

# **Tackling the NFL**

*An analysis of the role of the government in workplace safety*

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## **Abstract**

This research analyzes how the federal government can play a role in solving the concussion crisis in the National Football League (NFL). The government has intervened in private sector industries in the past on the grounds of improving safety and health, most notably through the Occupational Safety and Health Act of 1970. The government has intervened in several issues that affect the sports industry, such as antitrust issues and substance abuse, but has not made any significant impact on concussion legislation. Based on three case studies of other industries, the NFL concussion crisis prompts government intervention. However, because the phenomenon is so recent, football is a unique industry, and the NFL has particularly addressed the situation with internal policy, government intervention has not taken place.

## **Introduction**

Junior Seau passed away on May 2, 2012 at the age of forty-three. Mike Webster passed away on September 22, 2002 at the age of fifty. Jim McMahon, former Chicago Bears quarterback, publicly declared that if he could start his career over, he would have chosen baseball. Football legends are facing tragic deaths and publicly expressing frustration with their current health. Seau, Webster, and McMahon are just three of a long list of retired NFL players that have experienced health risks, mainly brain malfunctions, because of the time spent playing in the NFL. The NFL concussion crisis is significant because it threatens the future of professional football. Furthermore, it threatens the health and lives of Americans at work because they are facing unsafe working conditions. Why has the government not yet intervened in regulating concussion policy in the NFL?

Viewing the government's role in NFL concussion policy as a workplace safety issue, the question becomes: how can the government's role of safety regulation in the workplace be applied to concussion policy in the National Football League? This will involve analyzing past and current public policies related to private sector industries, including their methods and effectiveness. This analysis will exclusively look at the role of the government at the federal level in relation to four case studies, one being the NFL. These cases will provide exemplars for federal government intervention in industries on the grounds of worker safety that will ultimately address workplace safety through the lens of the NFL.

The appropriate course of action by the government moving forward will depend on the gravity of the current situation in the NFL. To determine if and how the government should intervene will prompt additional questions that must also be answered. These questions include: how has the government intervened in other industries regarding health and safety? Have these interventions been successful? What has the National Football League already done to help solve the concussion problem? What do current, retired, and future players think of the concussion's impact on the game? It is important to know what current, retired, and future players think about concussions because they have a stake in the issue. Any government intervention or policy will directly impact them. In addition, they have the ability to come together and influence future action. The questions have strong implications because they will help determine the current state of the NFL in terms of its readiness for government intervention.

It is nearly impossible to find a consistent definition of a concussion. Concussions are not only a sports issue but also a general health issue. Even though concussions have existed conceptually for over one thousand years, the management, treatment, and diagnosis of them remain controversial (Johnston, McCrory, Mohtadi, Meeuwisse, 2001). On the most basic level, a concussion involves the swelling of one's brain. However, according to the Congress of Neurological Surgeons, a concussion is "a clinical syndrome characterized by the immediate and transient post-traumatic impairment of neural function such as alteration of consciousness, disturbance of vision or equilibrium, etc. due to brainstem involvement" (Johnston et al., 2001, p. 150).

Concussions are particularly relevant in professional sports, especially football, because of the direct impacts to the head that takes place each game and practice. Even with advances in medicine, it is difficult to understand the exact causes of concussions, how they can be diagnosed, and how they can be treated and ultimately prevented. The National Football League has taken many actions to help combat the major concussion issue<sup>1</sup> that its players face right now, but concussions have major health implications for the future, and these few simple policies have not proven to be a sufficient and sustainable solution. Many retired players face life-threatening health issues due to head injuries they sustained while playing in the NFL. The number of retired players in this situation continues to rise, suggesting a need for immediate action. According to data from the National Football League via the Associate Press, in 2010 there were one hundred and fifty-four concussions reported within the first eight weeks of the 2010

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<sup>1</sup> Actions include: reducing the number of off-season practices, limiting the number of full-contact practices, making the return-to-play guidelines stricter, and moving kickoffs up five yards (Gregory 2012).

regular season (Associated Press, 2010). The trend has continued upward since this statistic was released and is expected to continue to rise in the future.

Meanwhile, the government has set a precedent in terms of government intervention in workplace safety and also in sports in general. The question still remains as to why these two issues have not been combined in terms of Congressional legislation.

Since the spike in concussions in recent years, research has been done on the actual injury and methods of detection within the league. However, there is a lack of analysis that explores the government's role in the concussion crisis. The government has had an interesting relationship with professional sports in the past and has not necessarily remained consistent on its regulation and intervention, which is why research on this topic can prove to have large implications for the future of the relationship between the government and professional sports.

### **Concussions in the NFL and Government Regulation Precedent**

#### *Concussions in the National Football League*

While there has been major progress in scientific and medical research regarding head injuries, there still exist many unknowns. One example of this progress is the research that Chris Nowitzki is conducting with the Sports Legacy Institute. He works with the Boston University School of Medicine to study the effects of sports-related head injuries on retired athletes (Miller 2009, p. 670). While this is a small project, its implications have the potential to be large because he is working with donated brains. While this research is performed independently of the NFL, it has been shared with league officials whose response was "polite but skeptical" (Miller 2009, p. 672). Research of medical implications of concussions shows that concussions produce side

effects that stay with retired players later in life. This scientific and medical data is important to consider when analyzing the government's role in concussion policies.

Based on this new scientific research, the NFL is at a turning point in terms of regulation and safety. Recent lawsuits that retired players have filed against the league threaten the league in terms of money and public image. Roger Goodell, the NFL commissioner, is dealing with issues on a wide spectrum, from the referee crisis to bounty schemes, as well as issues related to concussions (Gregory, 2012). The NFL has already instituted policies and rules to reduce the risk of long-term injury from concussion. This action is one of a private entity, not a function of the federal government. The league had denied that concussions caused chronic brain damage in the past, but has changed its viewpoints after evidence in 2009 proved that was not the case (Gregory, 2012). Roger Goodell's actions taken thus far include: reducing the number of off-season practices, limiting the number of full-contact practices, making the return-to-play guidelines stricter, and moving kickoffs up five yards (Gregory, 2012).

Dealing with concussion policy involves much more than analyzing medical conditions and scientific research. One must approach this situation not only from a medical and practical perspective but also from an ethical one. Because there are many uncertainties associated with concussions in terms of their diagnosis and effects, "the model of health delivery currently endorsed by every NFL team is ethically suboptimal" (Goldberg 2008, p. 349). Specifically, concussions among athletes are underreported and their neuropathological effects are initially hard to determine as they develop over time. In addition, protective equipment can help mitigate the likeliness and effects of concussions but cannot eliminate the risk of future concussions (Goldberg, 2008). The

under-reporting of concussions and sometimes improper use of safety equipment such as helmets contribute to the unethical handling of concussions. The NFL's mentality of toughness is also a contributing factor.

The current NFL policies surrounding concussions are unorganized and unethical because there is no unbiased overseeing third-party body; all policies are internal. Each individual team doctor administers concussion tests and medical procedures to players, and head coaches often pressure both players and doctors to get the players cleared so that they can go back out on the field. This is partly due to the fact that, when broken down to their most basic function, professional sports are businesses that strive to make money. Winning leads to higher revenues. Good players are needed in order to win, so concussions are just an annoyance in the minds of some coaches, which prevent winning and larger revenues. In addition, team doctors "are hardly immune from its effects, especially where their fees are paid by the very teams that have incentives to rush their players back from injury" (Goldberg 2008, p. 341). New York Giants head coach Tom Coughlin's admission is evidence of this type of behavior. He admitted to pressuring injured players and team doctors to get the injured player back on the field as soon as possible (Goldberg, 2008). While Roger Goodell has taken actions such as moving the kickoffs up five yards, which brought concussion incidents on kickoffs down about forty percent last year, he has not effectively addressed the ethical dilemmas that coaches, players, and doctors face when dealing with a concussion (Gregory, 2012). These ethical dilemmas arise because of the tradeoff that exists between winning and increasing revenues and keeping players safe and healthy.

The ethical dilemma that players, coaches, and team doctors face when dealing with a player suffering from a concussion results from the fact that behaviors and attitudes within the game of football are very different than those outside of the boundaries of the sport. In particular, certain behaviors on the field are deemed acceptable while they are deemed completely unacceptable off the field. Jeffrey Standen describes this phenomenon when he states, "Assaults and batteries that would render an athlete subject to criminal prosecution were they to occur away from the playing field are considered 'part of the game' when they happen during the course of a violent sport" (Standen 2009, p. 620). This football attitude is an important constraint on the type of intervention and oversight that can exist in the NFL. Government laws against assault and other acts of violence on the streets of the country cannot be applied to the football field because football players consent to putting their bodies at risk of injury when they are on the field (Standen, 2009). The interaction between violent sports and criminal law is relevant, and shows how criminal law can and cannot be applicable to situations on the field, taking into consideration consent and legality. If common laws were applied to every play in the NFL, players would constantly be arrested for assault charges.

#### *Professional Sports as a Public Policy Issue*

Between the years of 1951 and 1978 about three-hundred pieces of sports legislation were proposed in Congress. Two-thirds of this legislation involved antitrust issues (Johnson, 1979). League officials generally introduce this type of legislation as a pro-active measure. They want to ensure that action is taken before the federal judicial system can step in and make a ruling that would negatively affect their league (Johnson, 1979). Professional sports issues rely on the political process to determine outcomes

because many professional sports issues are public policy issues. This is because the public has an inherent right to access to professional sports (Johnson, 1979). Congress has had a detailed history in regards to its legislation affecting professional sports, but no clear precedent has been set. There is not a consistent trend due to the political influence of club owners and the fact that professional sports are an iconic image in American society (Johnson, 103). In reference to congressional lobbying, "the NFL leads the way, spending more than its three closest rivals combined" (Hughes, 2012). Lobbying is an extremely important factor in determining the government's agenda and attitudes toward different policies. The work that Congress had done with professional sports in the past will determine the feasibility of any intervention in concussion policy.

One way that the government and professional sports have interacted is through the construction of stadiums. Public finance provided by state and local governments has played an integral role in the preparation and construction of professional sports stadiums (Goodman, 2002). By offering these funds, the government clearly has demonstrated a stake in the successes and the failures of the professional sports leagues. Any oversight and regulation requires money, thus the precedent that these lower levels of government have set in helping finance the construction of stadiums is very important. Concussion policy is the next big issue in the NFL, thus the question of how the government will get involved based on its previous involvements still remains.

Congress has a unique relationship with professional sports partly because professional sports are businesses. It is clear that "Congress is one institution of government which has been important in the making of public sports policy" (Johnson 1979, p. 114). Two-thirds of sports legislation introduced to Congress in the 1950s dealt

with anti-trust regulations (Johnson, 1979). This evidence can then be applied to the notion that professional sports clubs and leagues are just like any other big business and therefore are subject to government regulation and public policies. Therefore, in researching government's involvement in concussion policies in the NFL it is important to consider the government's involvement in safety and health regulations in other industries. The government has set a precedent of intervention on the grounds of workplace safety and employer safety in many public and private sector industries. To make the comparison with other industries it is necessary to view the NFL from a business perspective.

#### *Regulating Safety Within Business*

The government's role in protecting individuals from harming themselves is controversial. As the statistics continue to show, cognitive illnesses are more likely to occur in retired NFL players in comparison to the general population (Hanna, 2010). Dr. Ann McKee, from Boston University, compared the situation in the NFL to another well-known societal dilemma in a congressional hearing. In response to a question about whether football was too dangerous given the potential cognitive injuries, she responded that smokers don't stop smoking just because they know that tobacco can kill them (Hanna, 2010). While the government has not instituted policies that outlaw the use of cigarettes because of their danger, it has created policies to help curb the use of cigarettes, for example, by introducing taxes and age restrictions. This action in the cigarette market can be useful in determining appropriate public policy in football on the grounds of paternalistic values.

There are many theories about how the government should implement and enforce safety regulations in the workplace. One tool that has been proven effective is the use of incentives in order to ensure occupational safety and health (OSH) (Kankaanpaa, 2010). The idea of using incentives to promote OSH is based on analyzing OSH in regards to its function as a market. In other words, OSH can be thought of as a good and the undersupply of OSH can be seen as a market failure that must be fixed using an economic tool, such as incentives (Kankaanpaa, 2010). While research has been conducted on the incentive model to increase OSH at the workplace, it has not taken into consideration the incomplete information that workers have about their safety at work. This must be considered as an influential factor in finding the efficient supply and demand of OSH in any business, including the NFL. Professional sports teams are very interested in making high profits. Therefore, incentivizing a franchise to invest in safety education and other programs that will reduce the number of concussions could be an effective tool in combatting the concussion issues in the NFL. Companies have the ability to address worker safety concerns internally, but a certain threshold can prompt government action as well, either because the internal policies are not sufficient or because the worker safety is under the federal government's jurisdiction.

Education may prove successful in the NFL considering there exists evidence that education can help curb the number of concussion cases in youth football. If this study was successful for youth football there is a high probability that it will also be applicable to professional football. Specifically, the *Heads Up: Concussion in Youth Sports* initiative is designed to help coaches prevent, recognize, and respond to concussions (Covassin, 2012). Based on a twenty-two item survey, Covassin concluded that youth

sports coaches "were able to appropriately prevent, recognize, and respond to sports-related concussions after reviewing the materials" (Covassin 2012, p. 233). Roger Goodell has taken action to help solve the concussion problem. He has used education on a small level, which Covassin proves can be an effective tool. If methods such as increased education and/or the appropriate incentives are offered in order to help increase occupational health and safety, NFL teams may be more likely to comply.

The Bureau of Labor Statistics has also conducted research on workplace violence. Workplace violence can vary greatly from industry to industry and from company to company, but in the National Football League, one can view violence as the physical assault that takes place on the field, even though it is part of the job and the game. In a 2012 survey, the Bureau of Labor Statistics found that just over seven million private industry business establishments had experienced workplace violence in the past year. About nine percent of these approximately seven million businesses had no policy in place that addressed workplace violence (BLS, 2005). This survey specifically looked at "the prevalence of security features, the risks facing employees, employer policies and training, and related topics associated with maintaining a safe work environment (BLS 2005, p. 1). Government reports such as this one provide insight into the government's database of worker safety policies and procedures that are already in place, and where they fall short. This data does not directly involve professional sports policy, but can be directly applied to it based on an analysis of its effectiveness in other industries.

The Occupational Safety and Health Act of 1970 sets the general groundwork for government intervention on the grounds of safety. Its mission is to "set standards to assure safe and healthful working conditions for working men and women" (H.R. 843,

1970, p. 1). When the government makes provisions to implement safety regulation in a new industry, it is often done through reforming this act to include new literature. The ultimate reason why the federal government has decided to intervene in instances of worker safety is because "the Congress find that personal injuries and illnesses arising out of a work situation which result in death or disability impose a substantial burden upon and are a hindrance to, interstate commerce in terms of lost production, wage loss, medical expenses, and disability compensation payments" (H.R. 843, 1970, p. 2). This statement explicitly defines Congress' role in regulating safety in the workplace because it rests under Congress' control of interstate commerce.

### **Methodology**

A comparative policy analysis of cases in which the government has implemented worker safety measures is the most effective method to analyze the NFL from a workplace safety perspective. These case studies include: The United States Postal Service (USPS), the agriculture industry as a whole, and professional boxing. The final conclusions reached after analyzing how government intervention worked in those industries will then be brought back to the National Football League and applied to concussion policy specifically. This will determine whether or not the government's role of safety regulation can be applied to concussion policy in the NFL.

It is impossible to determine the grounds for government intervention in a certain industry without looking at how the government has handled similar situations in other industries in the past. Although much of the research and case studies will not directly apply to the NFL or concussions policy or even professional sports, they will provide the information and analysis needed in order to answer the research question. The methods

of content and document analysis will provide the most comprehensive set of analytical tools to develop answers and conclusions.

In the chosen cases, workers are in situations that are dangerous to their health and physical well-being while at work. Based on the pattern of answers to the following questions, the actions taken in these cases may or may not be applied to the NFL. The specific questions are questions whose answers have strong implications on government intervention.

1. Is there a trigger event? A trigger event can have a large impact on public opinion and exacerbate a situation. For example, a death or life-threatening injury to an employee could cause a push for legislative action. Trigger events vary in scope and it is important to recognize their relationship with publicity. Although there is no definitive definition for a trigger event, I classify trigger event as an event that receives public attention and serves as a turning point in implementing policy.
2. How serious are worker injuries and health risks? This question must be answered using statistics and quantitative data to avoid the inherent subjectivity that exists when determining how serious a situation may be.
3. Do the workers complain? This question is important because often issues are taken more seriously when those being affected complain rather than others complaining on their behalf.
4. Is the industry in the public eye? Often industries that are in the public eye receive more attention from the government because it gives the government exposure to the constituents. In addition to the level of publicity an issue

- receives, it is important to know if this publicity is positive or negative, and what aspects of the organization are in the spotlight.
5. Are the employees members of a union? Organized groups have more influence on government actions than single, unorganized individuals.
  6. Does the industry have lobbying power in Congress? This question is similar to the previous question in the sense that it looks into the organization and influence of different groups on Congress.
  7. What is the result? Has Congress passed and implemented legislation? An analysis of the exact action taken by the government in response to safety concerns in the workplace will help determine implications for other industries.

I developed these questions because the response to each of them is a strong determinant in government action. If an industry produces strong answers to each of the first six questions, one could expect a correlation with a strong response to the seventh question. This set of criteria reveals whether an industry is primed for government intervention. In this research, the specific industry is the NFL, but this methodology can be applied in general to any analysis of government intervention.

Analyzing the cases will include examining Congressional hearings, Congressional legislation, and other professional reports. The USPS case is relevant because, like football, the work is inherently dangerous. This industry has evolved over time, and because it is an entity of the government, it provides a unique perspective of worker safety. Agriculture is one of the largest industries in the United States and because of the chemicals and equipment used on a daily basis, farmers face high risk on the job. Professional boxing is the case most similar case to the NFL. Boxing is a unique

sport and presents unique safety risks to its participants. Finally, to determine how the government's role in worker safety can be applied to the NFL the criteria must also be applied to the NFL. A comparison of the results from the three case studies and the NFL will provide conclusions to the research question of how the government's role of overseeing workplace safety can be applied to the NFL.

### **United States Postal Service Case Study**

#### *Overview*

The first case involves worker safety regulation in the United States Postal Service (USPS) operations. The congressional hearings and bills written in reference to worker safety within the USPS aim to apply the Occupational Safety and Health Administration (OSHA) regulations to the USPS industry. If the government can apply the OSHA regulations to the USPS, one might ask why this can't also be done for the NFL.

One of the important documents for this case study is Public Law 105-241 that was written on September 28, 1998 "to make the Occupational Safety and Health Act of 1970 applicable to the United States Postal Service in the same manner as any other employer" (1998). This document goes line by line to denote the exact language of the changes. OSHA has interacted with the USPS in other instances over time. In an article dated January 24, 2011, *OSHA Accuses USPS of Underreporting Injuries*, Sean Reilly outlines the accusations that "mail sorting operations are injuring postal employees" and that the USPS is "under-recording the number of injuries at postal plants across the country" (Reilly, 2011). The hearing titled *Safety and Health Within U.S. Postal Service* in 1980 took place across multiple committees and subcommittees and provides valuable

information into why the USPS needed regulation and what the main arguments were. In particular, it reveals that the Postal Service prioritizes sorting mail over the safety of the workers. (1980). The chairman of the committee also touches upon the fact that representatives of the Subcommittee on Postal Personnel and Modernization have sent representatives to inspect different facilities in order to determine what changes need to be made to ensure worker safety (1980). One powerful statement is, "The Postal Service is no different from any other employer with respect to its moral obligation to comply with the OSHA law, and provide safe and healthful working conditions for its employees" (1980, p. 10). Arguments surrounding USPS safety regulation span over a long period of time and do not involve one single action and result, rather a culmination of different hearings, editorials, and laws.

*Is there a trigger event?*

Workers' frustration with safety conditions in the USPS facilities has always been a concern. The nature of the work and the equipment present an inherent danger. However, there was one event that served as a wake up call for the government to take action. Unacceptable working conditions may go under the radar as long as something catastrophic does not take place. Such a catastrophic event took place on December 15, 1979 at the New York Bulk and Foreign Mail Center in Jersey City, New Jersey.

USPS employees continually complained about unsafe working conditions. However, these complaints didn't produce any action, as higher authorities almost always ignored them (Walsh & Mangum, 1992, p. 131). This changed when Michael McDermott passed away because of unsafe working conditions. Specifically, McDermott found himself getting sucked into a conveyor belt where safety devices could not be

deployed. He was unable to escape the trap (Walsh & Mangum, 1992, p. 132).

McDermott's death was more than a statistic to mark off in the books. The meaningful testimony in front of the Subcommittee on Postal Personnel and Modernization of the Committee on Post Office and Civil Service on January seventh and eighth made by McDermott's wife expresses the fact that not only did the USPS lose a valuable worker, but more important, society lost a valuable human being. She said:

"Some will forget my husband, Michael McDermott, after this but all I have left is memories and snapshots of him. My daughter will never know who her daddy was. My husband was my whole life. They not only took his life, but they also took mine and my daughter's." (Safety and Health Within U.S. Postal Service, 1980, p. 11)

This congressional hearing opened the public's eye to not only this specific incident but to the problem of worker safety in the USPS in general. At the time of McDermott's death, the USPS was not covered under the Occupational Safety and Health Act.

However, due to the severity of the situation, the USPS invited OSHA to inspect the center where the death occurred. The willingness of the USPS to invite OSHA and admit to unsafe working conditions showed their commitment to protecting workers and making changes. OSHA found twelve major violations of safety standards that called for immediate action. Based on the inspections by OSHA technicians and the nature of the situation, President Carter issued Executive Order 12196 on February 26, 1980. This order made OSHA health and safety standards on private industries applicable to federal agencies such as the United States Postal Service (Walsh & Mangum, 1992, p. 132).

Several years later, on September 28, 1998, the 105<sup>th</sup> Congress passed Public Law 105-241, which aimed "to make the Occupational Safety and Health Act of 1970 applicable to the United States Postal Service in the same manner as any other employer" (Public Law

105-241, 1998). These measures taken by the federal government were in reaction to the trigger event of Michael McDermott's death. Without this specific trigger event, much-needed policy changes may not have been implemented.

*How serious are worker injuries and health risks?*

The safety and health risks that a worker faces at a USPS facility are largely due to the machinery and equipment. In addition, workers' health is often compromised because of the long hours and physical labor endured on a daily basis. The USPS is an independent agency of the United States federal government. The rate at which injuries and illness occur at the U.S. Postal Service is staggering in comparison to the rest of the federal government employment entities. In the third quarter of the fiscal year 2013, the USPS employed 959,783 individuals who experienced 29,056 cases of injury and/or illness. This resulted in a case rate of 4.88 percent. This is almost twice as high as the case rate for the federal government employees in total (including executive, legislative, judicial branches, and U.S. Postal Service), which was only 2.52 percent, reflecting 70,474 cases out of 2,797,041 total employees (Federal Injury and Illness Statistics, 2013). It is clear to see that the U.S. Postal Service has the highest rate of accidents and injuries of all federal agencies (Safety and Health Within US Postal Service, 1980). This comparison is solely among federal government employment entities.

*Do the workers complain?*

These USPS employees not only have the outlet and opportunity to organize and advocate for change, but they actually do it. 1970 marked the first ever strike against the United States government. Postal workers carried out this strike, which led to many

organizational changes in the postal system as well as the creation of the American Postal Workers Union.

The great postal strike not only shows the power of large numbers but it also shows the passion with which the workers felt change needed to happen. The main grievances that led to the strike were: long hours, substandard pay, meager benefits, and deplorable working conditions (Great Postal Strike of 1970, 2010). However, the most immediate cause was the postal workers' lack of right to collectively bargain over compensation. This was a right generally given to private sector unions. After long hours and determination, the workers were able to successfully gain the right to collective bargaining.

In addition to complaining as a large, organized group, there is evidence that the individual workers were frustrated with their jobs and their safety at these respective jobs. In Mrs. McDermott's testimony she stated:

"I will never understand until the day Michael was killed why he ever stayed at that job. He would come home at night complaining about his back and how his gloves and his pants were caught and torn because of the conveyor being stripped of its safety devices. He just did not know who to complain to any more." (Safety and Health Within U.S. Postal Service, 1980, p. 11)

The USPS workers were upset with working conditions. They complained to family members and friends, and also came together to complain on a national stage in order to protect their rights.

*Is the industry in the public eye?*

While Americans interact with the USPS on a daily basis, they are not necessarily aware of what goes on behind the scenes. In other words, the United States Postal Service is very much in the public eye on the consumer side, but remains very private on

the production side. Many of the incidents that involve worker safety are not broadcasted to the public. However, at certain times, such as the great postal strike of 1970, the public was aware of the unsafe conditions within the postal service. In relation to industries such as professional sports, however, the average citizen is much less likely to know about safety in postal facilities than know about safety on football fields.

Americans are aware of the existence of the Postal Service as an industry because it has a strong presence in the public eye but cannot physically see the injuries from which workers suffer.

*Are the employees members of a union?*

Organized groups generally have more success in getting their interests recognized than non-organized groups and USPS workers fall under this category of an organized group. Overall, the USPS employs about 800,000 workers (Public Law 105-241, 1998). USPS workers make up the world's largest postal union known as the American Postal Workers Union (Walsh & Magnum, 1992, p. XV). Therefore, the many workers have an organized force through which they can express their opinions and urge for change.

*Does the industry have lobbying power in Congress?*

The United States Postal Workers have shown that they are willing to lobby Congress to make changes. Each time they have committed to this process, they have succeeded, which shows their strength as an organization as well as the importance they place on their safety. One reason why the USPS has lobbying power in Congress is because it is a government agency and its relationship with the federal government is closer than that of other organizations and industries. However, the USPS must follow

all the same processes that other organizations must follow in terms of their formal relationship with the government and Congress.

*What is the result?*

Appropriate action has been taken in regards to worker safety within the U.S. Postal Service. In fact, many policies and follow-up inspection have been implemented successfully and will continue to exist in the future. Public Law 105-241 made the Occupational Safety and Health Act of 1970 directly applicable to the United States Postal Service, which was a major breakthrough in assuring that the USPS, although a government entity, was treated like any other business. As a direct response to an investigation of forty-two postal service sites in 2009 that revealed violations of OSHA standards, OSHA assigned a trained electrical work plan coordinator to each facility to improve upon electrical work practices (OSHA News Release 12-1289-NAT, 2013). OSHA also announced in news release 12-1289 on July 1, 2013 that it would require the use of special protective equipment and "OSHA will meet with the Postal Service on a regular basis to discuss the results of OSHA monitoring inspections and USPS audits, as well as any concerns or problems encountered" (2013). Not only did Congress address the situation by giving OSHA jurisdiction over the USPS, but OSHA is also committed to carrying out its duties.

*Conclusions*

Based on the answers to the proposed questions, the USPS is an example of an industry that was ripe for government intervention. This government intervention took place nineteen years after the trigger event, which is a significant time lag. Figure one summarizes the USPS case by ranking the response to each question as strong (S),

medium (M), or weak (W). All responses to the question are strong and the resulting government intervention is strong as well. This aligns with the expected positive correlation between the first six questions and the final question of government intervention.

Figure 1

	<b>USPS</b>
<b>Trigger Event</b>	<b>S</b>
<b>Worker Complaints</b>	<b>S</b>
<b>Severity of Injuries</b>	<b>S</b>
<b>Industry in Public Eye</b>	<b>S</b>
<b>Members of Union</b>	<b>S</b>
<b>Lobbying Power</b>	<b>S</b>
<b>Government Intervention</b>	<b>S</b>

### **Agriculture Case Study**

#### *Overview*

There are many risks that agriculture employees face that can affect their health and physical well-being. The government has intervened in this industry in terms of regulating the actual production of pork, including how animals are treated and what can be used to ensure the safety of the meat that people are to consume. However, only the regulations that have been implemented for the sole purpose of protecting worker safety and making the workplace a safe environment are relevant for worker safety concerns.

The agriculture industry rests under direct jurisdiction of OSHA. There is an entire subsection of the OSHA website dedicated to Agricultural Operations. OSHA directly lays out all aspects with which agricultural operations must comply. Some of these include: roll-over protective structures for agricultural tractors, field sanitation, and specifications for accident prevention signs and tags (Agricultural Operations, OSHA). Specifically, "Agricultural operations are covered by several Occupational Safety and Health standards including Agriculture, General Industry, and the General Industry Duty

Clause" (Agricultural Operations, OSHA). OSHA classifies an agricultural worker as any individual who works in agriculture, fishing, hunting, or forestry (Agricultural Operations, OSHA). Applying the criteria of the seven questions to the agriculture industry will clarify the necessity of government intervention.

*Is there a trigger event?*

There was not one single trigger event that led the implementation of safety regulation procedures in this case; however, over time, there have been many incidents of injury and death on farms that have justified the implementation of policy. One example of such an event was the death of four farm workers in Minnesota. They passed away after entering a manure waste pit while trying to fix a broken pipe. The exact cause of death was inhalation of toxic waste (Fatalities Attributed to Entering Manure Pit, 1992). OSHA responded to this incident and recommended that the farm post warning signs near the entrances to manure pits and design manure waste systems in a way in which workers can access necessary parts from outside the pit (Fatalities Attributed to Entering Manure Pit, 1992). This small incident is a trigger event because it was a catastrophic event that prompted government action.

Another example of such an event occurred on the Schoenfelder Farms in Eyota Township of Minnesota. Exposure to fumes caused Carlos Ramirez-Perez to be found unconscious in a workroom area (Pieters, 2010). Tests found levels of carbon dioxide as high as twenty-nine percent as well as levels of hydrogen sulfide as high as forty-two to forty-four parts per million (Pieters, 2010). OSHA investigated the incident following the attitude: "The agency's aim is to prevent future deaths in the workplace, more than it is to penalize business for violations" (Pieters, 2010). This specific death of Ramirez-

Perez is, again, one single example of the types of deaths that occur on hog farms. It is evident that there is no single event that has led directly to legislation or regulations. On the other hand, it is widely known that hog farming and the agriculture industry are inherently dangerous for workers, and the deaths are a result of these unsafe conditions. Because there has not been one single catastrophic trigger event, there is a lack of an urgent push for unified and immediate action. However, legislation and action has been taken in small steps over time.

*How serious are worker injuries and health risks?*

The agriculture industry is not generally perceived as one of the most dangerous industries in the United States. However, the National Safety Council's annual survey revealed that agriculture is only second to mining in the number of fatalities at work (Thu, 1998). The health issues that farmers and farm workers face represent a wide range of ailments. Agricultural workers have an extremely high rate of work-related illness including "respiratory and zoonotic diseases, increased risk for certain cancers, hearing deficits, musculoskeletal problems, and numerous skin conditions" (Thu, 1998, p. 336). These are very serious health conditions that can completely alter one's life and even result in death. Some other conditions that have been observed include: cancers of stomach, brain, prostate, and skin, leukemia, non-Hodgkin's Lymphoma, and multiple myeloma (Thu, 1998). In addition to these serious health problems, workers face danger when working with different farm technologies such as hay processing equipment or feed grinders (Thu, 1998).

The severity of the health hazards that farmers and farm workers face is serious, but even more concerning is the frequency with which they happen. In 1996, the average

number of fatalities per 100,000 workers for all industries in the United States was four. However, for agricultural workers this number was as high as twenty-four fatalities per 100,000 workers (Thu, 1998). The trend has remained steady over the years because in 2004, agricultural work was among the industries with the highest occupational fatality rates. There were twenty-nine fatalities per 100,000 workers in the agricultural industry in 2004. This resulted in a total of six hundred and sixty-nine agriculture worker deaths that year (Donham, Rautiainen, Lange, Schneiders, 2007). Furthermore, the "National Safety Council data shows that agriculture workers experience the second highest rate of illness suffered due to occupational work" (Thu, 1998, p.336). This became even more severe in 2005 when agriculture had the single highest fatality rate out of all industries in the United States at thirty-two and a half fatalities per 100,000 workers (Certified Safe Farm Program, 2010). Most recently, five hundred and seventy agricultural workers died from work-related injuries in 2011. Between the years of 2003 and 2011, 5,816 individuals died from agricultural work-related injuries (Agricultural Operations, OSHA).

Farmers have expressed that the main source of their health problems associated with work are related to stress. Kendall Thu, a professor at the University of Iowa, explains this very well:

"Because of the inattention to these external conditions, there has been an incomplete understanding among health and agricultural science professionals concerning the role of social and economic factors contributing to the alarming rates of illness, injuries, and fatalities among farmers, farm workers, and their families in the U.S." (1998, p. 335)

Stress, in this case, is defined as the hardships associated with making a living in the agriculture industry, of producing at high rate and low costs, etc. When an American eats food produced on a farm, he/she most likely does not have an accurate perception of the

stress the producers of that item face. This stress translates directly to health risks for the farm workers.

Extreme heat is also very common in areas with high populations of farms. Working long hours in high temperatures can cause health risks. In addition to the dangers presented from equipment malfunctions and accidents such as tractors overturning or irrigation equipment electrocuting workers, the mere repetitiveness of the work is a burden to farmworkers' bodies. According to data from the Bureau of Labor Statistics, upwards of one farmworker dies every day due to work-related accidents or injuries. Hundred of workers are also injured every day (At The Company's Mercy, 2013). There exists strong evidence that the injuries and health hazards in the agriculture industry are very serious. The mixture between exposure to hazardous materials and working with very dangerous machinery puts farm workers at more risk than other occupations where employees face only one or neither of these dangers.

*Do the workers complain?*

Farm workers have not made any significant impact with their complaints due to their lack of cohesiveness. While they are naturally going to be unhappy with the unsanitary and unsafe conditions in which they work, the farmers have yet to make it to the national stage in fighting for their safety protection at work. Rather, their complaints rest at the local and state level and have not made it into congressional testimonies. The House Committee on Agriculture conducts hearings that center around the production and quality of food, not the safety of workers.

*Is the industry in the public eye?*

The agriculture industry has been in the public eye recently, but not because of worker safety concerns. The hype surrounding agriculture is focused on environmental protection and the treatment of animals. Both of these factors directly impact the consumer. The focus is on the fact that factory farms are taking over the industry and producing manufactured meats and vegetables instead of natural substances.

As is the trend with most discussions of agriculture, the public pays attention to quality of food, not quality of working conditions of the people who produce that food. However, in 1960 that changed when Edward R. Murrow created a documentary titled *Harvest of Shame*. This documentary "brought the depressing realities of the industrial food complex into Americans' living rooms" (At The Company's Mercy, 2013, p. 5). It highlighted the struggles of migrant farmers who earned low wages and experienced horrific working conditions. Other studies by Oxfam America, the Farmworker Justice Fund, and the Corporate Research Project of Good Jobs First conveyed similar messages to the public. While these publications told the story of safety conditions in the agriculture industry, many Americans remained oblivious. Small-scale events such as National Farmworker Awareness Week hosted by the Student Action for Farmworkers and Bon Appetite Management Company show that small interest groups are interested in protecting farmworkers' rights (Tocco, 2013). In relation to other industries of comparative size, the agriculture industry only receives public attention when concerns surrounding quality of food arise. Americans continuously eat food produced on a farm, without exposure to the production side.

*Are the employees members of a union?*

Because the agriculture industry in the United States has evolved tremendously over time, the workers have not been able to come together under one forceful union. The best attempt at achieving such an organization is: the United Farm Workers of America. Cesar Chavez founded this organization in 1962. The United Farm Workers of America is the first and largest organized farm workers union, as it is active in ten states (United Farm Workers, 2006). Much of their victories and influence have occurred at the state level. For example, they lobbied for the first state regulation to prevent farm worker deaths related to heat in California (United Farm Workers, 2006). There is, however, a lack of national representation of agriculture workers by the union. The efforts are instead focused on region or state specific issues as opposed to those issues effecting agricultural workers in general.

*Does the industry have lobbying power in Congress?*

The agriculture industry as a whole, which focuses its efforts on protecting the industry's success and development, has spent tremendous amounts of money to lobby Congress. Specifically, "Since 1999, the fifty largest agricultural and food patent-holding companies and two of the largest biotechnology and agrochemical trade associations have spent more than \$572 million in campaign contributions and lobbying expenditures" (Food and Water Watch, 2010, p. 1). These efforts have mainly focused on encouraging the easing of regulations on genetically modified foods. However, based on a 2010 Food & Water Watch poll, seventy-eight percent of Americans believe that the U.S. Food and Drug Administration (FDA) should not approve such efforts, including allowing genetically engineered salmon (Food and Water Watch, 2010). These efforts are focused

on easing regulations for technological changes to the agriculture systems, not on protecting its workers. As recently as October of 2013, there were intense lobbying efforts in reference to the farm bills, which outline farm and nutrition policies within the United States. The efforts from the agriculture community centered on advocating for farm subsidy programs and crop insurance programs to remain in place (Nixon, 2013).

The agriculture industry has had success lobbying Congress, but the agriculture workers have not. The fact that the broader agriculture industry does spend time and effort lobbying Congress on issues it deems important shows that it could exert similar efforts to lobby Congress to protect farm workers if it deemed that issue important as well.

*What is the result?*

The agriculture industry is under strict regulation. There are many policies in place at both the federal and state levels that affect the safety of farmers and farm workers. However, just because these policies are in place does not mean that there have been improvements in safety.

Agricultural operations are under strict control by OSHA because OSHA deems agriculture as one of the most dangerous industries in the United States. While many specific policies are in place, it is less clear whether these policies are specifically carried out. For example, the main cause of death between 1992 and 2009 for farmworkers was tractor overturns. This type of accident can be prevented most effectively through the use of Roll-Over Protective Structures, which are mandated under OSHA restrictions that state, "Roll-over protective structures shall be provided by the employer for each tractor operated by an employee" (Agricultural Operations, OSHA). Even with this mandate,

only fifty-nine percent of tractors in the United States used such devices (Agricultural Operations, OSHA).

Aside from the legislation of OSHA, one of the first main movements to improve safety conditions on agricultural farms occurred in 1988. Prior to this year, the U.S. government and population paid little attention to health problems in agriculture. However, in 1988 the National Coalition of Agriculture Safety and Health held a public policy conference (Thu, 1998). The National Coalition of Agricultural Safety and Health, along with Senator Tom Harkin, and an Iowa farmer who lost her son in a farm accident, created legislation to fund the National Agricultural Health and Safety Initiative. Congress passed this legislation and designated The National Institute for Occupation Safety and Health to be in charge of the agency and carry out the initiative (Thu, 1998). By creating this institute to oversee the project, Congress showed that it was willing to fund and oversee the regulation of the agriculture industry.

There have been several other initiatives at the non-government level aimed at improving safety for farm workers. One example is the Certified Safe Farm Program. According to the Iowa Center for Agricultural Safety and Health, the Certified Safe Farm Program is:

"A multi-faceted agricultural intervention program designed to reduce the rate of injuries and illnesses in the agricultural population. The program consists of four main components that work together to offer the best opportunity for changing attitudes and behaviors of farmers. The four components are: an occupational health screening, an on-farm safety review with performance standards, personalized and group education, and incentives such as insurance discounts or agribusiness discounts." (Certified Safe Farm Program, 2010)

The existence of this program certainly shows initiative, but it doesn't always lead to change and/or improvement. The federal government did not create the Certified Safe

Farm Program, but it represents the type of intervention that would prove effective in the agriculture industry. Furthermore, it uses the tools of education and incentives that have proven effective in improving safety conditions.

A comprehensive study was performed to evaluate the effectiveness of the Certified Safe Farm Program. The conductors of this study had two groups: intervention and control groups. One group was to follow the previously mentioned four components of the Certified Safe Farm Program while the other group did not change its procedures. The results were staggering. The researchers found that "Annual occupational injury and illness costs per farmer paid by insurers were forty-five percent lower in the intervention cohort than in the control cohort" (Donham et al., 2007, p. 348). The program is an effective way in reducing negative health conditions for workers and can serve as a model for future programs in both the agriculture industry and other industries in general.

The existence of contingent worker relationships in the agriculture industry prevents the implementation of long-term policies that protect long-term workers. Contingent worker relationships have become the norm in the agriculture industry because by hiring contingent workers, employers can adjust the level of employment based on short-term fluctuations in demand (At The Company's Mercy, 2013). Because many agricultural employees are temporary workers, there is a lack of strong employer-employee relationships. This prevents the implementation and enforcement of many policies that are taken for granted in other industries with steady work forces and strong employee-employer relations (At The Company's Mercy, 2013).

OSHA has definitive jurisdiction over the agriculture industry. This regulation can be enhanced further because of the states' rights to also regulate the industry more

strictly. Although the state OSHA-type programs generally reflect the goals and regulations of the federal program, the state does reserve the right to enforce safety laws differently than the federal government (Shutske & Schermann). Specifically, twenty-four states, including ten of the twenty-two top pork producing states, have state OSHA plans that are more strict than the federal guidelines (Shutske & Schermann). At the very least, the workers in the agriculture industry are guaranteed protection under OSHA regardless of what an individual state implements.

### *Conclusions*

The agriculture industry in the United States has some characteristics that make a strong case for government intervention to protect worker safety and some characteristics that are less conducive to government action. Particularly, the lack of a trigger event and the

major worker complaints have not caused a major push for immediate action. However, Congress has still passed legislation and provided funding for initiatives that promote safer work environments for agriculture workers. Most notably, OSHA oversees agricultural operations in regards to worker

Figure 2

	<b>Agriculture</b>
<b>Trigger Event</b>	W
<b>Worker Complaints</b>	W
<b>Severity of Injuries</b>	S
<b>Industry in Public Eye</b>	W
<b>Members of Union</b>	W
<b>Lobbying Power</b>	S
<b>Government Intervention</b>	S

safety conditions. Even though the industry did not necessarily have a strong case for legislative action, the government intervention response is strong. This misalignment is

shown in figure two, as some responses were weak, yet the government intervention is strong.

## **Professional Boxing Case Study**

### *Overview*

Professional boxing first gained popularity in the United States as early as the late 1800s. It was not until 1930 that almost every state in the United States deemed boxing legal (Neiman, 2008, p. 62). The introduction of the radio helped increase the sport's popularity. Boxing is similar to football in the sense that the participants subject themselves to physical injury; the question is to what extent these injuries warrant government intervention. I have chosen to include professional boxing in the sample of case studies because it so closely mirrors football in terms of its value as a sport and the physicality that its participants face. Boxing and football differ fundamentally on many grounds, but the regulation in the boxing industry can be analyzed to determine if it is applicable to the NFL.

### *Is there a trigger event?*

Professional boxers face extreme risks every time they enter the ring. This has been consistent over time as have been the trigger events that prompt public awareness of the risks that professional boxers face. As early as 1947, Sugar Ray Robinson knocked Jimmy Doyle out during a match, which led to his death about seventeen hours later. In 1962, a controversial situation prompted Emile Griffith to knock out and ultimately kill Benny Paret in a world welterweight title fight (The Independent, 1995). Emotional factors contributed to the aggressive knockout. Emile Griffith identified as sometimes straight, sometimes gay, and sometimes bisexual. During the pre-fight weigh-in, Benny

Paret allegedly said a gay slur aimed at Griffith (Lovekin, 2013). In front of a national television audience, at Madison Square Garden, "Griffith knocked out his bitter rival in the twelfth round to regain his own welterweight title, and Paret went into a coma and died from injuries ten days later" (Lovekin, 2013). Nationwide, Americans watched as Benny Paret went into a coma that would lead to his death. Because so many Americans were exposed to this occurrence, it opened eyes to the dangers of boxing and the severe injuries that it could cause.

There were many more instances of death in the ring. According to The Independent, "Approximately five-hundred boxers have died in the ring or as a result of boxing since the Marquis of Queensberry Rules were introduced in 1884" (1995). The Marquis Queensberry Rules laid out basic guidelines for professional boxing, such as the use of gloves. According to the American Association of Neurological Surgeons, 488 boxing-related deaths occurred between January of 1960 and August of 2011 (2011). For example, in 1979, Willie Claasen died after a match in New York. Brian Mitchell knocked out Jacob Morake, who died from head injuries (The Independent, 1995). Because of boxing's decline in popularity, the American public has not been drawn to one specific instance of death or serious injury in the boxing ring. However, within the boxing community, the culmination of such events has prompted recognition of the risks that boxers face and the possible necessity of safety provisions. The risk in boxing is obvious to viewers because many fights end in an individual being in an unconscious state. This means that a strong, single trigger event is not as necessary to raise awareness. The aggregation of deaths and injuries that boxers face in the ring represents a strong trigger event.

*How serious are worker injuries and health risks?*

Physical activity, specifically sports, possess an inherent risk. Athletes even find this element of danger attractive (Toward Safety in Boxing 1950). Boxing, however, is a unique sport because of its ultimate goal. The goal of most sports is to outscore the opponent. A basketball team wins if it scores more points than its opponent and a professional bowler wins a bowling match if he/she scores higher than the opponent. However, in a boxing match, "The chief aim of the contestant is to disable his opponent; and though his intention is to produce only temporary disablement he may easily go further than he intends" (Toward Safety in Boxing, 1950, p. 1006). Consequently, safety regulations and procedures for professional boxing may be even more important than those of other professional sports. Because the primary goal is already to cause physical damage to the opponent, the inherent risk of injury is inevitable.

Boxing is a dangerous sport and occupation. Specifically, "Brain injuries are the most common type of injury suffered by boxers, and there is a relatively high incidence of both acute and chronic brain injuries" (Neiman, 2008, p. 68). Acute injuries are classified as concussions and hemorrhages while chronic injuries are considered encephalopathy, commonly known as "punch-drunk" syndrome. It has been proven that between fifty and sixty-eight percent of professional boxers will ultimately experience chronic traumatic brain injuries later on in life. Just over one death per 100,000 will occur per year due to professional boxing (Neiman, 2008, p. 69).

Studies have shown, however, that boxing may not be a dangerous sport when compared with other sports. A study of athletic trauma-caused deaths spanning thirty-two years, from 1918 to 1950, shows that boxing produced fewer deaths than baseball,

football, or even daily accidents (Gonzalez, 1951, p. 1511). In a game of football, causing physical harm to the opponent is a means to the final goal while in boxing it is the end goal.

While the number of deaths from boxing is small relative to other sports, the injuries that may or may not lead to death are serious and widespread. In a study conducted on fifteen current and former boxers, eighty-seven percent of the subjects showed irregular outcomes in two or more of the following four tests: neurological examination, electroencephalogram (EEG), Computed Tomography (CT) Scan, and neuro-psychological test battery (Casson, Viano, Powell, Pellman, 2010, p. 2664).

*Do the workers complain?*

Because professional boxers have yet to organize to represent their interests as a whole, there has not been much publicity of their complaints and grievances. Even if individual boxers are upset about safety condition in the ring, this sentiment has not received public attention because of its small scale.

*Is the industry in the public eye?*

Professional boxing receives public attention because it is a professional sport. However, in comparison with other professional sports, its audience level is lower. Over time, boxing's popularity has declined drastically. In 2011, only two percent of adults who follow one or more sport reported boxing to be their favorite sport. Other sports that shared this same level of popularity include track & field, bowling, and horse racing (Harris Poll, 2012). Because it is a professional sport, boxing does generate a significant level of interest, even if it is not considered a favorite sport for many people. A nationwide survey revealed that boxing is seventh in a list of sports ranked based on the

level of interest people show in them. Twenty-one per cent of those surveyed revealed they have some level of interest in professional boxing (Sanneh, 2013). Names of superstar football or basketball players are household names, but only true boxing fans can rattle off the top boxers at any given time. In 2011, in a sample of fifteen televised fights, the lowest television rating rested at 347,000 people while the highest television rating for a single fight was 788,000 (Sanneh, 2013). These are very low figures compared to the approximately one hundred million Americans that watch the Super Bowl each year. Whereas football is on the incline in terms of popularity, boxing has been on the decline for years. However, because the employees, or the boxers, are on a public stage when doing their work, their injuries are visible to the public. The nature of the sport is to display physical violence. Even though boxing is not a popular sport, the injuries that boxers face are literally in the public eye.

*Are the employees members of a union?*

Boxers are not members of an organized union that can advocate for boxing rights. The boxing community has trouble with governing bodies so there is no surprise that boxers have had trouble coming together in a union. The idea of forming a union for professional boxers has been explored, but the diversity of the individual boxers has prevented them from uniting (Neiman, 2008, p. 90). With over 8,500 licensed professional boxers in the United States it is not surprising that it is difficult for them to unite. Boxing is an individual sport and that attitude is maintained among boxers outside of the ring.

*Does the industry have lobbying power in Congress?*

Because the boxers themselves never organized to express their interests, they have not successfully lobbied Congress on a large scale. Congress's interest in regulating boxing has come from other sources. When the federal government first intervened in professional boxing in the 1950s it was because of the perception that there was organized crime occurring within the professional boxing sphere (Neiman, 2008, p. 75). In addition, the federal government showed a renewed interest in regulating boxing after a controversial win of middleweight champion James Toney over journeyman David Tiberi (Neiman, 2008, p. 76). The judges ultimately gave Toney the win, which led to allegations of fight fixing. This controversial fight instigated Congress to intervene. Generally strong lobbying efforts lead to Congressional action, but in this case, controversy prompted Congress to take action.

*What is the result?*

State regulation has reigned over professional boxing for over a century, dating back to the 1900s (Neiman, 2008, p. 75). Even though the government has intervened in professional boxing to some extent, "The state boxing commission is the only organization that has the legislative power to license and regulate a boxing match" (Neiman, 2008, p. 78). Forty-four states, in addition to the District of Columbia, license boxing matches. Because boxing is dealt with at a state level, there are many inconsistencies across states in terms of medical regulations (Neiman, 2008, p. 79). This is problematic as "Professional boxing is the only major sport that lacks a central regulatory organization" (Neiman, 2008, p. 91).

The federal government and professional boxing first crossed paths in the 1950s. The Supreme Court ruled, "The sport of boxing utilized the channels of interstate commerce, and therefore, the sport was subject to federal antitrust laws" (Neiman, 2008, p. 74). The Professional Boxing Safety Act was passed "to improve and expand the system of safety precautions that protects the welfare of professional boxers; and to assist State boxing commissions to provide proper oversight for the professional boxing industry in the United States" (Section 3, 1996). This piece of legislation outlines many guidelines important to the safety of professional boxers. First, each boxer must pass a physical examination before each match to make sure he is able to safely compete. Second, it requires that a certified physician be present at the ring during a match and that each boxer's medical insurance cover any injuries sustained during the boxing match. Third, it states, "The Secretary of Health and Human Services shall conduct a study to develop recommendations for health, safety and equipment standard for boxers and for professional boxing matches" (Section 5, 1996). Lastly, it allows states to implement stricter policies as long as they align with the goals of this policy (Section 5, 1996). The Professional Boxing Safety Act of 1996 directly addresses safety concerns of the boxers without changing any fundamental rules of the actual sport of boxing.

In addition, legislators passed the Muhammad Ali Boxing Reform Act in 1999, which called for amendments to the Professional Boxing Safety Act of 1996. The language in this law expresses the desire for state officials to regulate professional boxing events. The most applicable rhetoric of this act occurs in a proposed amendment to section six of the Professional Boxing Safety Act of 1996. It states:

"It is the sense of the Congress that a boxing commission should, upon issuing an identification card to a boxer under subsection (b)(1), make a health and safety disclosure to that boxer as that commission considers appropriate. The health and safety disclosure should include the health and safety risks associated with boxing, and in particular, the risk and frequency of brain injury and the advisability that boxers periodically undergo medical procedures designed to detect brain injury." (Section 7, f, c')

The wording of this passage, however, does not suggest a strict rule that warrants punishment if not followed. It states that the boxing commission should warn the boxer to the amount that it considers appropriate. This leaves a lot up to personal interpretation and can result in disparities in terms of how individual cases are handled.

Both the Professional Boxing Safety Act of 1996 and the Muhammad Ali Boxing Reform Act have been somewhat successful in their many goals, in particular their goal of protecting the safety of boxers (United States Boxing Commission Act, 2005). Because many of the procedures outlined in these laws are left for the states to carry out, there are definite loopholes. The goal of the proposed United States Boxing Commission Act is "to establish the United States Boxing Commission to protect the general welfare of boxers and to ensure fairness in the sport of professional boxing" (H.R. 1065, 2005). This would fill in the gaps of the previous two and establish the U.S. Boxing Commission that serves as an overseeing body of all professional boxing. The United States Boxing Commission Act failed to pass in the House of Representatives on November 16, 2005 (Neiman, 2008, p. 92). There continues to exist a lack of enforcement on all levels of Congressional involvement of professional boxing to the extent that, "enforcement of these legislative measures has been deficient and arguably nonexistent" (Jurek, 2006, p. 1189). Congress' actions render meaningless if they are not enforced.

None of the legislation mentioned has changed any fundamental rules of boxing. However, it has aimed at providing boxers with adequate medical assistance before, during, and after matches. In addition, it aims at educating boxers about the safety risks that they are voluntarily exposing themselves to. Research has proven that education can be a powerful tool in preventing head injuries in football<sup>2</sup>, and there is no reason to believe that education cannot be a powerful tool in preventing head injuries in boxing as well.

### *Conclusions*

Boxers face health risks because the inherent danger of the sport. However, boxing has declined in popularity over time and individual boxers fail to represent the boxer community as a collective unit. There are varied responses to the questions, which should lead to an indeterminate result. However, as figure three shows, Congress has passed

Figure 3

	<b>Boxing</b>
<b>Trigger Event</b>	S
<b>Worker Complaints</b>	M
<b>Severity of Injuries</b>	S
<b>Industry in Public Eye</b>	M
<b>Members of Union</b>	W
<b>Lobbying Power</b>	M
<b>Government Intervention</b>	S

legislation to protect boxer safety even though not all the conditions in the industry are primed for government intervention.

### **NFL Analysis**

#### *Overview*

A documentary produced by Frontline titled *League of Denial: The NFL's*

*Concussion Crisis* outlines the recent history surrounding the concussion crisis. This

<sup>2</sup> This research refers to the previously mentioned study conducted by Covassin where coaches that were given education regarding concussions "were able to appropriately prevent, recognize, and respond to sports-related concussions after reviewing the materials" (Covassin 2012, 233).

documentary explores the NFL's repeated denial of any health risks that the players might face. When forced to act on the issue, the NFL never publicly made statements admitting to the risk of concussions and even appointed doctors to head research committees that were known to deny any link between football and severe head injuries. Dr. Amalu, a distinguished researcher in the field who linked head injuries in football to Chronic Traumatic Encephalopathy (CTE), was not invited to a conference in the summer of 2007 that invited all team doctors and trainers to come together to discuss concussions in the NFL (League of Denial, 2013).

The NFL even distributed pamphlets to the players that said people who suffered from concussions were not at further risk for health problems later on in life. The pamphlet directly read, "Research has not shown that there are any long term consequences to concussion in NFL players as long as each injury is treated properly" (League of Denial, 2013). Dr. McKee led research in Boston and was at the forefront of developing the link between football, CTE, and other brain disorders. She found this link by examining the brains of deceased retired football players. Once Roger Goodell and the NFL as a whole finally admitted to the link that Dr. McKee had scientifically proven years prior, Goodell gave Boston University and Dr. McKee funds to continue studying these issues. This was one of the first actions taken by the league that showed a commitment to helping to solve this problem. Each week that games are played during the 2013 NFL season, there is talk surrounding the concussion crisis and the league must make public statements and rulings to determine fines for players that are hitting other players too violently. The hype surrounding the issue has caused the NFL to take more action and to address the issue head on. Yet, all of these actions and policies took place

internally. The government, while showing a slight interest in the problem, never declared a definitive stake by passing legislation (League of Denial, 2013).

*Is there a trigger event?*

Head injuries have been associated with football since its inception. They are a natural consequence of the game. However, the attention paid to them and the efforts to protect players have increased significantly in recent years, and this is partly due to the death of retired players, particularly one specific football legend. On May 2, 2012, Junior Seau passed away at the age of forty-two from a self-inflicted gunshot. After investigation of the incident and significant medical examination of his body, the National Institutes of Health (NIH) determined that at the time of his death, there were abnormalities in his Seau's brain that are linked with degenerative brain disease and CTE. Seau showed signs of behavior changes after retiring from the NFL including depression, emotional detachment, forgetfulness, insomnia, and behavioral swings. Seau ultimately committed suicide because of the repeated blows to the head that he experienced during his twenty NFL seasons he played with the San Diego Chargers, Miami Dolphins, and New England Patriots (Wilner, 2013). Because Junior Seau is such a notable football player, his death and the revelation of his brain disorders opened many eyes to the importance of studying concussions in the NFL. There were many other instances of retired players' deaths in addition to that of Junior Seau. Dave Duerson, a former Chicago Bears defensive back, left a suicide note that he wanted his brain studied by scientists. Terry Long, a retired Steeler, died after drinking Anti-Freeze. Andre Waters, a former Eagles safety, shot himself in the mouth after suffering from depression and chronic pain (Legal Issues Relating to Football Head Injuries, 2010).

Steven and Mark Fainaru bring to light the NFL's denial of a concussion crisis in recent history in *League of Denial* (2013). Their research started with Mike Webster's death at the age of fifty in 2002. An autopsy of his body revealed: destroyed feet and legs, herniated disks, broken vertebra, torn rotator cuff, separated shoulder, teeth falling out, cellulitis, forehead fixed to his scalp, and a shelf of scar tissue on the forehead (League of Denial, 2013). This was the first true discovery of the catastrophic health risks that football players faced, and in the years following, scientific research continued to prove this frightening reality. The more retired players that experience death or serious health concerns as a result of their time in the NFL, the more aware society becomes of the dangers of football and the importance of addressing safety concerns for NFL players.

*How serious are worker injuries and health risks?*

Concussions cause a "short term disturbance in brain function" (Miller, 2010). While one mild concussion is not necessarily expected to be life threatening or cause severe health issues later on in life, repeated concussions and blows to the head can produce catastrophic health risks in the future. Growing evidence shows that football players are prone to CTE, which was previously associated with professional boxing. In addition, researchers have discovered neurodegeneration, which is often associated with Alzheimer's, in the brains of retired players who passed away at younger-than-expected ages (Miller, 2010). Furthermore:

"A North Carolina study found that professional players who suffered multiple concussions were three times more likely to suffer clinical depression than the general population. A follow-up study in 2005 showed NFL players suffering concussions had five times the rate of cognitive impairment. And retired players were 37 percent more likely to suffer from Alzheimer's than the population as a whole." (Legal Issues Relating to Football Head Injuries, 2010, p. 2)

While there is much attention paid to the long-term effects of concussions or repeated concussions, there is also growing concern surrounding the more casual impacts that the head experiences nearly every single play on the football field. The thousands of less traumatic impacts that the brain experiences during a football career are also likely to cause CTE (Miller, 2010). According to *League of Denial*, an average football player will experience blows to the head between 1,000 and 1,500 times a year, each time with a force around twenty G. This is equivalent to driving a car at thirty-five miles per hour into a brick wall over 1,000 times a year (League of Denial, 2013).

While the injuries themselves are cause for worry, so is the lack of precaution that players are taking in order to protect themselves. Because football is inherently dangerous and part of the intrinsic value of the game is violence, many players are speaking out against newly implemented rules that are aimed to protect players from injuries that could ultimately lead to more serious conditions such as CTE. In *League of Denial*, Jim Otto, former center for the Oakland Raiders said, in reference to injuries in the NFL, "It's affected my life, it surely has, but I'm not there crying about it, I know I went to war and come out of the battle with what I've got and that's the way it is" (League of Denial, 2013). On the contrary, some players have taken these new rules seriously and understand their importance. It is not until the severe health conditions arise later on in life that the then retired players are able to see the importance of safety for NFL players. Head injuries, particularly concussions have both short term and long-term effects on NFL players. Based on a study of thirty retired NFL players who suffered multiple concussions during their time playing, there is a significant correlation between the

number of concussions suffered in one's lifetime and the degree of depression symptoms displayed later in life (Didehbani, Cullum, Mansinghani, Conover, Hart Jr., 2013).

The health issues associated with head injuries suffered by professional football players are severe. Brain injuries do not simply inhibit a person's physical abilities, but they can lead to debilitating diseases such as depression and Alzheimer's that not only affect the individual, but also have a catastrophic effect on family members. As is clear with the case of Junior Seau, these conditions can be severe enough to lead to suicide. Concussions are severe enough as is, but when compiled over time, the long-term effects are even more alarming.

*Do the workers complain?*

In a statement dated January, 2013, National Football League Players Association (NFLPA) President, Domonique Foxworth stated, "The league, their No. 1 focus – at least they say their No. 1 focus – is health and safety. And we say our No. 1 focus is health and safety. How come we have such a hard time moving the ball on some health and safety issues?" (Associated Press, 2013) This statement is particularly meaningful coming from the President of a group that represents all players' interests. Another strong leader, Executive Director, Demaurice Smith argues for a system to verify the credentials of the medical professionals employed by each of the NFL teams in the league. He also is interested in an amendment to the Collective Bargaining Agreement that would require the NFL to hire a neutral medical officer who can oversee medical care and hear appeals regarding medical care (Associated Press, 2013).

Both current and retired players and their families have expressed distaste with the NFL and its handling of head injuries. Over four thousand former football players

have recently manifested this distaste through a lawsuit against the NFL. These individuals suffered from conditions such as dementia, depression, and Alzheimer's that were allegedly results of head injuries from playing professional football. The lawsuit settlement cost the league \$765 million. This money will be used to compensate victims, cover medical bills, and fund research (Associated Press, 2013 a). While this was a major breakthrough for the victims, it serves as temporary relief for a problem that will continue to plague the league in the future.

*Is the industry in the public eye?*

A majority of adults in the United States watch football during the NFL season. In fact, according to a recent Adweek/Harris Poll, sixty-four percent of American adults watch NFL football (Harris Poll, 2011). Among these football-watching adults, sixty percent spend five hours or less per week watching football while twenty-seven percent reported spending between six and ten hours per week. Six percent spend upwards of sixteen hours a week watching NFL football (Harris Poll, 2011). Not only is football popular in absolute terms, but it is also more popular than its peer professional sports. Particularly, "Over one-third of adults who follow at least one sport (thirty-six percent) say professional football is their favorite sport while just thirteen percent say baseball is their favorite" (Harris Poll, 2011). Additional percentages for sport-watching individuals' favorite sport include: thirteen percent college football, eight percent auto racing, five percent men's professional basketball, five percent men's college basketball, and five percent hockey (Harris Poll, 2011). In 1985, when this poll was first presented to the public, only twenty-four percent of sports fans reported their favorite sport as football (Harris Poll, 2011). There has been a twelve percent increase over the past twenty-eight

years. A staggering one hundred million viewers are estimated to watch the Super Bowl each year (Miller, 2010). These statistics show that Americans enjoy watching football, which means they pay attention to happenings in the league. It is nearly impossible to watch a football game without the commentators mentioning politics within the NFL or any policies surrounding concussions and player safety.

There is no doubt that the industry of professional football is in the public eye. And even individuals who are not directly football fans can see controversial incidents in the news and on social media. The popularity of the NFL gives its players and coaches a great opportunity to have a large impact on the community. In other words, "By establishing safety guidelines that no doubt would be emulated by youth programs, NFL leaders could protect the brain health of countless children and young adults" (Miller, 2010). Football is not only enjoyed as a spectator, but also as a participant for four million children that play for their school teams (Miller, 2010). Thus, the image that the NFL projects impacts more than its fans, it impacts the younger generation of football players and programs that model their actions after the esteemed NFL. Football is ingrained in American society.

*Are the employees members of a union?*

The NFL is composed of thirty-two individual teams, yet the players come together to advocate and protect their interests as not only players for their individual teams but as players for the NFL as a whole. They come together through the NFL Players Association. The NFLPA's mission statement, found on the homepage of the website, states:

"We, The National Football League Players Association...Pay homage to our predecessors for their courage, sacrifice, and vision;...Pledge to preserve and enhance the democratic involvement of our members;...Confirm our willingness to do whatever is necessary for the betterment of our membership – To preserve our gains and achieve those goals not yet attained." (NFLPA)

The NFLPA was founded in 1956 as the union for professional football players with the main goal to represent players' interests, including wages, hours, working conditions, and more. The NFLPA is very vocal and has shown that it will do anything necessary in order to protect its player and their rights (NFLPA). The NFLPA declares a stake in almost every large issue concerning NFL policies and NFL players. Some of their most recent press release titles include: *Joint NFL NFLPA Update on Buccaneers MRSA Situation; Statements on Arbitration Decision for Ben Utecht, NFLPA Committee Issues Discipline on Three Agents; NFLPA Expands Award-Winning Financial Education Program* (NFLPA). It is evident by this sample of titles that the NFLPA is involved in a wide range of issues and has significant influence over operations within the NFL.

*Does the industry have lobbying power in Congress?*

The NFL shares the professional sports arena with several other sports. Major League Baseball (MLB) is known to be America's pastime and the National Basketball Association (NBA) connects the public with professional basketball. However, the NFL is massive and with its size comes power, particularly in reference to its relationship with the federal government. The NFL leads all other professional sports organizations in lobbying Congress. In fact, the NFL spends more than the next three competitors combined (Hughes, 2012). In 2011, the NFL spent \$1,620,000 on efforts to lobby Congress. In the first quarter of 2012, this number was \$300,000, which set a pace for \$1,200,000 by year's end. The next highest level of spending was by Major League

Baseball, spending a mere \$520,000 in 2011 and only \$70,000 in 2012 (Hughes, 2012). These numbers reflect the magnitude with which the NFL spends money to influence Congress on issues including: broadcasting, Internet gambling, drug testing, and player safety (Hughes, 2012).

While a large portion of the lobbying deals with labor relations and broadcasting rights, with the growing concern about concussions and player safety, the NFL has focused on these hot topics. Based on the league's historical record of lobbying Congress and the monetary value it places on these efforts, future lobbying on important issues such as concussion legislation is not only possible, but also likely. Because changes to rules and safety procedures would likely have a dramatic impact on the game of football:

"The NFL's lobbying efforts focus on concussion legislation and any pre-concussion safety standards and helmet regulations that might be set. The league wants to shape how standards are set and share its viewpoints with government leaders before legislation is introduced in Congress." (Hughes, 2012)

This suggests that the NFL is very interested in Congress' actions and is determined to express its viewpoints in order to influence the lawmaking processes that will affect professional football.

*What is the result?*

As research continues to undoubtedly show the dangers of concussion and head injuries in football, the NFL has taken some action to address the issue. However, the full admission of the dangers and need for action still has yet to come. As recently as 2010, the NFL, while performing an internal long-term study of head injuries and brain conditions, continued to deny reports linking diseases such as CTE directly with professional football. The NFL has a Mild Traumatic Brain Injury Committee that

denied the link between CTE and playing football, again as recently as 2010 (Legal Issues Relating to Football Head Injuries, 2010). However, the NFL does have many policies and procedures in place that are aimed to protect players and limit concussions. The NFL gave thirty million dollars in the form of a research grant to the National Institutes of Health to fund research of retired players' brains (Wilner, 2013).

Explicitly stated on the Safety Rules and Regulations page of the NFL website is the following: "Player safety is the top priority for the NFL. Since its earliest days, the league has continuously taken steps to ensure that the game is played as fairly as possibly without unnecessary risk to its participants" (Safety Rules and Regulations, 2013). The NFL works hard to inform players and coaches of any new rules by distributing the League Policies for Players manual that addresses topics such a equipment guidelines and disciplinary actions that will be taken against those who violate player health and safety rules. The NFL Competition Committee is responsible for reviewing suggested rule changes and making recommendations to team owners (Safety Rules and Regulations, 2013). This same committee also reviews injury data at the end of every season provided by the Injury and Safety Committee and reviews suggested changes. A new panel has also been created, called the Player Safety Advisory Panel. Its main goal is to improve player safety. There are disciplinary measures in place for violation of on and off field rules and procedures as well as definite return-to-play policies for a player who has suffered a head injury. This return-to-play policy for concussions was updated in 2009 to state:

"Once removed for the duration of a practice or game, the player should not be considered for return-to-football activities until he is fully asymptomatic, both at rest and after exertion, has a normal neurological examination, normal neuropsychological testing, and has been cleared to return by both his team

physician(s) and the independent neurological consultant. A critical element of managing concussions is candid reporting by players of their symptoms following an injury. Accordingly, players are to be encouraged to be candid with team medical staffs and fully disclose any signs or symptoms that may be associated with a concussion." (Safety Rules and Regulations: Return-To-Play, 2013)

Football head injuries have been introduced in the federal government. A hearing in the Committee on the Judiciary in the House of Representatives titled "Legal Issues Relating to Football Head Injuries" occurred in 2010. However, no tangible legislative action has been produced. Independent medical researchers have produced findings on player safety in the NFL and the NFL has implemented internal policies to address the situation, yet the government has not implemented any laws similar to the Professional Boxing Safety Act of 1995 or Public Law 105-241 that made the Occupational Safety and Health Act of 1970 applicable to the USPS.

### *Conclusions*

The NFL is in a unique situation because of how current the concussion crisis is. Every question has a strong response yet the federal government has not passed legislation to address the issue, as figure four shows. Based on the results of the other case studies, this is not an expected outcome.

Figure 4

	<b>NFL</b>
<b>Trigger Event</b>	<b>S</b>
<b>Worker Complaints</b>	<b>S</b>
<b>Severity of Injuries</b>	<b>S</b>
<b>Industry in Public Eye</b>	<b>S</b>
<b>Members of Union</b>	<b>S</b>
<b>Lobbying Power</b>	<b>S</b>
<b>Government Intervention</b>	<b>W</b>

### **Conclusion**

All of the studied cases share similarities and differences. The overarching theme is that all four industries are ones in which workers face severe health and safety risks.

To complete any of these jobs, the workers are knowingly putting themselves at risk. While the USPS and agriculture injuries are largely due to external machines and equipment, boxing and football present risks to the workers because of the physical motions of coming into contact with other players. However, when simplified, all four industries are ones in which the workers face serious risk and need protection. This protection has come from internal policy, and for all cases but the NFL, federal government policy as well.

While in boxing the main goal is to disable the opponent, this is not the case in football. However, because the goal of blocking a player or tackling a player so closely coincides with the ultimate goal of winning, football players often play with the intent to disable their opponent. This is drastically different from the mentality that postal workers and farmworkers have. They attempt to complete their work in a safe and productive manner, not to cause harm or injury upon anyone else. For this reason, players in the NFL suffer repeated blows to the head that add up to cause long-term negative impacts on their health, whereas workers that experience unsafe conditions in the USPS and in agriculture generally suffer from one-time accidents. Depending on the severity of these accidents these workers can recover completely, or in the most severe case, face death as a consequence.

This analysis was completed in a way that treats professional sports as any other industry. Under this assumption, players can be thought of strictly as workers, and the actions taken on the field simply as work. This means that the safety concerns and injury risk that the football players, or workers, face should be handled in the same manner that respiratory illness suffered by farmworkers is handled. The same goes for conveyor belt

accidents, such as that one suffered by Michael McDermott, and also blows to the head in professional boxing. In all three cases, the federal government has some stake in each specific industry through Congressional laws. The government has showed interest in the NFL but has not passed any acts similar to the Professional Boxing Safety Act of Public Law 105-241.

The NFL is not the only professional sports industry facing a concussion crisis. Hockey players in The National Hockey League (NHL) face similar risks as football players in the NFL. Ten former NHL players have recently filed a lawsuit against the NHL, similar to the NFL lawsuit that was settled for \$765 million earlier this year. The class action lawsuit rests upon the notion that the league knew of the head trauma risks that players faced and should have done more to protect player safety. Furthermore, the lawsuit argues that, "The league continues to contribute to injuries today by creating 'a culture of violence' through its refusal to ban fighting and body-checking, and by employing 'enforcers' whose main job is to fight" (Muir, 2013). Although the result of this lawsuit has yet to be decided, the NHL has a stronger history than the NFL in terms of recognizing safety risks and attempting to protect players. This will likely prove beneficial for the league when settling this lawsuit.

The NHL, as early as 1997, was the first league to seriously address concussion issues by creating a concussion working group. It was on the forefront of player assessment upon suffering a concussion as well as developing baseline testing to diagnose concussions (Muir, 2013). NFL players are somewhat split in terms of supporting safer football conditions and accepting the risk in order to preserve the game. Hockey players have historically attempted to fight against actions taken by the league to

protect themselves, the players (Muir, 2013). The NFL denied the existence of concussion-related risks for its players while the NHL openly sought to solve this problem. Yet, for both industries, federal government legislation has yet to make an impact on the issue. The lawsuit of the NHL is on the horizon and additional similar lawsuits are expected to emerge in these two leagues and also other professional sports leagues. The internal policies of the leagues are going to run out of solutions and a bigger entity may be needed to intervene.

#### *Workers' Compensation and the NFL*

Worker's compensation is an important tool used to alleviate some of the burden an individual faces upon suffering an injury at work. The overall goal of the worker compensation system is to financially aid individuals who suffer from occupational disabilities, regardless of who is at fault (Carlin & Fairman 1995, p. 97). Each state has individual worker compensation laws. California's Worker Compensation scheme is known to be extremely player-friendly because of its Single-Game Clause and The Cumulative-Injury Provision. The Single-Game Clause "allows a player to pursue an injury claim, so long as the player participated in a single game within the state, regardless of whether the bulk of his career took place elsewhere" (Gust 2012, p. 250). An NFL player does not need to be a resident of California nor a member of a California-based team in order to receive workers compensation for injuries suffered while playing a minimum of one game in the state of California.

In addition to the Single-Game Clause, the Cumulative-Injury Provision also contributes to the branding of California as the "Golden State for Retired Athletes" (Foote, 2011). California's worker compensation system is different from most other

states' systems because it allows compensation for cumulative injuries, in addition to the standard compensation for one-time incidents. A cumulative injury is defined in section 3208.1 of California's labor code as "occurring as repetitive mentally or physically traumatic activities extending over a period of time, the combined effect of which causes any disability or need for medical treatment" (Labor Code 3208.1). Most NFL players filing for worker's compensation are likely to be suffering from cumulative injuries as opposed to one-time injuries. Because of the uniqueness of California's worker compensation system, California has spent a significant amount of money paying worker compensation benefits for professional athletes, not just NFL players. California has paid \$747 million in payouts in 4,500 cases for professional athletes; 5,000 cases were still pending as of July 2013. Terrell Davis, a running back for the Denver Broncos, received \$199,000 from California for workers compensation despite never having played for a California football team (Toebben, 2013). Loopholes clearly exist in California's system, and California's governor has worked to solve this issue.

The NFL backed Governor Jerry Brown as he signed bill AB 1309 to limit the loopholes that existed for professional athletes seeking to file worker compensation claims in California. This law exempted from California's worker compensation program professional athletes that temporarily worked in California yet had access to workers' compensation insurance in their own state (Assembly Bill No. 1309, 2013). The NFL supported this change, urging players to file claims in their own states to avoid burdening California (Bensinger, 2013). There existed a clear loophole in the California worker compensation law and the state government responded with an effective solution.

Workers compensation systems are designed and implemented by state governments but are also recognized by the federal government. The situation in California is an example of the state government recognizing workplace safety issues and ensuring professional athletes adequate protection. The system was refined to limit this protection, yet it still rests at an appropriate amount in the state of California. If professional athletes, including NFL players, are able to receive worker compensation for injuries they have suffered in the NFL, it would be in the government's best interest to protect player safety on the field. The more injuries suffered, the more the state governments will have to pay out in worker compensation benefits.

Additionally, one of the main objectives of workers' compensation is safety enhancement. The existence of workers' compensation promotes safer working environments because "the reporting provisions of workers' compensation statutes make employers aware of the specific employee injuries...further, since workers' compensation imposes the costs of employee accidents on the employer, the system creates a financial incentive for the employer to prevent injuries" (Carlin & Fairman 1995, p. 98). This financial incentive is not prompting action because there exists a disconnect between the federal and state governments.

#### *Why and how the government should intervene*

Based on the analysis of the three case studies, the government should pass legislation to intervene in protecting football players on the grounds of protecting worker safety. OSHA was founded upon protecting worker safety and the NFL is just like any other industry with the players comparably to any other type of workers. Since the

players are facing serious, life-threatening injuries and illnesses, then it is the government's job to protect the players.

The NFL is in a direr situation than all of the other three cases looked at. This chart represents the findings of this research. The answer to each question posed is ranked as strong (S), medium (M), or (W). Based on figure five, the government intervention level for the USPS, agriculture, and professional boxing is strong.

Figure 5

	<b>USPS</b>	<b>Agriculture</b>	<b>Boxing</b>	<b>NFL</b>
<b>Trigger Event</b>	S	W	S	S
<b>Worker Complaints</b>	S	W	M	S
<b>Severity of Injuries</b>	S	S	S	S
<b>Industry in Public Eye</b>	S	W	M	S
<b>Members of Union</b>	S	W	W	S
<b>Lobbying Power</b>	S	S	M	S
<b>Government Intervention</b>	S	S	S	W

The responses to the seven questions ranged from weak to strong for all three case studies, yet resulted in a strong response for all three. However, the NFL has strong responses to all of the categories, yet the government intervention level is weak. This does not follow the pattern found from the other case studies and represents a unique situation within the NFL. Based on the patterns of the other cases, the government intervention response should correlate with the degrees of the other categories, yet this is not the case.

The method of intervention in the case studies that proved most effective was the case in which Congress passed legislation to oversee safety precautions that reinforced

and regulated internal policies already in place. When Congress decided to make OSHA applicable to the USPS, the USPS already had safety procedures in place. This action just made these procedures more legitimate and ensured that an unbiased regulator was overseeing the operations. Over recent years, the NFL has implemented strict rules that players and coaches must follow when a player suffers from a perceived-concussion. However, this system is imperfect as there exists some corruption, and when a business is self-regulating, it is hard to hold individuals and teams accountable. If Congress were to pass legislation to declare a stake in the issue and oversee and amend the policies already in place, this would be the most effective strategy. The federal government can act as an unbiased third party to prevent corruption.

The case studies of the USPS, agriculture, and Professional Boxing, show that it is evident that the federal government is committed to protecting worker safety in a variety of industries. Congress has passed definitive legislation to protect worker safety in both the USPS and Professional Boxing. In addition, OSHA has direct oversight over the agriculture industry and Congress has allocated money to ensure that farms are operating in a way that provides safe working conditions for the employees. The federal government should intervene in concussion policy in the NFL because this is a workplace safety issue. The government must fulfill its duties that have been set forth through precedent in other industries. Football players are at risk of serious injury while at work. The situation in the NFL is just as severe if not more severe than the situation in the other three industries. However, the NFL possesses characteristics that distinguish it from these other industries that explain why it cannot be treated in the same light as the USPS, agriculture, or professional boxing.

*Why the government hasn't intervened*

This research has proven that the government should intervene in concussion policy in the NFL. This has not happened yet for three main reasons. First, American football is inherently different from other businesses. Next, the NFL has pre-existing internal policies to handle the situation. Finally, concussion issues in the NFL are a recent phenomenon.

Football is America's most popular sport and is viewed as an American tradition. Because violent play is part of the game and part of what makes watching football so exciting, people are scared to alter the fundamentals of the game of football. Protecting football players requires changing aspects of the game, whether it is equipment and pads or tackling rules. Football is so successful and so entertaining in its current state. Implementing policy to change that is frightening to many individuals and organizations and is very risky for the NFL. Changing safety conditions in a USPS carrier facility or on a hog farm has little effect on the public and doesn't fundamentally change the business. However, implementing similar rules in the NFL would have a large impact on the business and is more difficult to carry out.

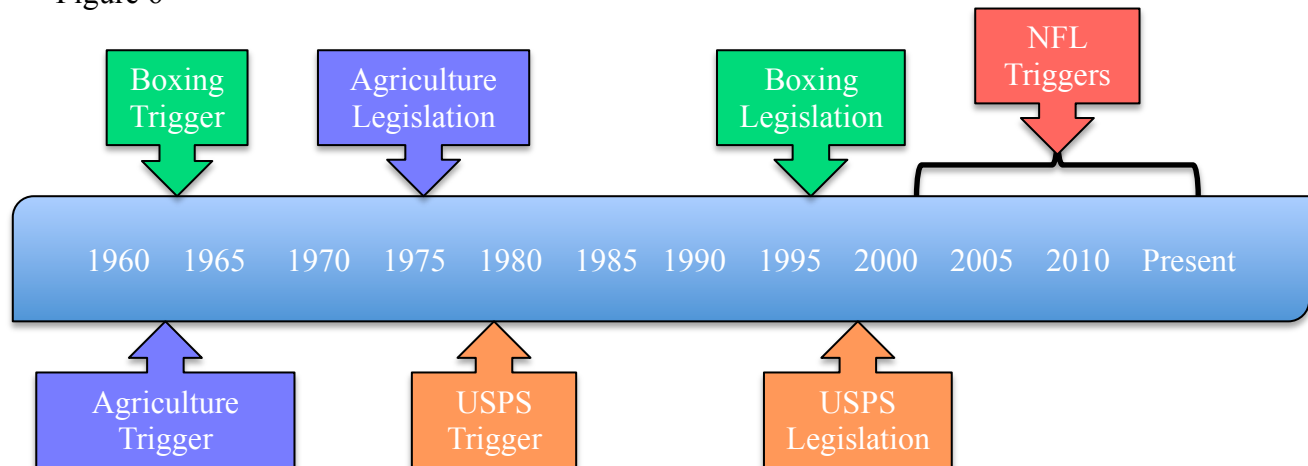
Even though the NFL denied the severity of concussions for many years, it has reversed this opinion and shown a commitment to protecting players by implementing internal policies. The NFL has strict return-to-play rules and has invested money into researching concussions. The NFL can then make the argument that government intervention is not necessary because the NFL has the situation under control and has policies already in place and is investing in ways to make these policies more effective in the future. However, in the USPS, agriculture, and professional boxing, there were safety

procedures in place that were failing. The government stepped in to reinforce these safety procedures and oversee their implementation and effectiveness. Internal policies can be effective, but having the federal government oversee these policies can prove even more effective.

Finally, the government has yet to pass legislation regulating football safety risks because it is such a recent phenomenon. Scientific research is still being proven and not enough time has passed for the recognition of this problem to produce action. This timeline shows the period of time that passed between the trigger events and legislative action for each of the case studies, with the trigger events and legislation actions defined below.

The timeline in figure six shows that the amount of years between the determined trigger event and determined legislation action for the USPS, agriculture, and professional boxing is nineteen, fifteen, and thirty-four, respectively. This is evidence as to why the government has not intervened. In the three cases, it took a significant amount of time between a trigger event and policy implementation, which means that it would take approximately ten more years before it would be expected that the government pass legislation and intervene in workplace safety in the NFL. This research finding is significant because it provides a template for analyzing government actions in response to workplace safety. Although in theory the government should treat the NFL just like any other industry, in practice, the recent nature of the situation, the uniqueness of the NFL, and the already existing internal policies have temporarily prevented the government from intervening.

Figure 6



**USPS Trigger** - Death of Michael McDermott in 1979

**USPS Legislation** - Public Law 105-241 of 1998

**Agriculture Trigger** - "Harvest of Shame" in 1960, small incidents over time

**Agriculture Legislation** - OSHA created, major jurisdiction over Agriculture in 1975

**Boxing Trigger** - Death of Benny Paret in 1962

**Boxing Legislation** - Professional Boxing Safety Act of 1996, Muhammad Ali Boxing Reform Act of 1999

**NFL Trigger** - Death of Junior Seau in 2012, confirmation of scientific research in 2000s

**NFL Legislation** - TBD

### Limitations and Further Research

This paper looks at how federal government safety regulation policy can be applied to the concussion crisis in the NFL. An inherent limitation to this study is the ambiguity that surrounds concussion diagnosis and treatment. It is difficult to determine the extent of brain injuries due to concussions until later on in life. Technically, concussive phenomena, such as the swelling of the brain, are immediate but often the symptoms are delayed (Johnston, et al., 2001). In addition, it is important to note that the professional football industry is constantly changing and developing. Coaches and players move from team to team and there is a lack of consistency in that sense.

This analysis only looks into professional football, excluding college and youth football. However, these pre-professional levels of football tend to mimic actions taken by the NFL. Changes in NFL concussion policy regulation by the federal government would most likely trickle down to other levels of football. Additional research would be required to determine these exact effects and how the government could or should intervene in college and youth football. This situation is unique because the safety involves young children and students as opposed to professional adults. Additionally, this analysis exclusively looks at the federal government, specifically the legislative branch. State and local governments do have a stake in workplace safety issues and professional sports issues; however, more research would need to be conducted in order to explore the relationship between the federal and local governments and how this affects workplace safety. Additional follow-up research will be necessary in order to develop an effective and sustainable government policy that can keep up with the constantly changing environment of the NFL.

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