/mono-regsafepart02

Centers for Disease Control and Prevention. (2020, April 8). *Worker health study summaries - uranium miners*. Centers for Disease Control and Prevention. Retrieved November 18, 2022, from https://www.cdc.gov/niosh/pgms/worknotify/uranium.html

Centers for Disease Control and Prevention. (2022, June 27). *Health Insurance Portability and accountability act of 1996 (HIPAA)*. Centers for Disease Control and Prevention. Retrieved November 18, 2022, from https://www.cdc.gov/phlp/publications/topic/hipaa.html

Coupler, link and PIN : 100.025.001. (n.d.). Retrieved November 18, 2022, from https://www.trainmuseum.org/virtual-exhibits/vex4/4EB8AA4D-DF03-463E-8CB0-485743189064.htm

Department of Labor Logo United Statesdepartment of Labor. OSHA Publications | Occupational Safety and Health Administration. (n.d.). Retrieved November 18, 2022, from https://www.osha.gov/publications/

Department of Labor Logo United Statesdepartment of Labor. OSHA Publications | Occupational Safety and Health Administration. (n.d.). Retrieved November 18, 2022, from https://www.osha.gov/publications/

Hard, W. (1910). *Injured in the course of duty*. The Ridgway Company.

On the job slaughter: A national shame. (1968).

The steel workers from volume 3 of the pittsburgh survey. eHISTORY. (n.d.). Retrieved November 18, 2022, from https://ehistory.osu.edu/exhibitions/PittsburghSurvey/SteelWorkers/default

U.S. Bureau of Labor Statistics. (n.d.). *2.6 million workplace injuries and illnesses in private industry in 2021, down 1.8 percent from 2020*. U.S. Bureau of Labor Statistics. Retrieved November 18, 2022, from https://www.bls.gov/opub/ted/2022/2-6-million-workplace-injuries-and-illnesses-in-private-industry-in-2021-down-1-8-percent-from-2020.htm

United States Department of Labor. 1910 – Bureau of Mines created | Mine Safety and Health Administration (MSHA). (n.d.). Retrieved November 18, 2022, from https://www.msha.gov/1910-%E2%80%93-bureau-mines-created

United States Department of Labor. Inspection Detail | Occupational Safety and Health Administration osha.gov. (n.d.). Retrieved November 18, 2022, from https://www.osha.gov/ords/imis/establishment.inspection_detail?id=1629607.015

User, G. (2020, November 11). *The history of OSHA - NRTC Automation*. Industrial Automation Services | NRTC Automation. Retrieved November 18, 2022, from https://nrtcautomation.com/blog/the-history-of-osha

The Washington Times (Washington [D.C.]) 1902-1939. The Library of Congress. (n.d.). Retrieved November 18, 2022, from https://www.loc.gov/item/sn84026749