1-1-2005

Five year study of the effectiveness of safety incentive programs instituted at BJ's Wholesale Club

Peter D. Van Derlyke

Follow this and additional works at: http://scholarworks.rit.edu/theses

Recommended Citation

This Master's Project is brought to you for free and open access by the Thesis/Dissertation Collections at RIT Scholar Works. It has been accepted for inclusion in Theses by an authorized administrator of RIT Scholar Works. For more information, please contact rit.scholarworks@rit.edu.
Five Year Study of the Effectiveness of
Safety Incentive Programs Instituted at BJ’s Wholesale Club

Peter D. Van Derlyke

Thesis Project submitted in partial fulfillment of the requirements for the degree of
Masters of Science in Environmental, Health & Safety Management

Department of Civil Engineering Technology
Environmental Management & Safety
Rochester Institute of Technology
Rochester, NY

Approved by:

Maureen S. Valentine
Maureen Valentine, PE, Department Chair

J. L. Schneider
Jennifer Schneider, Sc.D., CIH, Thesis Advisor
Title of thesis: Five Year Study of the Effectiveness of Safety Incentive Programs Instituted at BJ’s Wholesale Club

I, Peter Van Derlyke, prefer to be contacted each time a request for reproduction is made. If permission is granted, any reproduction will not be for commercial use or profit. I can be reached at the following address:

Date: 5/22/05  Signature of Author: Peter Van Derlyke
Acknowledgements

I would like to thank Professor Jennifer Schneider. She not only shared with me her knowledge and wisdom from her years of experience in the safety realm; she also gave me the determination and drive to complete this project. Without her guidance and help none of this would have been possible.

I would like to thank Mark Meek and Stephanie Foley of BJ’s Wholesale Club for their willingness to help me obtain data and for their guidance over the past six years. Their knowledge of the Clubs was of great assistance to me during this time. Thank you also to all those employees who took the time to answer my questions.

I would also like to thank the following people for never giving up on me, pushing me to finish, proof reading, guidance, putting up with me and my neuroses and for just being there: Mom and Dad, Cricket, John P., Colby and Jarod. Without your love and support I would have never made it through.
Table of Contents

List of Tables vi
List of Figures vii
Appendices viii
Abstract ix

1.0 Introduction 1
   1.1 Topic 1
   1.2 Research Questions 3
      1.2.1 Primary Research Question 3
      1.2.2 Secondary Research Question 3
      1.2.3 Tertiary Research Question 3
   1.3 Definitions 3

2.0 Background 5
   2.1 General BJ's Wholesale Club Information 5
   2.2 Accident Frequency/Incident Rates 6
   2.3 Accident Costs and Allocation 7
   2.4 Safety Task Force 9

3.0 Literature Review 10
   3.1 Background Literature 10
      3.1.1 Brief History of Safety Incentive Programs 10
      3.1.2 Conflicting Views of Safety Incentive Programs 11
         3.1.2.1 Pros of Safety Incentives 11
         3.1.2.2 Cons of Safety Incentives 16
3.1.3 Safety Incentive Implementation Process 21

3.2 Conclusion 24

4.0 Methods/Analysis 26

4.1 Tasks and Objectives 26

4.1.1 Develop Safety Incentive Programs 26

4.1.1.1 Analysis of Prior Safety Incentive Programs 26

4.1.1.1.1 Safety Bingo 27

4.1.1.1.2 Safety Grab Bag 28

4.1.1.1.3 Safety Jeopardy 29

4.1.1.1.4 Safety Food Parties 31

4.1.1.1.5 Team Safety 31

4.1.1.1.6 What’s Wrong With This Picture 32

4.1.2 Develop an Accident Analysis Program 33

4.1.3 Develop Entire Program 37

4.1.4 Club Selection and Incentive Program Distribution 38

4.1.5 Evaluate Safety Awareness 38

4.1.5.1 Employee Questionnaire 38

4.1.5.2 Manager’s Comments 39

5.0 Results 40

5.1 Evaluation of Safety Incentive Programs 40

5.1.1 Evaluation of Implementation Year 40

5.1.2 Evaluation for the Five Years Following 42

5.2 Evaluation of Safety Awareness 46
5.2.1 Employee Questionnaire

5.2.2 Manager's Comments

6.0 Analysis and Discussion

6.1 Effectiveness of Safety Incentives During Implementation Year

6.2 Effectiveness Over a Five Year Period

6.2.1 Confidence Limits

6.2.2 Incident Rate Spikes

6.2.2.1 Medford, NH

6.2.2.2 Portsmouth, NH & Willoughby, OH

6.3 Safety Awareness

6.4 Manager's Opinions

6.5 Concealing Accidents

7.0 Conclusions

7.1 Important Results

7.2 General Comments

7.3 Uniqueness

7.4 Meeting Thesis Project Requirements

7.5 Comments on Initial Hypothesis
List of Tables

Table 1- B J's WC Rate Average vs. NAICS Code 45291/SIC Code 5399 OSHA Rate Average 7

Table 2- Safety Incentive Questionnaire 39

Table 3- "Team Safety" Safety Incentive Program Incident Rates (IR) During Implementation Year 40

Table 4- "What's Wrong With This Picture" Safety Incentive Program Incident Rates (IR) During Implementation Year 40

Table 5- "Safety Jeopardy" Safety Incentive Program Incident Rates (IR) During Implementation Year 41

Table 6- "Safety Bingo" Safety Incentive Program Incident Rates (IR) During Implementation Year 41

Table 7- "Safety Grab" Safety Incentive Program Incident Rates (IR) During Implementation Year 41

Table 8- Five Year Evaluation of "Team Safety" Safety Incentive Program Incident Rates (IR) 43

Table 9- Five Year Evaluation of "What's Wrong With This Picture" Safety Incentive Program Incident Rates (IR) 43

Table 10- Five Year Evaluation of "Safety Jeopardy" Safety Incentive Program Incident Rates (IR) 44

Table 11- Five Year Evaluation of "Safety Bingo" Safety Incentive Program Incident Rates (IR) 44

Table 11- Five Year Evaluation of "Safety Grab" Safety Incentive Program Incident Rates (IR) 45
List of Figures

Figure 1- Accident Analysis Spreadsheet 34
Figure 2- Accident Analysis Department Graph 35
Figure 3- Accident Analysis Month Graph 35
Figure 4- Accident Analysis Accident Result Graph 36
Figure 5- Accident Analysis Accident Type Graph 36
Figure 6- Accident Analysis Injury Type Graph 37
Figure 7- Confidence Limits for Greenfield 55
Figure 8- Confidence Limits for Sennett 56
Figure 7- Medford, NH Five Year Incident Rates 57
Figure 8- 5 Year Incident Rates for Willoughby, OH & Portsmouth, NH 58
Appendices

Appendix A- Accident Analysis Program
Appendix B- Safety Incentive Program Handout
Appendix C- Safety Task Force Questionnaire
Appendix D- Manager's Safety Incentive Program Interview Summary
Appendix E- Five Year Incident Rate Graphs
Works Cited
Abstract

Safety incentive programs have been employed for many years as a means of keeping employee injuries under control. There are many ways incentives can be implemented and little is known about which are the most effective. This thesis project reports on a study conducted over five (5) years at some of BJ's Wholesale Club's highest accident frequency rate locations. Each year several locations with high accident frequency rates were chosen to be on what was called the Safety Task Force. The purpose of this thesis was to determine if safety incentives would aid in the reduction of workplace accidents. This thesis project tracked, reviewed and compared accident frequency at 24 Clubs located throughout the East Coast between the years of 1999 through 2004. The results were as follows: 1) the total number of accidents that occurred during the time each Club was on Safety Task Force was reduced; 2) the majority of Clubs were able to keep their accident rates low in the years following their participation on Safety Task Force; 3) safety awareness was heightened at each of the Clubs; 4) the safety incentives did not seem to contribute to the non-reporting of accidents. This thesis project also discusses the importance of adding safety awareness to an incentive program, pros and cons of offering incentives to employees to reduce accidents and the measures taken at each Club while they were participating in Safety Task Force.
1.0 Introduction

1.1 Topic

The focus of this thesis project was to evaluate the effectiveness of safety incentive programs instituted at some of BJ’s Wholesale Clubs with the highest incident rates. To evaluate the effectiveness of these programs, areas of concern were examined. The total number of accidents that occurred during the time of the incentive programs was tracked. Then the number of accidents that occurred at the locations in the four years following the implementation of safety incentive programs was examined to determine if the safety incentive program had an effect on raising the safety awareness in the employees throughout the Clubs.

A majority of U.S. businesses use some sort of safety incentive, and most safety professionals believe that they are an important element in any safety and health program (Prichard, 2001). Nevertheless, safety incentive programs have been a controversial topic and have been widely debated throughout the safety professional community. At the beginning of this project, BJ’s Wholesale Club had some incentive programs in place but little in the way of measuring their effectiveness.

This project is significant for several reasons. The basic drive of any and all safety related programs is to be successful. Success in the safety profession is most commonly gauged by the number of accidents that occur at a facility during the year. There is much interest in determining whether or not implementing
safety incentives will help add to that success. In other words, does implementing a safety incentive program help drive down the number of work related accidents and injuries? And, are those decreases related to actual reduction of accidents or to less reporting?

Safety incentives are equally important in regards to the cost associated with accidents. Reducing the number of injuries that occur at a facility can help control a controllable cost. If implementing safety incentives can help reduce the number of injuries at a facility, it will in turn help in cost savings. Costs associated with accidents differ depending on which study is read, but the average costs fell somewhere in $46.1-$69.8 billion range in 2001 for all accidents in the U.S. During 2001, 4,881,800 injuries were reported in private industry. Of these incidents, 2,409,400 caused employees to miss work. Research from the Bureau of Labor Statistics reports that workers missed 1,465,300 days of productive time as a result of on-the-job injuries (Herman, 2003).

In this thesis project, it will be determined whether or not safety incentives aided in reducing the number of workplace injuries at the Clubs studied both during the year the incentive was introduced and during subsequent years thereafter. It will also help to determine if safety awareness was increased in the Clubs as a result of the introduction of safety incentive programs.
1.2 Research Questions

1.2.1 Primary Research Question
Did implementing a safety incentive help reduce the number of accidents that occurred without employees or Club management concealing accidents?

1.2.2 Secondary Research Question
Were the Clubs studied able to keep the number of accidents down in the years following the implementation of the safety incentive program?

1.2.3 Tertiary Research Question
Did the safety incentive program help increase safety awareness at the Clubs?

1.3 Definitions
For the purpose of this project, the term “safety incentive” will be used to describe a plan put in place that encourages or motivates the employee to work safely. As Bob Brown (2003) states in his article “Safety Incentives: Are they motivators, or just lost in the shuffle?” a typical incentive program sets goals such as days or hours without a certain level of injury. It then designates the level of rewards if these goals are met.
The term “Safety Task Force”, which is a company specific term, refers to the group of employees at BJ’s Home Office which implements and monitors the safety incentives on a yearly basis. This group is comprised of:

- all six safety professionals that work for the company
- at least one representative from the risk management department
- at least one representative from the maintenance department
- at least one representative from the internal auditing department
- and finally, two members of top management (Assistant Vice President (AVP) or above)

Finally, it is important to point out that the term “incident rate” in this project reflects a worker’s compensation incident rate, not an OSHA rate, unless otherwise noted. This incident rate is based on the number of medical claims, or those injuries which resulted in an employee seeking medical treatment. This rate may be higher than an actual OSHA rate since all injuries receiving medical treatment were included even though not all of those medical injuries were necessarily OSHA recordable. The formula for this incident rate is as follows:

\[
\text{Worker’s Compensation Rate} = \frac{(N \times 200,000)}{\text{Hours Worked}}
\]

Where:

\[
N = \text{Total Number of All Medical Claims}
\]
2.0 Background

2.1 General BJ’s Wholesale Club Information

BJ’s Wholesale Club Incorporated is a large multi-state wholesale club chain, selling bulk merchandise to the general public at a reduced rate. The first Club was opened in Medford, Massachusetts in 1984 and today, 156 Clubs are in operation in the eastern United States from Maine to Florida and in the state of Ohio. During BJ’s inception, safety was not a main concern among top management or shareholders. Over the course of time however, with rising worker’s compensation claims and costs, the need for a special emphasis on safety was recognized. In the early 1990s a safety/sanitation department was developed to oversee all issues pertaining to worker safety and food safety. Initially, one person was in charge of both safety and sanitation (food safety). Because BJ’s sells large amounts of food items, most of the emphasis was placed on the food safety side. By the mid-1990s, additional employees were hired and two departments were formed: the Safety Department and the Sanitation Department. Once again, safety was left in the hands of one person who, by now, was in charge of safety for over 90 locations. In 1999, as the company was rapidly expanding, top management and the company’s shareholders saw the need for safety to become more regionalized. The concept was that all locations would be regions comprised of 25-30 Clubs. A Regional Safety Coordinator would be responsible for the training, auditing, program development and program implementation for each of their respective regions. With these Regional Safety
Coordinators in place, the company was hoping to be able to increase safety awareness at the Club level as well as reduce the company's worker's compensation claim rates. Today there are five Regional Safety Coordinators, each responsible for 25-30 Clubs, that report directly to a Safety Manager at Home Office.

2.2 Accident Frequency/Incident Rates

Now that the Bureau of Labor Statistics (BLS) follows the North American Industry Classification System (NAICS), BJ's Wholesale Club is compared to other similar industries under the NAICS code number 45291 (Warehouse Clubs and Superstores). In 2003, the average OSHA incident rate of nonfatal occupational injuries and illnesses for this Code was 7.9. In comparison, during the calendar year of 2003, BJ's Wholesale Club's entire chain worker's compensation incident rate average was 6.27. For 2004, this average was lowered almost 14% to an average of 5.40.

Before 2003, the BLS still compiled data under the Standard Industrial Classification (SIC) coding system. For the years prior to 2003, the data used to compare BJ's Wholesale Club with other similar industries was SIC code 5399. BJ's entire chain has been consistently lower, with the exception of 1999, than the national average for their classification when comparing incident rates.
Table 1- BJ’s WC Rate Average vs. NAICS Code 45291/SIC Code 5399 OSHA Rate Average

<table>
<thead>
<tr>
<th>Year</th>
<th>NAICS Code 45291/SIC code 5399 OSHA rate Average</th>
<th>BJ’s Wholesale Club WC rate average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>6.7</td>
<td>7.3</td>
</tr>
<tr>
<td>2000</td>
<td>7.0</td>
<td>6.6</td>
</tr>
<tr>
<td>2001</td>
<td>7.1</td>
<td>5.8</td>
</tr>
<tr>
<td>2002</td>
<td>6.7</td>
<td>5.4</td>
</tr>
<tr>
<td>2003</td>
<td>7.9</td>
<td>6.3</td>
</tr>
<tr>
<td>2004</td>
<td>Not Available</td>
<td>5.3</td>
</tr>
</tbody>
</table>

2.3 Accident Costs and Allocation

The cost of workplace injuries grew 6.5 percent between 2001 and 2002, and made up more than half of the total growth [in cost] between 1998 and 2002 (12.1 percent) after adjusting for inflation in medical and income benefits (Liberty Mutual, 2004). During the calendar year of 2004, BJ’s Wholesale Club had a total of 717 workers’ compensation claims for their 156 locations. These claims have already imposed a direct cost on the company of $1,273,586; and with 276 claims still on open status; these costs could reach as high as or higher than the company’s estimated costs of $2,652,586. These costs do not reflect the indirect expenses associated with each claim such as: overtime costs for the workers who had to fill in, the cost of lost time by the employees who had to stop work to assist in helping the injured employee and filing paperwork, costs associated with the decline of worker morale, etc.
Given that BJ's Wholesale Club is a self insured company, medical costs associated with workplace injuries have been a concern among top management. Every dollar spent on medical claims due to workplace injuries comes out of the operating costs associated with running the company. In order for BJ's Wholesale Club to survive in such a tight market, it is necessary for them to reduce these costs. This necessity is reflected in the average cost of an accident. On average, a medical only injury costs BJ's Wholesale Club $6,000 (Dean, 2004). This number reflects both the direct and indirect costs associated with a medical claim. Since the average sale of an item results in a 1-cent profit for every dollar spent, BJ's would have to sell approximately $600,000 in products to make up the loss of one medical only injury claim (Wedge, 2004). Moreover, the average cost of a lost-work-day (LWD)\(^1\) claim is $26,000; meaning it would take over $2 million dollars in sales to recoup their losses for this type of claim.

To help increase awareness at the Club level, each medical claim that occurs at a Club is billed directly back to that Club. In other words, for every medical only claim that occurs at a Club that Club's Profit and Loss report is charged $6,000 and for every LWD claim the individual Club is charged $26,000. Top level management wanted some ownership of responsibility at the individual Clubs for accidents. Since every Manager at each Club has the possibility to earn a bonus that is a direct reflection of profitability, upper management hoped that this

\(^{1}\) In this case, a LWD claim is only after the worker's compensation waiting period. Generally seven (7) days in most states BJ's operates in, the exceptions being Delaware and Virginia which have a three (3) day waiting period. This does not reflect the definition of an OSHA LWD claim.
charge out system would help in the reduction of accidents by causing managers to be more proactive rather than reactive in regards to safety.

2.4 Safety Task Force

The Safety Task Force was first developed in the mid-1990s. The main goal of the task force was to target those Clubs that had higher than normal worker’s compensation claims from the previous year. Each year, 15-25 Clubs were targeted based on their worker’s compensation incident rate, severity of incidents and medical claims versus LWD claims. These Clubs were instructed by the Safety Task Force to develop plans to help reduce the number of incidents that were occurring at their locations. The plans were to be solely developed at the Club level and were to include both safety awareness and safety incentive plans. Meetings were held for each Club to present their plans and the task force accepted, rejected or modified the plans that were presented. Once plans were agreed upon and accepted, the General Manager, along with the other Club Managers, were to institute and monitor the effectiveness of the plan. At this time, the only measure being used to track the effectiveness of the incentive program was the worker’s compensation rate.

By the time of this study, the Safety Task Force had evolved to the point where the Clubs were given safety incentives to choose from based on previous years’ best practices. For this study, the programs were clearly defined and plans were all pre-approved in order to keep things consistent throughout the study.
3.0 Literature Review

3.1 Background Literature

3.1.1 Brief History of Safety Incentive Programs

The practice of safety incentives and employee recognition has been a long standing tradition for many companies, however; there is not much literature on the origin and history of safety incentives or employee rewards.

With worker's compensation becoming not just a hot topic, but a growing expense throughout the 1980's, more and more company owners and corporate managers began demanding of their insurer's loss control representatives that they provided more than just traditional risk management approaches (Marshall 2003). Part of this need grew out of the painful fact that an increasing number of employees were taking advantage of the worker's compensation system without any regard to actual injuries. Such claims included workers who had been laid off or terminated for cause or employees who were faking an injury hoping for a big payday (Marshall 2003). No safety program alone would ever be able to prevent those types of misbehaviors. As Marshall (2003) further states:

Thus, there began an increasing demand in the market place for ways to motivate workers to more closely participate in the safety process. This became an absolute necessity in some states, such as California, where new legislation required safety incentives as a component of an overall safety program. In a very short span of time, safety incentive consultants, and safety incentive companies, began marketing themselves
as another effective risk management tool. And, indeed, worker’s compensation claims started dropping nationwide and continued to do so throughout the ‘90’s.

During this research, it was found that many corporations use some type of safety incentive program. These programs ranged from safety bingo to relating the incentive to some form of participation in safety meetings and/or programs. Smith (2004) found this as well when she reported, employers such as Marriott Hotels, Frito Lay, Hamilton Beach, Kraft Foods, Exxon and the US Postal Service have motivated employees by using Peavey Safety Jackpot program, which features scratch-off game cards that employees use to collect points they can redeem for prizes. The prizes used for these incentives also varied widely. Examples included prizes consisted of days away from work with pay to twenty dollar gift cards all the way up to a new automobile.

3.1.2 Conflicting Views of Safety Incentives

3.1.2.1 Pros of Safety Incentives

There is considerable debate over whether or not safety incentives work. This is the wrong question; it is obvious that incentives do work (Downing, 2002). Historically it has been shown that 96 percent of all workplace related injuries have occurred due to unsafe acts; so, the more important question is how and when incentives are more effective at preventing unsafe behavior. Behavioral scientists have given us some important information regarding behavior change. According to Marshall (2003):
Behavior scientists have stated that behavior that is reinforced (incentivized) will occur more frequently than behavior that is not reinforced. Moreover, researchers have found that for every 330 unsafe acts, twenty-nine minor injuries will occur and only one of the 330 will result in a lost time incident. What actually gets reinforced, and is therefore more likely to occur, is the shortcut the person who is behaving unsafely took to save time. The only thing that will counter this effectively is to reinforce the safe behavior that would prevent the unsafe behavior from occurring.

Some believe punishment (reprimands, firings, suspensions, etc) would help to prevent unsafe behavior from occurring. Punishment seems to make people not want to report minor injuries for fear of reprimand which could increase the likelihood of the unsafe behavior to continue as well as increase the risk of injury or accident. In comparison, if safe behavior is recognized and rewarded, it is easier to encourage people to work more safely. Safety incentives seem to help in this attitude shift. As said by Downing (2002), when attempting to motivate people to change, there is the “10-80-10 rule”:

10 percent of the people will do it just because it is the right thing to do.

80 percent of the people will do it but require some motivating factor.

10 percent of the people won’t do it no matter what.

The target of a safety incentive program is the 80 percent of the people that require motivation. When examining that rule, if one can successfully motivate that group of people to work safely, 90 percent of the organization will be involved in achieving the safety goal. As Marshall (2003) explains, these days, most safety managers fall into one of two categories: those of the old school who believe that rewarding an employee for something he or she is supposed to do in
the first place (work safely) is unnecessary and sends the wrong message. Then there are those who recognize that safety is more than just facility inspections, ongoing safety training, etc. They recognize that creating an effective safety program requires, on some level, the employees’ commitment to make it work. And just as an auto company can design and build a great car, it’s not going to go very far without gas. Such safety managers recognize that safety incentives are the gas that will drive the overall safety program.

A safety professional’s main goal at any corporation is to provide a safe working environment for employees. This goal also includes educating, motivating and monitoring the employees on how to perform their job duties safely. The statistic most commonly used to measure this goal of safety performance for all employees working safely is the reduction of the number of workplace accidents. Safety incentive programs have been widely used as one tool to help increase this performance. According to Smith (2004), incentive programs aimed at individuals increased performance by 27 percent, programs aimed at teams increased performance by 45 percent and some 92 percent of workers surveyed indicated that they achieved their goals because of incentives. In this frame of reference, safety incentives do seem to have a positive impact on the performance of workplace safety.

Advocates of safety incentives believe the use of a “carrot” encourages and promotes appropriate safe behavior (Prichard, 2001). Employees’ value
recognition, it shows them that management is paying attention to them and every aspect of their job duties. Incentives are a way for companies to show their employees that they care for them and are willing to recognize those who perform their job safely. Over the long term, behavior can be changed by creating heightened safety awareness and providing financial rewards for proper behavior. The results of this changed behavior can be improved morale of the workers and a reduction of worker’s compensation claims and costs for the employer.

Safety incentives can help raise the level of safety awareness throughout a facility. As discussed earlier, many accidents and injuries occur due to unsafe acts. At BJ’s Wholesale Club, many of these unsafe acts are easily correctable by simply raising the level of safety awareness. Safety incentives help to keep safety in the forefront of an employee’s mind. If an incentive is available, an employee is more likely to consider their actions before acting upon them.

If an employee knows they have the chance to win a free dinner for themselves and the rest of their co-workers, they may be more likely to choose a safer way of performing their job duties. An example was stated by an employee that works at one of the BJ’s locations in the mid-Atlantic region. Because he knew the Club was only fifteen days away from achieving a goal that would reward everyone with a dinner, he chose to walk around a pallet instead of across it like he had done so many times before in the past. He realized that walking on the pallet could cause him to twist an ankle or result in another type of injury that would not
only hurt himself physically but also hurt everyone else that had worked so hard to make it to the milestone. It has now become second nature for him to take into consideration acts as simple as walking across a pallet before carelessly endangering himself (Schott, 2004).

Proponents of safety incentive programs also suggest that safety becomes more interesting when a safety incentive is introduced into the overall safety program. A good example of this was found in Sandy Smith’s article “Safety Incentives: It’s Not Just a Breakfast Anymore” (2002) where she described International Paper’s Liquid Packaging Division’s program. In the article, she states:

Amidst the laughter and fun, valuable lessons about personal protective equipment (PPE) are being taught and remembered. Childers, EHS coordinator at the facility, works hard to keep the safety program fresh at the Plant City location, which employs 230 management and hourly employees who manufacture juice and dairy cartons. At that location, which is a participant in OSHA’s Voluntary Protection Program, rewards, recognition and fun are added to the foundation created by a strong safety program.

Incentives can also play a role as a public relations tool for the safety department and safety managers. Employees view the safety department as caring when they are allowed to participate in such programs. They feel that the managers are watching and rewarding them for performing their jobs effectively and safely.
3.1.2.2 Cons of Safety Incentives

A primary concern with incentive programs is that they are a form of bribery (Prichard, 2001). Some professionals feel that safety incentives are rewarding workers for something they should already be doing: working safely. They believe that the incentive for working safely should be the health and well-being of the employee. Because some view incentive programs as a form of bribery, they believe that supporting incentive programs is to assume that all accidents are a result of unsafe acts. This implies that safety incentives are used to bribe employees to work more safely and act differently when it comes to work. Incentives do not obligate any change in existing processes or procedures (Prichard, 2001).

Some also argue that safety incentives encourage employees to hide accidents. William Atkinson points this out in his 2004 article “Safety Incentive Programs: What Works.” In it he states,

While the philosophy behind such programs seemed sound (giving rewards to employees for results), there were a number of criticisms leveled at such programs by some safety consultants, some union leaders and even OSHA. First and foremost on the list of concerns was the idea that such programs could create pressure on employees not to report accidents, injuries, near misses or other incidents so as to keep their “record” intact. While one might expect that coworkers would lead this pressure (and they frequently did), there were even some documented cases of supervisors and managers pressuring employees not to report accidents. These cases tended to be in situations where rewards that were designated for teams or whole department were on the line.
In a September 1996 issue of *Safety & Health*, an article entitled “Can Safety Be Too Much Fun?” examined the point that while some safety incentive programs may help motivate employees; others can do more harm than good. An appealing point made in the article highlighted that with all the apparent problems related to safety incentive programs (one being the allegation that incentives may promote employees and employers to not record workplace accidents if a gift or reward is at stake), members of an OSHA advisory committee have voiced:

Strong safety concerns that contests lead to employees not reporting work-related injuries and illnesses...part of the twist on the argument notes that Section 11 (c) of the federal OSHA act, and similar provisions in each of the acts administered by the state OSHAs provide that employees can’t be discriminated against for exercising any right under the act. Since employees have the right to report that they have been hurt on the job, and games that discourage the exercise of that right could be considered discriminatory.

Union groups are in opposition to safety incentive programs for these same reasons as well. Many union leaders believe that instituting safety incentive programs encourages workers not to report accidents that occur on the job. They feel that these incentive programs place the blame of injuries solely on the workers’ unsafe behavior. Absent in this “blame the worker” theory is the role that hazardous workplace conditions play in job-related injury, illness and death (Lessin, 1999). Union officials feel that safety incentives are a better deal for corporations than they are for the employees. With safety incentives promoting the non-reporting of accidents, they feel that corporations benefit by a lower
OSHA recordable rate which in turn lowers the chances of that company to be target for an OSHA inspection. Moreover, they feel that if employees don’t report injuries and illnesses as work-related, they may not file a worker’s compensation claim which helps the company reduce premiums and payments. In the article “Safety Incentive and Injury Discipline Policies: The Bad, the Worse and the Downright Ugly,” Nancy Lessin, 1999, also argues that workers and workplaces suffer with safety incentive programs because

When workers are discouraged from reporting work-related injuries and illnesses, they may not receive early diagnosis and treatment of their ailments, as well as, the compensation they deserve.

Also,

When job injuries and illnesses are not reported, the hazards on the worksite that caused them are not identified and targeted for elimination or correction. Hazards in today’s workplaces that cause or contribute to job injury, illness and death include toxic chemicals; unguarded machines; understaffing; improperly designed tools, equipment and workstations; fatigue from long hours; heavy work loads; rapid pace of work; production pressures and a myriad of other safety, chemical, biological, and physical and work organization factors. Hazards that are not eliminated or reduced will continue to hurt or maim additional workers.

William Atkinson further discusses this in his 2004 article entitled “Safety Incentive Programs: What Works?” There he states:
Another concern was that failure to report incidents, even minor incidents and near misses, was defeating the whole purpose of a proactive safety program, which is to generate as much information as possible on trends so that steps can be taken to curb future problems. That is, if employees are pressured not to report incidents, management will virtually have no information on which to base future safety initiatives. In fact, some experts suggested, employees should actively be encouraged to report any and all incidents so preventative measures could be introduced.

Another concern among those who oppose safety incentives is that they can have a damaging effect on safety performance and employee behavior over time. Dan Prichard further explains this is in 2001 article “Safety Incentive Programs: A Critical Assessment.”

Actual practices have shown that employees become disillusioned with incentive plans when they feel exploited because the expected rewards are not forthcoming. The criteria and performance evaluation must be seen as objective and within the performer’s control. The recipient should consider the reward equal to the effort that produced it. Too insignificant, and the incentive will be insulting and ineffective; overdone, and the balance of fairness will be upset. Extensive human behavior research has shown that when people are led to think about what they will get for doing a task (the reward), they typically do it less well and/or lose interest in it.

Finally, opponents of safety incentive programs suggest that employees could be ostracized by fellow co-workers if they were to be the one to spoil the record before the goal was met. No one wants to be viewed as the person who let the
team down. On September 28th, 1989, ENR published an article describing a
company that was offering pizza, savings bonds and jackets to employees as part
of a safety incentive program’s goal of remaining lost time injury free for an
entire year. Some of the comments in that article help strengthen this point.

“I was so frightened that I was going to spoil the record of 400
days that you can’t imagine.”

“I think that if somebody spoils the record or gets hurt, he’ll get
buried in concrete so nobody will ever find out about it and they
won’t lose the record.”

As clearly shown, there are as some arguments in opposition to safety incentive
programs. The major concern with safety incentives is the non-reporting of
accidents. This concern can be reduced, if not eliminated, by introducing some
preemptive measures before implementing an incentive program. There seems to
be many more motivating factors for advocating them. After researching the
topic, there seems to be valid reasons for instituting safety incentive programs, as
long as the basic safety system is in place. According to the research, incentives
seem to be a motivating factor that may encourage employees to perform their
jobs safely (Prichard, 2001). If incentives are effective in motivating employees
to work safely, the benefits could be immeasurable. A safe working environment
enhances employee morale, which in turn affects the efficiency of the employee,
which affects the efficiency of a department, on so on. Those types of effects are
difficult to measure, but can be a great asset to an organization.
3.1.3 Safety Incentive Implementation Process

When it comes to implementing a safety incentive program, everyone is in agreement that a basic safety program needs to be in place first. Safety incentives should be one tool in the safety system and should not be used as a substitute for an entire safety program. As Bob Brown said in his 2004 article “Safety Incentives: Are They Motivators, or Just Lost in the Shuffle”; Incentive and recognition programs can enhance a good safety program, but on the other hand they can hinder a safety program that is just starting out.

As with all safety programs, safety incentives need to involve all managers and have their complete commitment. Without this level commitment, safety incentives as well as safety programs will surely fail. With manager’s commitment, a culture of safety awareness and motivation throughout all levels of the company can be cultivated.

Before implementing any safety incentives into the safety program, it is important to first understand where they will fit into the overall safety program. Greg LaBar addresses this issue in his 1997 article entitled “Putting Incentives to Work”, in it he states that to understand where a safety incentive program fits into the overall scope of a safety program involves understanding the three keys to motivating workers. These three key points include:
Hiring and Firing Procedures: Employers should recruit safety-conscious workers and emphasis during hiring the importance of adherence to safety procedures and the penalties for non-compliance.

Communication and Culture: Top and middle managers should have safety performance as part of their goals and a consideration in bonuses and promotions. This should encourage them to make safety a key part of the corporate culture.

Connections Between Behavior and Rewards: It is important that awards and incentives be clearly and quickly linked to specific performance measures.

Once it is established where and how a safety incentive program fits into the safety system of an organization, it is important to determine how to successfully set up the program. Daniel Patrick O'Brien lays the groundwork for this in his July 2000 article “Winning with Incentives: How to Improve Safety and Not Intimidate Workers.” In it he gives tens steps on how successfully set up a safety incentive program

1. Don't set a certain number of injuries, illnesses or incidents as a sole criteria for winning awards. This can easily drive reporting underground and actually work against improving your safety performance.

2. Avoid using the same program for long periods of time. Programs tend to get dry and stale and lose their motivating punch. Pay attention to your programs momentum. Thirty days isn’t long enough to get it going – and after a year it might have run its course.

3. Don’t stop your program because you had one bad performance period.

4. Be careful that you don’t set up employees for failure. This can happen if the program requires zero accidents.
5. Don’t have different levels of rewards for different groups, such as one for supervisors, and another for hourly employees.

6. Don’t skew reporting to try and save a “safe streak”. This must be combated with a strong reporting and investigation program. If not, the “walking wounded” will drive morale into the dirt.

7. Focus on rewarding desired behaviors and activities.

8. Behaviors and activities that get rewarded should be based on what your entire workforce does – from top management to line employees. Don’t let incentives been seen as a blame-the-worker program. Getting management involved will motivate everyone.

9. Focus on the goals that involve all your employees. The more involved employees become, the greater the chance you have of improving safety performance.

10. Everyone must have an equal chance to win. Don’t create one winner and 300 losers. This is an easy way to lose participation.

As it was previously noted in section 3.1.2.2 of this paper, one major concern of safety incentives is the hiding of workplace accidents. Although the ultimate responsibility rests on the shoulders of management and workers to report any and all accidents, there are some steps that can be implemented to help combat this problem. Daniel Patrick O’Brien (2000) gave five steps that can be taken to help alleviate the problem of under reporting.

One option is to focus only on injuries that result in an employee being absent from work for more that 24 hours. Urge employees to seek medical care as needed.

Have employees sign a roster certifying that they have had no work-related injuries that would disqualify them from a program.

Cancel an employee’s right to participate for non-reporting.
Don't view an incentive game as an alternative to a safety program. Be proactive. Game materials from some vendors are packaged with pads of safety suggestion forms and other materials. Set up consequences for foreman and supervisors who fail to report an injury they observe. Especially at small work sites, supervisors will know if an injury occurs.

3.2 Conclusions

Based on the literature found, it does seem that safety incentive programs have some positive impact on the total number of worker's compensation claims filed for companies that implement them. It is important to remember, however, that even those who advocate these incentive programs, recognize, and even emphasize, that a strong safety program is needed before even considering instituting incentives. A safety incentive should be one element of the whole safety program. Without the basics, an incentive program, as well as the entire safety system, will fail.

The major concern of the incentive program is under reporting. Under-reporting not only opens the door for fines under the OSHA regulations; but also masks potentially serious unsafe conditions in the workplace. As discussed earlier, there are steps that can be put into practice that will alleviate this issue but the ultimate responsibility falls on the workers and managers of the corporation. Measures need to be taken to ensure that under reporting does not occur. There are several actions that can be applied to discourage the non-reporting of workplace accidents. Employers can make employees sign a statement understanding that if
they conceal an accident, they will be automatically disqualified from any and all incentive programs. Another option can be to design an incentive that is not goal oriented. Many incentives are based on goals such as achieving a certain number of days accident free. Incentives can be tailored to recognize employees for understanding safety policies and procedures. These types of incentives can aid in raising the safety awareness throughout an organization which can have an indirect impact on reducing the number of accidents that take place. Since these types of incentives are not based on any kind of accident goal, there would be no need for employees to not report.

Another concern associated with incentive programs is that they are just a “quick fix.” They seem to work in the beginning but falter over time. Because it was difficult to find any hard evidence to support this in the research, part of this project is to determine if this is the case at BJ’s Wholesale Club. Much of the literature found dealt with organizations that instituted already preprogrammed incentives from outside companies and no long term data was collected. With this being the case, it is hard to comment on whether or not the theory of a “quick-fix” is accurate.
4.0 Methods/Analysis

4.1 Tasks and Objectives

4.1.1 Develop Safety Incentive Programs

4.1.1.1 Analysis of Prior Safety Incentive Programs

As previously discussed in the introduction, the concept of safety incentives was not new to BJ's. Since 1994 BJ's has had some form of safety incentive for Clubs with high incident rates. From 1994 until 1998, the Clubs were instructed to devise incentive plans with little or no guidance from Home Office. For the purpose of this project, a list of the incentive programs that were used during this time frame prior to 1999 was compiled and analyzed to see what, if any, had a positive impact to reduce the total number of worker's compensation claims. The programs that appeared to 1) have the most significant positive effect on reducing the total number of worker's compensation claims, 2) were easily administered and 3) were recordable, were put into practice for the Clubs selected for the safety task force in 1999. Sections 4.1.1.1 through 4.1.1.6 list the programs that had the best results during 1994-1998. Section 5.1.1 discusses the effectiveness of each these programs during the time of this study. These were the ones that were chosen to be implemented in the Clubs that were studied during this 5 year project.

The idea associated with all the incentive programs that were chosen to be part of this study is that they would raise the level of safety awareness throughout the
Club by using rewards that all employees would have the potential to win. The objectives of the incentives was to heighten employee’s safety awareness (observing unsafe conditions and unsafe acts), while they perform their duties.

Clubs that were chosen to participate in the safety incentive program had the choice of selecting one of the incentives listed in Sections 4.1.1.1.1 through 4.1.1.1.6. It was hoped that by giving the Clubs the freedom to choose their own incentive, it would give them ownership of that program and allow them to feel as though they were part of the decision making process.

The programs needed to be designed in a way that an employee with no training would be able to read and interpret the content. The Clubs’ managers were to be responsible for implementing and distributing the program to their respective employees. Sections 4.1.1.1.1 through 4.1.1.1.6 briefly describe the concepts behind each incentive program and how many Clubs participated in each. Full descriptions of each program are located in Appendix B- Safety Incentive Program Handout.

4.1.1.1.1 Safety Bingo

Although it was available for all Clubs, this incentive was designed for those in rural or suburban areas where bingo supports the culture of the communities that surround them. Prior experiences have shown that this incentive does not work
well in urban and metro areas since bingo is not a cultural paradigm in those communities.

The rules behind safety bingo are similar to the rules of parlor bingo, but tailored toward safety goals. A bingo card was attached to every employee’s paycheck at the start of the incentive process. Each day the Club remained accident free, a manager of the Club would pull a number from a bingo dispenser. The number that was drawn was posted on a safety board inside the employee lounge. The first employee to win bingo was rewarded a $25 gift certificate. If a medical claim accident occurred before there was a winner, the game was suspended and all bingo cards were destroyed. A new game resumed the day following the medical claim accident.

During this study, five Clubs chose the Safety Bingo incentive; all of which were located in rural or suburban areas. Results of the effectiveness of this program regarding incident rate for the first year of implementation are found in Table 6, located in Section 5.1.1 and for the entire five years of study in Table 11, located in Section 5.1.2.

4.1.1.2 Safety Grab Bag

This incentive was designed more for those Clubs located in urban and metro areas. Clubs in those areas have less time to dedicate to administering programs because of the high volume of merchandise they sell. This incentive program is
the easiest to administer and operate, yet still has positive effectiveness on reducing incident rates.

This incentive program rewards employees weekly. If the Club can remain accident free for seven consecutive days, two employees are randomly chosen to select, from a box, gift certificate cards that range from $25 to $100. If there is a medical claim accident within the seven days, the game is stopped and it resumes the day following the accident.

During this study, seven Clubs chose the Safety Grab incentive; all of which were located in urban areas. Results of the effectiveness of this program regarding incident rate for the first year of implementation are found in Table 7, located in Section 5.1.1 and for the entire five years of study in Table 12, located in Section 5.1.2.

4.1.1.3 Safety Jeopardy

Unlike the previous two incentive programs that were designed for geographic areas, Safety Jeopardy was tailored for Clubs with lower volume of sales because of the time it took to prepare and administer the program. This incentive program was run weekly and was based more on safety knowledge and raising awareness than most of the other programs, but also included reward system based on accident goals.
This incentive was based on the popular game show *Jeopardy* where contestants are to answer in the form of a question. Weekly, "answers" related to safety would be posted on a safety board located in the employee lounge. All employees were encouraged to write the correct question on a ballot and submit it in a ballot box. At the end of the week, a manager at the Club would sort all the correct ballots and from there, draw a random winner. This portion of the incentive was not based on any accident goals set by the Club. Even if a medical claim accident were to occur, a winner would still be drawn.

The second portion of this incentive was medical claim based. If the Club could remain medical claim accident free for thirty consecutive days, all employees would be treated to a food party.

This incentive was chosen as part of this study to see what affect incentives that were not as goal oriented had on the medical claim incident rate.

During this study, six Clubs chose the Safety Jeopardy incentive. Results of the effectiveness of this program regarding incident rate for the first year of implementation are found in Table 5, located in Section 5.1.1 and for the entire five years of study in Table 10, located in Section 5.1.2.
4.1.1.4 Safety Food Parties

Every Club that participated in this study had food parties as part of their incentives. While Clubs could have chosen this to be their only incentive, they were given the option to run this program along side of any of the other programs they had to choose from. The idea was that since all the other programs only allowed one or two winners, this would give all employees the chance to have free food.

This program rewarded employees at each Club if that Club were to remain medical claim accident free for thirty consecutive days.

No Club in this study chose to run this program alone. Every Club that participated had this as a side incentive.

4.1.1.5 Team Safety

The Team Safety incentive program was developed for Clubs that lacked employee cohesion at their locations. Although BJ’s is separated into several independent departments, teamwork and camaraderie in the entire organization is essential in promoting a safe work environment.

This incentive broke the Club into approximately four teams. An example team would consist of the meat, deli, bakery and receiving departments. These teams would work together to ensure that the departments remained free of unsafe
conditions and the employee would perform their job duties safely. Employees would perform random spot checks or audits within their team departments to ensure everything was safe. For instance, using the example given, a meat room employee would spot check the receiving department to make sure there were no unsafe acts being performed. If there were, that employee would correct it. For each week that teams remained accident free, one randomly selected member from each team would be selected to draw a prize from a goodie bag. If an accident occurred during the week, the only teams eligible to draw a prize would be the ones that did not have an accident. If the entire Club remained accident free for a thirty consecutive day period, the entire staff would be rewarded to a food party. If the Club did have an accident, the food party was cancelled and the thirty day countdown would resume the day after the accident.

During this study, two Clubs chose the Team Safety incentive. Results of the effectiveness of this program regarding incident rate for the first year of implementation are found in Table 3, located in Section 5.1.1 and for the entire five years of study in Table 8, located in Section 5.1.2.

4.1.1.1.6 What’s Wrong with This Picture?

Much like the Safety Jeopardy incentive, the What’s Wrong with This Picture incentive program place emphasis on the employee’s knowledge of safety procedures. This incentive was designed for Clubs with less volume in sales because of the time it took to prepare for it.
A predetermined time, either weekly, biweekly or monthly, was set on which staged photos of unsafe acts or unsafe conditions were posted on the safety board in the employee lounge. Employees were encouraged to determine what was wrong in the picture and write and submit their answers on a ballot entry. At the end of the set time, a manager would sort the correct answers from the incorrect ones and randomly choose a winner from that group. This program was not based on any accident goals set, which allowed everyone that submitted a correct answer the chance to win a prize at the end of the determined time.

During this study, four Clubs chose the What’s Wrong With This Picture incentive. Results of the effectiveness of this program regarding incident rate for the first year of implementation are found in Table 4, located in Section 5.1.1 and for the entire five years of study in Table 9, located in Section 5.1.2.

4.1.2 Develop an Accident Analysis Program

Before putting the safety incentives into operation at the selected Clubs, an accident analysis needed to be completed. Since it seemed the managers of the Clubs were losing focus on safety, a program was to be developed to help them understand where, and possibly how, the accidents were occurring in their respective Clubs.
A simple, but effective, spreadsheet was developed allowing them to enter each accident that had occurred during the calendar year of 1999. Each case that was entered prompted them to describe which department the accident had occurred in, the accident type and the injury type. An example of this spreadsheet can be found in Figure 1 and the complete spreadsheet, including graphs, can be found in Appendix A.

**Figure 1- Accident Analysis Spreadsheet**

From the information entered, separate graphs were automatically generated.

Each graph was then used to help determine if there were any trends with regard to the accidents that had taken place. The graphs showed the departments, the time of year, the accident type and the injury type of the collected data. Examples of these graphs can be found in Figures 2-6.
Figure 2- Accident Analysis Department Graph

Figure 3- Accident Analysis Month Graph
Figure 4- Accident Analysis Accident Result Graph

Figure 5- Accident Analysis Accident Type Graph
4.1.3 Develop Entire Program

With the accident analysis completed and the incentive programs developed, the next step was to pull everything together into a package that each Club could easily understand and implement. The development of the entire program needed to be done in a way that was easily manageable, interesting and effective.

With these concepts in mind, it was determined that a menu would be developed from which the Clubs could choose certain items. A restaurant theme seemed to be a fun way to present the plans to the Clubs. Plus, allowing the Clubs to choose their own program gave them a sense of autonomy. The title of this program was
Safety Café and it included a full menu and descriptions of each safety incentive and how to implement it. A complete copy of the program, which includes the incentive programs, can be found in Appendix B.

4.1.4 Club Selection and Incentive Program Distribution

Clubs were targeted by their 1999 incident rate. Any Club in the chain that had an incident rate over 10.0 was to participate in the program. Each Club that was selected to participate in the safety incentive program was instructed to: complete the accident analysis (found in Appendix A), adjust the break room to help heighten safety awareness and to choose an incentive program from the choices given.

4.1.5 Evaluate Safety Awareness

4.1.5.1 Employee Questionnaire

To determine the effectiveness the safety incentive programs had on raising the safety awareness at each Club, a questionnaire was attached to 25 random employee’s paychecks for each of the 24 participating Clubs. A copy of the questions is listed in Table 2 and a copy of the original questionnaire that was sent is located in Appendix C.
## Table 12- Safety Incentive Questionnaire

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>Yes</th>
<th>No</th>
<th>Not Sure</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were you instructed about the Club’s Safety Incentive Program when it was implemented/when hired?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did having the safety incentive program influence you in your daily job activities?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you feel more likely to confront a coworker working unsafely and tell them how to perform the task in a safe manner?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were you or any Team Members encouraged to hide accidents in order to keep an accident free streak?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If you got injured, would you hesitate in reporting it for fear of coworker backlash?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If you got injured, would you hesitate in reporting it for fear of losing the chance at the prize?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you feel that the overall safety atmosphere in the Club improved because of the incentive?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As a result of the incentive program did your general knowledge of safety increase?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you feel the safety incentive lost effectiveness over time; if yes please state why in comments section?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Which incentive was used at your Club (circle all that apply):

<table>
<thead>
<tr>
<th>Safety Bingo</th>
<th>Safety Jeopardy</th>
<th>Food Party</th>
<th>Team Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Grab</td>
<td>What’s Wrong With This Picture?</td>
<td>Not Sure</td>
<td></td>
</tr>
</tbody>
</table>

Of the 600 questionnaires attached to paychecks, 363 responses (approximately 61%) were collected and analyzed.

### 4.1.5.2 Manager’s Comments

To better understand the impact of safety incentives on the managers that ran the programs, phone interviews were conducted in May, 2005 with the General Managers who’s Clubs participated in this study. The interview was very informal and each manager was asked their opinion of the safety incentive program. A sample of at least two General Managers from each of the safety incentive programs was asked to participate in the interview.
5.0 Results

5.1 Evaluation of Safety Incentive Program

5.1.1 Evaluation of Implementation Year

All incentive programs were implemented by the Clubs in the beginning of 2000, based on the incident rates from 1999. Tables 2-6 illustrate the 1999 and 2000 incident rates of each Club that participated in the safety incentive program. These tables also show the percent improvement from the previous year for each Club as well as the safety incentive program they implemented.

Table 2- “Team Safety” Safety Incentive Program Incident Rates (IR) During Implementation Year

<table>
<thead>
<tr>
<th>Chosen Incentive</th>
<th>Willoughby, OH</th>
<th>Greenfield, CT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team</td>
<td>11.3</td>
<td>16.3</td>
</tr>
<tr>
<td>1999 IR</td>
<td>11.3</td>
<td>16.3</td>
</tr>
<tr>
<td>2000 IR</td>
<td>7.1</td>
<td>6.7</td>
</tr>
<tr>
<td>% Improvement</td>
<td>37%</td>
<td>59%</td>
</tr>
</tbody>
</table>

Table 3- “What’s Wrong With This Picture” Safety Incentive Program Incident Rates (IR) During Implementation Year

<table>
<thead>
<tr>
<th>Chosen Incentive</th>
<th>Danvers, MA</th>
<th>Salem, NH</th>
<th>Utica, NY</th>
<th>Watchung, NJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Picture</td>
<td>10.8</td>
<td>12.7</td>
<td>12.6</td>
<td>10.1</td>
</tr>
<tr>
<td>1999 IR</td>
<td>10.8</td>
<td>12.7</td>
<td>12.6</td>
<td>10.1</td>
</tr>
<tr>
<td>2000 IR</td>
<td>6.5</td>
<td>4.7</td>
<td>2.7</td>
<td>9.3</td>
</tr>
<tr>
<td>% Improvement</td>
<td>40%</td>
<td>62%</td>
<td>79%</td>
<td>8%</td>
</tr>
</tbody>
</table>
Table 4- “Safety Jeopardy” Safety Incentive Program Incident Rates (IR) During Implementation Year

<table>
<thead>
<tr>
<th>Chosen Incentive</th>
<th>Nashua, NH</th>
<th>Johnson, RI</th>
<th>Waterford, RI</th>
<th>Ocean Twp, NJ</th>
<th>Tilton, NH</th>
<th>Portsmouth, NH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999 IR</td>
<td>13.1</td>
<td>11.9</td>
<td>12.0</td>
<td>12.5</td>
<td>14.9</td>
<td>13.3</td>
</tr>
<tr>
<td>2000 IR</td>
<td>6.5</td>
<td>5.0</td>
<td>14.4</td>
<td>4.9</td>
<td>2.5</td>
<td>9.6</td>
</tr>
<tr>
<td>% Improvement</td>
<td>50%</td>
<td>58%</td>
<td>-20%</td>
<td>60%</td>
<td>84%</td>
<td>28%</td>
</tr>
</tbody>
</table>

Table 5- “Safety Bingo” Safety Incentive Program Incident Rates (IR) During Implementation Year

<table>
<thead>
<tr>
<th>Chosen Incentive</th>
<th>Oneonta, NY</th>
<th>Medford, NH</th>
<th>Auburn, MA</th>
<th>Clay, NY</th>
<th>Sennett, NY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999 IR</td>
<td>13.1</td>
<td>11.0</td>
<td>12.7</td>
<td>10.3</td>
<td>11.9</td>
</tr>
<tr>
<td>2000 IR</td>
<td>2.6</td>
<td>3.5</td>
<td>7.9</td>
<td>7.0</td>
<td>14.3</td>
</tr>
<tr>
<td>% Improvement</td>
<td>80%</td>
<td>68%</td>
<td>38%</td>
<td>32%</td>
<td>-21%</td>
</tr>
</tbody>
</table>

Table 6- “Safety Grab” Safety Incentive Program Incident Rates (IR) During Implementation Year

<table>
<thead>
<tr>
<th>Chosen Incentive</th>
<th>Reading, PA</th>
<th>Springfield, PA</th>
<th>Fairfield, CT</th>
<th>Queens, NY</th>
<th>Stoneham, MA</th>
<th>Rutherford, NJ</th>
<th>Yorktown, NY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999 IR</td>
<td>10.2</td>
<td>11.8</td>
<td>10.8</td>
<td>13.9</td>
<td>14.7</td>
<td>11.4</td>
<td>12.9</td>
</tr>
<tr>
<td>2000 IR</td>
<td>6.1</td>
<td>15.1</td>
<td>9.0</td>
<td>7.4</td>
<td>10.9</td>
<td>5.6</td>
<td>5.3</td>
</tr>
<tr>
<td>% Improvement</td>
<td>41%</td>
<td>-28%</td>
<td>17%</td>
<td>47%</td>
<td>26%</td>
<td>51%</td>
<td>58%</td>
</tr>
</tbody>
</table>

Overall, the combined Clubs had a 40% average improvement during the first year of implementation of the safety incentive program with three of the Clubs showing a negative improvement.
When examining the reduction rate based on the plans instituted, it was found that, for the first year following implementation, the plans had average percentages of incident rate reduction as follows:

- Team Safety- 48%
- What's Wrong with This Picture?- 47%
- Safety Jeopardy- 43%
- Safety Bingo- 39%
- Safety Grab- 30%

5.1.2 Evaluation for the Five Years Following

Tables 7 through 11 provide the data for the five years following the implementation of the safety incentive at each Club. For this study, the 1999 incident rate was used as the baseline for each Club. 1999 was chosen because that year's incident rate was the one used to decide which Clubs were going to participate in this project. The average percent improvement was calculated by adding the incident rates from 2000 through 2004, dividing that number by 5 and then comparing that number to the 1999 incident rate. Using this calculation, it took the "spike" years into account but allowed to see if there was still an overall positive trend in incident rate over five years.
Table 7 - Five Year Evaluation of “Team Safety” Safety Incentive Program Incident Rates (IR)

<table>
<thead>
<tr>
<th>Chosen Incentive</th>
<th>Willoughby, OH</th>
<th>Greenfield, CT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999 IR</td>
<td>11.3</td>
<td>16.3</td>
</tr>
<tr>
<td>2000 IR</td>
<td>7.1</td>
<td>6.7</td>
</tr>
<tr>
<td>2001 IR</td>
<td>7.7</td>
<td>6.6</td>
</tr>
<tr>
<td>2002 IR</td>
<td>4.8</td>
<td>4.4</td>
</tr>
<tr>
<td>2003 IR</td>
<td>13.8</td>
<td>7.9</td>
</tr>
<tr>
<td>2004 IR</td>
<td>10.2</td>
<td>3.6</td>
</tr>
<tr>
<td>Avg. % Improvement</td>
<td>23%</td>
<td>64%</td>
</tr>
</tbody>
</table>

Table 8 - Five Year Evaluation of “What’s Wrong With This Picture” Safety Incentive Program Incident Rates (IR)

<table>
<thead>
<tr>
<th>Chosen Incentive</th>
<th>Danvers, MA</th>
<th>Salem, NH</th>
<th>Utica, NY</th>
<th>Watchung, NJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Picture</td>
<td>10.8</td>
<td>12.7</td>
<td>12.6</td>
<td>10.1</td>
</tr>
<tr>
<td>1999 IR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000 IR</td>
<td>6.5</td>
<td>4.7</td>
<td>2.7</td>
<td>9.3</td>
</tr>
<tr>
<td>2001 IR</td>
<td>6.9</td>
<td>4.0</td>
<td>1.4</td>
<td>0.9</td>
</tr>
<tr>
<td>2002 IR</td>
<td>3.4</td>
<td>6.1</td>
<td>4.2</td>
<td>0</td>
</tr>
<tr>
<td>2003 IR</td>
<td>9.7</td>
<td>12.5</td>
<td>5.3</td>
<td>4.1</td>
</tr>
<tr>
<td>2004 IR</td>
<td>3.9</td>
<td>6.6</td>
<td>2.8</td>
<td>5.7</td>
</tr>
<tr>
<td>Avg. % Improvement</td>
<td>44%</td>
<td>47%</td>
<td>74%</td>
<td>59%</td>
</tr>
</tbody>
</table>
Table 9- Five Year Evaluation of “Safety Jeopardy” Safety Incentive Program Incident Rates (IR)

<table>
<thead>
<tr>
<th>Chosen Incentive</th>
<th>Nashua, NH</th>
<th>Johnson, RI</th>
<th>Waterford, RI</th>
<th>Ocean Twp, NJ</th>
<th>Tilton, NH</th>
<th>Portsmouth, NH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999 IR</td>
<td>Jeopardy</td>
<td>13.1</td>
<td>Jeopardy</td>
<td>12.0</td>
<td>Jeopardy</td>
<td>14.9</td>
</tr>
<tr>
<td>2000 IR</td>
<td>Jeopardy</td>
<td>6.5</td>
<td>Jeopardy</td>
<td>14.4</td>
<td>Jeopardy</td>
<td>2.5</td>
</tr>
<tr>
<td>2001 IR</td>
<td>Jeopardy</td>
<td>1.3</td>
<td>Jeopardy</td>
<td>6.7</td>
<td>Jeopardy</td>
<td>10.0</td>
</tr>
<tr>
<td>2002 IR</td>
<td>Jeopardy</td>
<td>6.8</td>
<td>Jeopardy</td>
<td>9.6</td>
<td>Jeopardy</td>
<td>4.9</td>
</tr>
<tr>
<td>2003 IR</td>
<td>Jeopardy</td>
<td>8.7</td>
<td>Jeopardy</td>
<td>3.5</td>
<td>Jeopardy</td>
<td>2.5</td>
</tr>
<tr>
<td>2004 IR</td>
<td>Jeopardy</td>
<td>8.8</td>
<td>Jeopardy</td>
<td>6.0</td>
<td>Jeopardy</td>
<td>4.6</td>
</tr>
<tr>
<td>Avg. % Improvement</td>
<td>51%</td>
<td>52%</td>
<td>33%</td>
<td>51%</td>
<td>67%</td>
<td>23%</td>
</tr>
</tbody>
</table>

Table 10- Five Year Evaluation of “Safety Bingo” Safety Incentive Program Incident Rates (IR)

<table>
<thead>
<tr>
<th>Chosen Incentive</th>
<th>Oneonta, NY</th>
<th>Medford, NH</th>
<th>Auburn, MA</th>
<th>Clay, NY</th>
<th>Sennett, NY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999 IR</td>
<td>Bingo</td>
<td>13.1</td>
<td>Bingo</td>
<td>12.7</td>
<td>10.3</td>
</tr>
<tr>
<td>2000 IR</td>
<td>Bingo</td>
<td>2.6</td>
<td>Bingo</td>
<td>7.9</td>
<td>7.0</td>
</tr>
<tr>
<td>2001 IR</td>
<td>Bingo</td>
<td>2.5</td>
<td>Bingo</td>
<td>4.0</td>
<td>7.5</td>
</tr>
<tr>
<td>2002 IR</td>
<td>Bingo</td>
<td>0.0</td>
<td>Bingo</td>
<td>6.2</td>
<td>10.1</td>
</tr>
<tr>
<td>2003 IR</td>
<td>Bingo</td>
<td>7.2</td>
<td>Bingo</td>
<td>3.0</td>
<td>12.1</td>
</tr>
<tr>
<td>2004 IR</td>
<td>Bingo</td>
<td>0.0</td>
<td>Bingo</td>
<td>6.9</td>
<td>3.0</td>
</tr>
<tr>
<td>Avg. % Improvement</td>
<td>81%</td>
<td>26%</td>
<td>56%</td>
<td>23%</td>
<td>63%</td>
</tr>
</tbody>
</table>
Table 11- Five Year Evaluation of “Safety Grab” Safety Incentive Program Incident Rates (IR)

<table>
<thead>
<tr>
<th>Chosen Incentive</th>
<th>Reading, PA</th>
<th>Springfield, PA</th>
<th>Fairfield, CT</th>
<th>Queens, NY</th>
<th>Stoneham, MA</th>
<th>Rutherford, NJ</th>
<th>Yorktown, NY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999 IR</td>
<td>Grab</td>
<td>Grab</td>
<td>Grab</td>
<td>Grab</td>
<td>Grab</td>
<td>Grab</td>
<td>Grab</td>
</tr>
<tr>
<td>IR</td>
<td>10.2</td>
<td>11.8</td>
<td>10.8</td>
<td>13.9</td>
<td>14.7</td>
<td>11.4</td>
<td>12.9</td>
</tr>
<tr>
<td>2000 IR</td>
<td>6.1</td>
<td>15.1</td>
<td>9.0</td>
<td>7.4</td>
<td>10.9</td>
<td>5.6</td>
<td>5.3</td>
</tr>
<tr>
<td>2001 IR</td>
<td>4.4</td>
<td>6.0</td>
<td>7.3</td>
<td>2.5</td>
<td>3.4</td>
<td>8.0</td>
<td>7.6</td>
</tr>
<tr>
<td>2002 IR</td>
<td>6.8</td>
<td>11.1</td>
<td>3.9</td>
<td>4.7</td>
<td>8.3</td>
<td>3.7</td>
<td>2.1</td>
</tr>
<tr>
<td>2003 IR</td>
<td>2.3</td>
<td>7.0</td>
<td>5.7</td>
<td>4.3</td>
<td>9.4</td>
<td>3.7</td>
<td>8.2</td>
</tr>
<tr>
<td>2004 IR</td>
<td>2.2</td>
<td>1.7</td>
<td>10.2</td>
<td>5.0</td>
<td>6.7</td>
<td>5.3</td>
<td>4.7</td>
</tr>
<tr>
<td>Avg. % Improvement</td>
<td>57%</td>
<td>31%</td>
<td>33%</td>
<td>66%</td>
<td>47%</td>
<td>54%</td>
<td>57%</td>
</tr>
</tbody>
</table>

Overall, the combined Clubs had a 49% average incident rate improvement over the five years that the safety incentive programs were in place. Although some Clubs showed a negative trend from one year to the next, all Clubs five year average of incident rates showed improvement.

When examining the reduction rate based on the plans instituted, it was found that the plans, after five years, had average percentages of incident rate reduction as follows:

- Team Safety- 44%
- What’s Wrong with This Picture? 56%
- Safety Jeopardy- 46%
- Safety Bingo- 46%
- Safety Grab- 49%
5.2 Evaluation of Safety Awareness

5.2.1 Employee Questionnaire

Question #1- Were you instructed about the Club’s Safety Incentive Program when it was implemented/when hired?

Yes: 354  
No: 9  
Not Sure:

Example Comments: - None

Question #2- Did having the safety incentive program influence you in your daily job activities?

Yes: 241  
No: 119  
Not Sure: 3

Example Comments:

- It made me think twice before taking shortcuts (Utica, NY employee).
- I would speak up if I saw other Team Members doing things that were unsafe (Tilton, NH employee).
- I started to ask for help before lifting something heavy (Queens, NY employee).
- Housekeeping became my second job (Greenfield, CT employee).

Question #3- Did you feel more likely to confront a coworker working unsafely and tell them how to perform the task in a safe manner?

Yes: 287  
No: 76  
Not Sure:
Example Comments:

- I had no problem going up to people and let them know they were doing things wrong. No one was going to blow the chance for me (Willoughby, OH employee).

- We all worked together as a team, everyone looked out for each other (Greenfield, CT employee).

Question #4- Were you or any Team Members encouraged to hide accidents in order to keep an accident free streak?

Yes: 23
No: 340
Not Sure:

Example Comments:

- My health means more to me than some stupid prize (Portsmouth, NH employee).

- I was told by my friend that I should put it on my insurance, she said “that’s why you pay for it”. But I know she just wanted the party (Salem, MA employee).

Question #5- If you got injured, would you hesitate in reporting it for fear of co-worker backlash?

Yes: 17
No: 322
Not Sure: 24

Example Comments:

- Sometimes the pot would be over $100, I’m not sure what I would do in that case. I think a lot of people
may be mad if I were to blow it (Medford, NH employee).

- No way would I report a minor injury. I work with some pretty tough guys (Queens, NY employee).

**Question #6-** If you got injured, would you hesitate in reporting it for fear of losing a chance at the prize?

| Yes: 19 | No: 154 | Not Sure: 190 |

Example Comments:

- Most Common Answer: It depends on how big the prize was.

- Second Most Common Answer: It depends on how severe the injury was.

**Question #7-** Did you feel that the overall safety atmosphere in the Club improved because of the incentive?

| Yes: 207 | No: 152 | Not Sure: 4 |

Example Comments:

- I loved reading the safety board. I gained a lot of knowledge from the topics that were posted (Watchung, NJ employee).

- Everyone seemed to be a little more on their toes when it came to safety (Reading, PA employee).
- It seemed like a lot of people began to talk about it (safety) more (Nashua, NH employee).

**Question #8- As a result of the incentive program did your general knowledge of safety increase?**

Yes: 298  
No: 65  
Not Sure:

Example Comments:

- I like to think it did (Utica, NY employee).
- YES!! (Greenfield, CT employee)

**Question #9- Do you feel the safety incentive lost effectiveness over time; if yes please state why in comments section?**

Yes: 87  
No: 276  
Not Sure:

Example Comments:

- Over time, safety fell back. (Springfield, PA employee)
- Every thing was gung ho in the beginning. Then it seemed everyone forgot about it. (Salem, MA employee)
- Managers seemed to stop caring, so did I. (Medford, NH employee)

**Question #10- Which incentive was used at your Club?**

Safety Bingo  
57
50

Safety Jeopardy  62
Food Party  207
Team Safety  17
Safety Grab  129
What’s Wrong With This Picture?  39
Not Sure  59

5.2.2 Manager’s Comments

The following is a summary of the responses gathered; a full breakdown of the answers is located in Appendix D.

Summary of Answers

Every General Manager interviewed agreed that safety incentive programs have the potential to play an important role in reducing the number of incidents that occur at a Club. Some discussed the idea that it is important to choose a safety incentive that fits well within the structure of a particular location. What works well in one Club does not necessarily mean it will work well in another.

Many managers seemed to think that the safety incentive program aided to lift morale in their Clubs. They seemed to think that employees were happier to lend a hand, or not complain as much about doing something that was not necessarily in their normal job duties. The program was almost a motivator to make employees go the extra mile.
Managers of various Clubs also believed that employees were more apt to talk about safety concerns they noticed inside the Club. If an unsafe condition was found that required a request for maintenance, something the employee couldn't correct, the employee was more likely to discuss the issue with their supervisor than they were before the implementation of the program.
6.0 Discussion and Analysis

6.1 Effectiveness of Safety Incentives During Implementation Year

As can be seen by the data collected, all but three Clubs had some reduction in their incident rates. The best reduction was in Tilton, NH where they had an 84% improvement. This high reduction rate could be attributed to the fact that this Club implemented their program in February of 2000. Other Clubs studied did not start their programs until the end of April or after. The Tilton location also was relatively new; it opened in the summer of 1998. Typically new Clubs have higher incident rates than older Clubs, usually attributed to poor prescreening of employees. Many new Personnel Managers are unaware of signs to look for when hiring new employees such as prior work history and physical attributes. Most Clubs have a 120% turn over rate of employees during the first year of operation. This could account for the higher reduction rate in the Tilton location as well.

As a whole, the Clubs that participated in this study had a 40% improvement in incident rate during the first year of the safety incentive program. An interesting facet of this data is that the programs that had greater employee involvement regarding the understanding of safety concepts had a higher percentage of incident rate improvement, at least for the first year. The Team Safety, What’s Wrong With This Picture and Safety Jeopardy incentives (all of which are less accident goal based) had average reduction rates of over 40%; while Safety Grab and Safety Bingo (both accident goal based incentives) were below 40% average
improvement. This would indicate that simply setting achievement goals does have some impact, but if you couple those goals with safety education and participation, it has a greater overall impact.

It is important to point out that the three Clubs that had a negative trend in incident rate also did not start their programs at the beginning of the year like the remaining Clubs. Because of cycle inventories and General Manager replacements, those Clubs did not roll out their programs until mid-year. Most of the accidents resulting in worker's compensation claims occurred before the implementation process, so if the data were skewed to reflect the incidents that occurred after the programs were in place those Clubs would also have shown a reduction in the number of incident rates.

6.2 Effectiveness Over a Five Year Period

Statistically, the data shows that for five years after the initial implementation of the safety incentives, the Clubs were able to keep their rates somewhat lower. All Clubs showed improvement of their average incident rate over the five years of this study.

It is shown that over the course of the five years, many Clubs had spikes in their incident rates, sometimes higher than their original 1999 rates. When the Clubs were interviewed about this, most managers had stated that the spikes were caused by lack of participation by managers at the Clubs. During every year in
which a spike occurred, some of Clubs’ management admitted to stopping their programs. It wasn’t just the fact that they had stopped with the prize incentive, but also with the awareness portion that went along with it. For these Clubs, the managers were able to see that employee morale suffered during this time and the employees began to feel like management had forgotten about them. All five years of incident rates for every participating Club were graphed to get a better look at when these spikes occurred. Specific Clubs are discussed in Section 6.2.1, and graphs for all participating Clubs can be located in Appendix E.

To compensate for these spikes in incident rates, the average of the five years were taken and that average was then compared against their initial 1999 incident rate. With these averages, it can be seen that the overall safety incentives did aid in the lowering of the incident rates.

When examining the type of incentive program that was implemented, it showed that there was no statistical data to support that one incentive program is superior to another. This is somewhat unexpected since there seemed to be a difference when examining the first year data.

6.2.1 Confidence Limits
In order to show that safety incentive programs did have a positive affect on the lower of incidence, confidence tables were performed for each Club that participated. For this study, a 95% confidence equation was performed to acquire
the upper and lower confidence limits. The data from these graphs seems to show that safety incentives do have a positive impact. The lower confidence limit was zero for all Club, showing that it is within the possibility to achieve zero accidents without incentives, although after implementation of the incentive programs all Clubs were beginning to trend toward zero. Before the implementation, most Clubs were at the upper confidence limit. Figures 7 & 8 are examples of the confidence graphs that were performed.

Figure 7- Confidence Limits For Greenfield

![Confidence Limits for Greenfield](image-url)
6.2.2 Incident Rate Spikes

6.2.2.1 Medford, NH

The Medford location had great success with their incentive program during the first year of implementation. Their incident rate dropped from an 11.0 in 1999 to 3.5 in 2000, a 68% improvement. Mid-year of 2001, the Club's General Manager (GM) was relocated to a different region and a new GM was brought in to operate this Club. Before the GM replacement, which occurred in May 2001, the Club had remained accident free for the first four months of 2001.

The new GM was not instructed by existing managers of the safety incentive that was underway at the Club, so the incentive program was stopped. From May to December, 10 medical claim accidents occurred at the Club giving them an
incident rate of 9.2. The incentive program was not reinstituted until the fall of 2002, when it was already too late to have a positive impact for that year's incident rate. At the close of 2002, the Club had an incident rate of 12.6 (13% higher than the implementation year of 1999).

The program continued to run through 2003 and 2004 where the Club did see improvement in their incident rates, but never the results that it showed that first year. This could possibly be due to employees losing faith in the managers to run an effective and efficient program. It could perhaps indicate that the new GM did not run the program in the same manner as the original GM. Whatever the case, this Club is representative of the other Clubs that had GM changes during the course of this study, such as Clay, NY and Salem, NH.

Figure 9- Medford, NH Five Year Incident Rates

6.2.2.2 Portsmouth, NH & Willoughby, OH

The Portsmouth New Hampshire and Willoughby Ohio locations both had unusually high spikes several years during the participation of the incentive
program. It was an occurrence that deserved some attention to determine what did cause this.

Data indicated that both of these Clubs experienced a higher than average turn over rate of employees. For most Clubs, turn over rate for hourly employees is between 90-120%. For the Willoughby location, turn over was as high as 176% and Portsmouth was 182%. It important to note that every year that these Clubs had spikes in their incident rate, they also had spikes in their turn over rate.

This could indicate that turn over could have an impact on incident rate, regardless if there are incentives in place.

Figure 10- 5 Year Incident Rates for Willoughby, OH & Portsmouth, NH

6.3 Safety Awareness

To help in aid in the determination of whether or not safety incentives help raise the awareness at the Clubs, in November of 2004, a questionnaire was attached to
the paychecks of employees at Clubs where the incentive was implemented. Of the 600 that were sent out, 363 responses were sent back. Questions #2, #3, #7, #8 and #9 pertained to the awareness level at the Clubs. The following discusses and analyzes the answers given.

**Question #2- Did having the safety incentive program influence you in your daily job activity?**

66 percent of the respondents agreed that the safety incentive did help influence them to work a little more safely. Of those 66 percent, the employee’s comments to this question stated that the safety incentives did help to reduce the short cuts they would take. It often would make them rethink their job and take a little extra time to do things safely rather then quickly. Many times it helped curb employees from doing careless acts, such as climbing the steel instead of using an approved ladder. It seemed, according to their comments, that it helped keep safety in the front of their minds while performing their daily job activities.

Also in this section, many employees commented that they began to perform jobs outside of their responsibility. They were more likely to clean spills or notify managers of unsafe conditions than they would have been without the incentives in place.

**Question #3- Did you feel more likely to confront a coworker working unsafely and tell them how to perform the task in a safe manner?**
One objective of safety incentives is that they will help motivate employees to confront coworkers and help them work safely. The concept behind this is that without incentives, employees would walk by a colleague performing an unsafe act and not say anything because the employee walking by has nothing to lose. With a safety incentive in place, all employees have something at stake so they will be more likely to say something and show the other person how to perform the task safely.

In this case, 79 percent of those that responded did in fact say that they would be more likely to approach a coworker working unsafely and instruct them on how to perform the job in a safer manner. Many times it was simple things like lifting improperly or not wearing proper personal protective equipment. According to some responses, employees that would never generally speak up in the past became more proactive after the implementation of the safety incentives. Employees seemed to be working together and helping one another out so as to not break the safe streak. More dialogue between employees seemed to help make the Clubs a little safer.

**Question #7:** Did you feel that the overall safety atmosphere in the Club improved because of the incentive?

With this question, 57 percent of the employees did feel as though the atmosphere in the Club had shifted to that of being safer. Most of the comments dealt with the safety board that was part of the incentive program. The Clubs that seemed to
maintain this board regularly, as well as had interesting information presented on
the board, seemed to have the best experiences. Many people in those Clubs
enjoyed, and at times looked forward to, the articles that were posted on the
board. With these articles, some employees took what they had learned and put it
in practice while performing their job duties.

It is interesting to note that 42 percent of the respondents felt as though the safety
incentives had no affect on the general atmosphere in the Club. The most
common reason for this was they felt that no one else seemed to care about the
program as much as they did. This will be discussed in the next question’s
analysis.

**Question #8- As a result of the safety incentive, did your general knowledge
of safety increase?**

A surprising 82 percent of the employees surveyed did say that their knowledge
had increased. According to their responses, management seemed more involved
and would discuss safety on a more regular basis. They began to enjoy learning
that safety is not only something that can be useful at work, but also that the
practices can be used at home.

It is interesting that in question no. 7, 42 percent of the employees felt that no one
else cared as much about safety as they did, but according to the responses from
this question, almost everyone agreed that their knowledge increased.
Question #9- Do you feel the safety incentive lost effectiveness over time; if yes please state why in the comments section?

Another concern associated with incentive programs is that they become stagnant and almost detrimental over the course of time. This question was designed to determine if that was the case in this particular study.

For this study, it was not shown that the effectiveness had worn off in time. 76 percent of the employees were in agreement that the effectiveness had not dwindled. Because of the way the question was worded, comments were not made as to why they thought the effectiveness had remained strong. That was a fault of the wording.

For those that thought the effectiveness had diminished, the most common reason as to why was because management had seemed to stop making safety a priority. Regardless if a safety incentive is in place or not, if safety is not a priority, the system will fail.

6.4 Managers’ Opinions

All managers that were interviewed agreed that the incentive programs seem to work and aided in the safety awareness of the Clubs. The comments given seem
to support the objectives of this thesis of reducing incident rates for both short and long term.

The programs that were developed through this thesis helped the managers put easy and effective plans into place, which the managers seemed to respond positively to. One manager did comment that they initially thought the program was a lot of work for something that they may see no reward for, but over the course of running the program realized that it did help reduce the number of incidents.

6.5 Concealing Accidents

As discussed in the literature review chapters, the main concern of instituting safety incentives is the fear that employees and employers will not report accidents. The questionnaire sent to the employees aided in trying to determine if this was a problem at the Clubs where incentives were implemented.

It is important to note, that since BJ's is a self insured company, and many legal issues would arise if management were to avoid reporting accidents that occurred at the workplace. To try to reduce the risk of this happening, BJ's has instituted a plan which would directly affects the bottom line of each individual Club in the situation of non-reporting. If a Club is found to have hidden an accident, that Club is then charged double the amount of that medical claim. This charge is
taken directly from the Club’s individual profit. This program was put into place in the mid-1990’s and has been effective in eliminating the hiding of accidents.

The questions directed at the employees to determine if they felt it necessary to hide accident, even minor, during the time of the incentive program. The questions that pertained to this were #4, #5, and #6 of the questionnaire.

**Question #4- Were you or any Team Members encouraged to hide accidents in order to keep an accident free streak?**

An overwhelming 94 percent of the employees surveyed stated that they did not feel encouraged to hide any accidents at the Club. This is an important factor because many of the opponents of safety incentives say that hiding accidents is the number one pitfall of having them. According to the comments made by employees, many feel that no amount of money or pressure would prevent them from keeping themselves safe and healthy. Almost all were in agreement that their health means more to them than any prize that could be given out.

Of the 6 percent that did respond to feeling pressure to hide accidents, all encouragement came from fellow coworkers and not management. In every response that had comments, fellow coworkers tried to encourage the injured party to put it on their personal health insurance as to not ruin the accident free streak.
Question #5- If you got injured, would you hesitate in reporting it for fear of co-worker backlash?

Again, the majority (89 percent) agreed that they would not hesitate in reporting an accident that resulted in an injury. Since another concern of opponents to safety incentives is that incentives could alienate employees that get injured from their co-workers, it was important to ask this particular question. By the responses, it seems that in this study, that concern is flawed.

Question #6- If you got injured, would you hesitate in reporting it for fear of losing a chance at the prize?

This question, unlike the others, dealt with the personal opinion of the employee. The other questions were tailored to see how the employee would feel when it came to how they were viewed by their peers. In those cases, almost all employees did not seem to care about how they were viewed by their co-workers when it came to reporting an accident. This question however, had a very interesting result.

While 42 percent believed that their health meant more to them than any prize, a fairly large percentage (52 percent) were not sure what they would do. For all those that answered this question as “not sure,” they commented that it would all depend on how big the prize was or how severe the accident was. This is the first, and only, negative outcome of this incentive program study. 52 percent is a large
portion and a worrisome statistic. All accidents need to be reported, as these employees know, but a prize could deter from some accidents being reported.

When looking back at the incident reports filed for each Club immediately following the implementation of the safety incentive programs, there was no clear indication of the of accidents not being reported. In 18 of the 24 Clubs that participated in this program, the first incident that occurred was one that had the possibility of being concealed. An example was in Auburn, MA where an employee sought medical attention for a sprained thumb, or in Utica, NY where the first incident was an employee that sought medical attention for a bruised foot. If non-reporting due to an incentive were to occur, it would seem that these would have been the types of accidents that would have been. Statistically, it seems reasonable that 25% of the Clubs’ studied would have major accidents as their first one, not because all the other minor incidents were concealed.
7.0 Conclusions

7.1 Important Results

The implementation and evaluation of safety incentives at BJ’s Wholesale Club resulted in three significant results.

First, incentive programs do show to be a valuable tool in the overall safety system of an organization. If designed and managed properly, they show to have a positive impact on the number of incidents that occur both immediately following the implementation and for the years that proceed. While there were elevated spikes in the incident rate in some years, most were attributed to the failure of management to maintain the program. Once the program was revived, the Clubs once again saw a decline in the number of incidents that occurred.

Secondly, it was noted that the incentives which involved employees answering questions or thinking about safety, rather than just being handed a prize, seemed to have an enhanced impact on the incident rate during the first year of implementation. This could be attributed to the fact that safety awareness with these types of plans is heightened because employees are almost required to learn safety rules or policies in order to be eligible to win the prize. Over the course of the study, it was demonstrated that the type of incentive seemed to have little impact on the incident rates, possibly indicating that the level of safety awareness had a plateau after the first year.
Lastly, the issue of accidents not being reported, which was a major concern of incentive plan opponents, came into question based on this study. Although most union leaders would have people believe that management, in an effort to improve OSHA rates, is the main cause of non-reporting, this study showed that employees would be the ones to conceal accidents for the prize. This is still a concern nonetheless. Incentive programs need to implemented with this in mind and need to have measures in place to assist this from occurring. One way to accomplish this is to educate the employees before implementing the program and to make them aware that if they are injured and fail to report it, they will be disqualified from any further incentives or that concealing accidents can be grounds for disciplinary action.

7.2 General Comments

Interviews with managers at the Clubs that participated in the incentive programs seemed to indicate that not only were they aware of the importance of a safe work environment, but also the cost consequences associated with each accident. All managers were aware that each accident that occurred at a Club resulted in a charge directly to profit margin of the individual Club. Realizing this could cause managers to conceal accidents, a preventative measure was put into place. If managers were found to be not reporting accidents or encouraging employees to use personal insurance when involved in a workplace accident, the Club would be charged double. Because of this, managers have embraced the incentive
programs for an operational value and a tool to meet financial goals as well as for
the general safety for their employees.

This new found support from managers based on financial goals has contributed
significantly to the sustainability to improved safety performance. In instances
where safety performance deteriorated, it was typically found that this was due to
management failing to sustain the incentive program. Once focus was brought
back, all Clubs saw positive performance once again.

7.3 Uniqueness

This project was unique because it examined the internal development of specific
safety incentives programs and tracked the progress over five years. In most
studies regarding incentives, the programs were developed by outside companies
and they are only monitored for a short amount of time.

7.4 Meeting Thesis Project Objectives

The goal of this thesis project was to develop and implement safety incentive
programs at high incident rate Clubs and track the effectiveness of those
incentives while also monitoring safety awareness throughout the Club.

First, the programs were developed and distributed to the Clubs that were targeted
with an incident rate of over 10.0 in 1999. An accident analysis program was
developed to aid the managers in determining if any trends were apparent in their facility and to assist in choosing the best incentive for their Club.

Next, Clubs that had implemented the incentive programs were monitored for the first year to see what, if any, impact the incentive program played in reducing the incident rate. Those same Clubs were monitored for another four years to determine if safety incentives had a lasting effect on the incident rate.

Finally, through the use of an employee questionnaire, the safety awareness level in the Club was examined to determine if the incentive program had a positive effect on the employees. This questionnaire also aided to determine if employees felt the need to hide any injuries or accidents that occurred at the Club.

7.5 Comments on Initial Hypothesis

Before beginning this project, it was thought that the incentive programs would have a short term positive effect, but then lose their momentum. As it was stated in the previous chapters, it seems as though safety incentives can have a lasting positive effectiveness if they are maintained and administered properly. The questionnaire provided to employees leads one to believe that safety incentives do not lose their effect if they are maintained and can hold their interest. Safety incentives do appear to be a valuable part of a safety system.
APPENDIX A- Accident Analysis Program

C:\Documents and Settings\pvanderlyke
APPENDIX B- Safety Incentive Program Handout

C:\Documents and Settings\pvanderlyke\Settings\pvanderlyke
APPENDIX C

SAFETY TASK FORCE QUESTIONNAIRE

BJ’s Safety Department is conducting a survey regarding the Safety Incentive Program currently in place at your Club. This questionnaire is voluntary but greatly appreciated. Please do not include your name on this survey since all information gathered will be anonymous.

When complete, please return this survey via inter-office mail to Pete Van Derlyke, Club 63.

Thank you for your time and cooperation for completing this survey.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>Yes</th>
<th>No</th>
<th>Not Sure</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were you instructed about the Club’s Safety Incentive Program when it was implemented/when hired?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did having the safety incentive program influence you in your daily job activities?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you feel more likely to confront a coworker working unsafely and tell them how to perform the task in a safe manner?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were you or any Team Members encouraged to hide accidents in order to keep an accident free streak?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If you got injured, would you hesitate in reporting it for fear of co-worker backlash?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If you got injured, would you hesitate in reporting it for fear of losing the chance at the prize?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you feel that the overall safety atmosphere in the Club improved because of the incentive?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As a result of the incentive program did your general knowledge of safety increase?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you feel the safety incentive lost effectiveness over time; if yes please state why in comments section?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Which incentive was used at your Club (circle all that apply):

<table>
<thead>
<tr>
<th>Safety Bingo</th>
<th>Safety Jeopardy</th>
<th>Food Party</th>
<th>Team Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Grab</td>
<td>What’s Wrong With This Picture?</td>
<td>Not Sure</td>
<td></td>
</tr>
</tbody>
</table>

Additional Comments:

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________
APPENDIX D- Manager’s Safety Incentive Program Interview Summary

B. Pursley (Senior Manager, Greenfield)- “For me the safety incentive worked great. I was a new GM to the company when we started the program. It helped me get everyone involved with safety in a fun way. It seemed to help get the employees on my side when looking for things that may have been unsafe. It was almost like having 100 set of eyes looking for things that may otherwise have gone unnoticed. I admit that overtime we lost sight if it (the incentive) and my incident rates show that. Things are back on track now though.”

I. Netkovick (GM, Greenfield)- “I liked the safety incentive program. It helped motivate my employees to do the right things all the time, not just while I was around. It also seemed like a friendlier Club, everyone was helping each other. It definitely worked, look at my numbers.”

B. Fernandez (GM, Danvers)- “I will confess that I hated the idea at first. It seemed like a lot of work for something that may have no affect. Boy was I wrong, it really helped me out. My employees were so happy to have something that recognized their achievements. I wouldn’t give it up.”

M. Blaszczak (GM, Salem)- “The incentive program worked here. I did the same thing in my last Club and no one liked it or at least didn’t seem interested. Maybe something different would have been more effective there. Here though, it lowered my numbers and made people happy. It is great.”

P. Costanza (GM, Johnson)- “Employees were so happy and willing to get involved. I’ve never seen that before. They would actually leave me notes to problems they saw and wanted corrected. I never had that happen before we started the program.”
J. Poole (GM, Waterford) - "There's no doubt my accidents would still be through the roof without the incentive. I have no problem rewarding people for doing the right thing, especially when I see the results I have had."

J. Alfano (GM, Ocean Township) - "It actually became more enjoyable to deal with my employees. They opened up to me and discussed problems they had."

K. Tower (GM, Medford) - "It seemed to help reduce the accidents I had. We have almost been at goal every year since we started. The employees really seem to like it."

M. Slattery (GM, Auburn) - "I like the turn around I saw. My employees actually seemed to be happy to come to work and didn't complain when asked to do some extra housekeeping. My numbers have been consistently low and reducing the accidents have seemed to make people happier."

B. DeSanto (GM, Sennett) - "I tried safety bingo in my previous Club and it failed miserably. I was in Jersey City and people could care less about Bingo. The cards would be wadded up on the ground before they left the Club. Here, people play bingo on Saturday nights so it is almost like they are getting away with something. I went from rate of almost 15 to 0. Of course they work, as long as you choose the right thing."

M. Amato (GM, Queens) - "The incentive had a great impact here. That says a lot based on our employees. They were always so negative about things. Now they are more positive and want to do the right thing."

J. Van Slyke (GM, Yorktown) - "This Club had always been terrible when it came to accidents. Now we are below the company goal almost every year. I love this program."
APPENDIX E- Five Year Incident Graphs

Medford, NH 1999-2004 Incident Rates

Johnson, RI 1999-2004 Incident Rates

Rutherford, NJ 1999-2004 Incident Rates

Salem, NH 1999-2004 Incident Rates

Ocean Township, NJ 1999-2004 Incident Rates

Danvers, MA 1999-2004 Incident Rates

Fairfield, CT 1999-2004 Incident Rates

Auburn, MA 1999-2004 Incident Rates
Works Cited


“Can Safety be Too Much Fun?”, Safety and Health, September, 1996, p. 27.


Schott, Earl. Interview about safety incentive program. BJ’s Wholesale Club #64. 2004.