Youth Killed While Driving Golf Cart at Country Club - Massachusetts

Investigation: # 00-MA-50-01
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SUMMARY

On September 16, 2000, a 16-year-old male golf bag room attendant (the victim) was fatally injured while operating a golf cart. The victim was driving a golf cart at work and struck a section of a deck that had been built over a pathway. The impact of the golf cart against the deck sheared off the steering wheel. The golf cart continued forward, and the victim's chest was crushed by the deck. Co-workers heard the crash and the victim's call for help and went to assist him. A call was placed for emergency assistance that arrived within minutes and transported the victim to an area hospital where he was pronounced dead. The Massachusetts FACE Program concluded that to prevent similar occurrences in the future, employers who hire minors should:

- establish and implement policies that prohibit workers less than 18 years of age from operating motor vehicles at work as required by the Massachusetts Child Labor laws
- systematically review tasks that workers less than 18 years of age are assigned and modify task assignments as indicated to reduce exposure to safety hazards and comply with the child labor laws
- develop and enforce a comprehensive health and safety program which includes specific provisions for young workers

In addition, **golf cart manufacturers** should:

- consider moving the direction control lever to the dashboard so that it is clearly visible and accessible to the operator
- consider modifying the hill brake release to allow the operator to apply the driving brake when releasing the hill brake

INTRODUCTION

On September 17, 2000, the Massachusetts FACE Program was notified by the local media, that on Saturday, September 16, 2000, a 16-year-old male employee of a private country club was fatally injured while operating a golf cart that struck a section of a deck. An

investigation was immediately initiated. On September 22, 2000, the Massachusetts FACE Program Director and an investigator traveled to the private country club where the club's manager was interviewed. The police report, death certificate, OSHA fatality/catastrophe report, and photographs were obtained during the course of the investigation.

The employer, a local private country club, was in business approximately 86 years at the time of the incident. The number of people the country club employed varied with the season. In the warmer months the club employed anywhere from 120 – 140 workers. Of these employees, 20 – 30 of them typically were under 18 years of age. During the colder months, total employment decreased to a range of 20 – 40 employees, and no employees under 18 years of age were employed. The club also used temporary workers to supplement their staff while hosting large parties or weddings.

The victim, who had his drivers learning permit, had been employed with the company for approximately one month at the time of his death. His training was primarily on-the-job with some hands on training with golf carts. There were approximately 13 employees including the victim that were under 18-years-old and worked as golf bag room attendants. The country club's handbook contained general written procedures for each position; these procedures did not include specific techniques on how required tasks should be completed. There was no designated safety representative at the country club.

INVESTIGATION

The country club was private and had only male members, who, at the time of joining, purchased shares of the country club becoming part owners. In addition to the 375 male members, approximately 950 individuals, including the members' wives and children, had access to the club facilities.

Golf was offered at the club May through October, the warmer six months of the year. During these warmer months, the country club employed many part-time workers, including high school students and college students. In September and October, when college students returned to school, the number of employees under 18 years of age increased. After October, the golf course section of the country club closed down for winter and the number of employees under 18 years of age decreased to zero. Typical jobs held by employees under 18 year of age included: golf bag room attendants, snack bar attendants, pool area attendants, and lifeguards. The victim had been employed as a golf bag room attendant for one month prior to his death. His responsibilities included: cleaning members bags and clubs after use, collecting and cleaning range balls, moving golf club bags into and out of golf carts, keeping the golf cart parking area clean and uncongested, cleaning the golf carts after use, and assisting the pro shop personnel.

All employees attended an orientation prior to starting work at the country club. The orientation was geared towards how employees should act around and treat the members of the country club. The golf bag room attendants did receive some on-the-job training for the various tasks listed above and they were shown how to operate golf carts before they were allowed to drive them. The golf cart training consisted of taking employees to an onsite empty parking lot where they were shown how to operate them. The country club allowed all employees, with at least a driver's learning permit, to operate the golf carts. Reportedly, the club had an unwritten rule that if any employee were caught driving recklessly or in an improper manner they would be fired immediately.

The golf cart involved in the incident was one of approximately 75 golf carts the country club owned. The golf carts were four wheeled, two passenger, 36-volt battery operated, rear wheel drive vehicles. They could move in both forward and reverse directions and were equipped with backup alarms. A direction control lever used to switch the golf cart from the forward to reverse directions was located on the lower section of the seat by the operator's

lower right leg (Figure1). This location made the control lever difficult to see and access. Each golf cart was equipped with a parking brake/hill brake, which, when engaged, locked the brake pedal in a downward position. To release the brake, the operator had to apply enough pressure to the gas pedal to "pop" the brake off. Although the majority of the golf carts at the club had canopies, the golf cart the victim was using was not equipped with a canopy. The canopies' main function was not structural but to shade the operators from the sun.

The day of the incident, was one of the club's busiest days of the year. The country club was holding two tournaments, one in the morning and one in the afternoon. Each member had invited guests to the tournament, greatly increasing the number of individuals playing golf that Saturday.

Members and guests taking part in the first tournament warmed-up that morning in the practice area before they went to their assigned golf carts to start playing their round of golf. Approximately 2½ hours after the start of the first tournament, the victim was asked by his supervisor to manually collect the balls in the practice area from the morning warm-up. Another employee had already used the automatic ball collector in the practice area leaving only the balls that the automatic collector could not reach.

The procedure for manually collecting balls involved selecting a golf cart and driving over to the practice area located, approximately several hundred feet away from the golf bag room. The employee would then walk around the practice area collecting golf balls with the handheld ball collector, a handheld cylindrical tool approximately three inches in diameter and four feet long. Once the ball collector was full, the balls would be emptied into buckets. The filled buckets would be brought back to the bag room via the golf cart and then the balls would be washed.

Because the incident was not witnessed, what exactly happened could not be determined. Investigating agencies identified two possible scenarios. Either the golf cart was parked and the victim was starting from a stopped position to go collect balls (scenario #1), or the victim was returning from collecting balls, and the golf cart was in motion just prior to the incident (scenario #2). In both scenarios, the golf cart involved in the incident had been the only one available for the victim to use and was or had been parked on the section of a paved pathway that was no longer in use. The pathway declined towards the building that housed the golf bag room and pro shop. A wooden deck had been built over the pathway and attached to building's side approximately 10 years prior to the incident (Figure 2).

In scenario #1, the victim would have entered the golf cart parked on the pathway in order to drive to the practice area. Either he did not realize that the cart had been left engaged in the forward direction, or he mistakenly placed the golf cart direction lever in the forward position. When he released the parking break by depressing the gas pedal, the cart lunged in the forward direction. Both, the pathway's slope and the momentum the golf cart would have gained when the victim "popped" off the parking brake likely contributed to the golf cart's forward movement.

In scenario #2, the victim would have been driving the golf cart back to its parking location prior to the incident and drove into the deck. It is possible that the victim might have confused the gas pedal for the brake pedal.

In either scenario, the 16-year-old victim was allowed to operate golf carts at work. On the day of the incident, the golf cart the victim was operating crashed into the side of the wooden deck attached to the building that housed the golf bag room and pro shop. After sliding approximately three feet underneath the wooden deck, the golf cart struck the

section of the deck where the floorboards are fastened to the joists severing the steering wheel from the steering column. The victim was pinned between the golf cart and the deck's floorboards, crushing his chest.

Employees heard the crash and the victim's call for help and placed a call for emergency assistance. The victim was freed from the golf cart by coworkers and a member of the club, a doctor, had attempted to revive the victim while emergency assistance arrived. The victim was transported to an area hospital by ambulance where he was pronounced dead.

CAUSE OF DEATH

The medical examiner listed the cause of death as blunt chest trauma.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Employers should establish and implement policies that prohibit workers less than 18 years of age from operating motor vehicles at work as required by the Massachusetts Child Labor laws.

Discussion: State and federal child labor laws are intended to protect working youth by prohibiting their employment under conditions that would be detrimental to their health or well being. These laws establish minimum ages for employment, limit the hours and times of day youth can work and prohibit employment of youth in certain jobs/tasks deemed as particularly hazardous for young workers.

Massachusetts Child Labor law prohibits workers less than 18 years of age in nonagricultural occupations from operating any motor vehicles, including golf carts, at work. (Massachusetts General Laws Part II Title XXI Chapter 149 Section 62). Employers should become familiar with and comply with the child labor laws. Specifically, they should establish policies to make certain that workers less than 18 years of age are not operating motor vehicles or performing other prohibited tasks and ensure that all supervisory staff as well as youth are trained in these policies. Signage on equipment indicating that it cannot be operated by persons less than 18 years of age and color coded name tags or work clothes indicating age of minors may be helpful in implementing these policies.

Reference and educational materials on child labor laws can be obtained by contacting either the Massachusetts Attorney General Office, Fair Labor and Business Practices Division, the U.S. Department of Labor's, Wage and Hour Division (www.dol.gov/whd/ (http://www.dol.gov/whd)), or the Massachusetts Department of Public Health, Teens at Work: Injury Surveillance and Prevention Project. (Link Updated 3/20/2013)

Recommendation #2: Employers of minors should systematically review tasks that workers less than 18 years of age are assigned and modify task assignments as indicated to reduce exposure to safety hazards and comply with the child labor laws.

Discussion: Private country clubs are just one of a number of industries that rely heavily on workers less than 18 years of age to fill their seasonal and part-time staffing needs. Employers of minors should systematically review that tasks that young workers will perform and modify them as indicated to reduce exposure to safety hazards and assure compliance with child labor laws.

In this case, the task of collecting golf balls could have been modified so the young worker did not have to use the golf cart. The practice area was located a few hundred feet away from the golf bag room where the golf cart was parked. The youth could have been given a ride to

and from the practice area or he could have walked over to the practice area with the ball collector and empty buckets and performed the task. Once the task was completed he could have walked back to the golf bag room leaving the full buckets of balls behind at the practice area to be picked up by an employee that is old enough to operate a motor vehicle for work proposes.

Recommendation #3: Employer should develop and enforce a comprehensive health and safety program which includes specific provisions for young workers.

Discussion: Employers with input from their employees, should develop, implement and enforce a comprehensive health and safety program. This program should identify who is responsible for workplace safety and include written procedures for tasks employees will perform, current health and safety information, and provisions for supervisor and worker health and safety training, including training of temporary employees. Site evaluations should also be addressed in the health and safety program and routinely performed to identify current or new hazards. Once a hazard is identified then proper controls should be implemented as promptly as possible. In addition, the health and safety program should be evaluated at least once every two years to ensure the program's effectiveness. Included at the end of this report is a summary of OSHA's draft proposed safety and health program rule.

It has been reported that 80 percent of occupational injuries to young workers occurred when no supervisor was present. In addition, there is evidence that young workers have a higher rate of occupational injuries than more experienced older workers. Employers who hire workers less than 18 years of age should include provisions addressing young workers in their health and safety program. These provisions should address but not be limited to policies and procedures to assure compliance with child labor laws, worker and supervisor training, and adequate supervision.

Recommendation #4: Manufacturers of golf carts should consider moving the direction control lever to the dashboard so that it is clearly visible and accessible to the operator.

Discussion: Golf carts manufacturers should consider moving the forward and reverse direction control lever to a location that the operator can easily access and clearly see the direction in which the lever is engaged prior to and while operating.

In this case, the control lever was located on the bottom half of the seat by the operator's lower leg, which made it difficult for the operator to see which direction the golf cart was engaged in. An inexperienced employee and/or an inexperienced driver, such as a young worker, might not realize which direction the golf cart was left in or mistakenly engage the golf cart in the wrong direction without realizing it. Moving the direction lever to the dashboard area would allow the operator to have an unobstructed view of the direction lever and reduce the chances of the operator engaging the golf cart in the wrong direction.

Retrofitting existing golf carts should also be considered. For example, an indicator light might be placed on the dash to inform the operator about the direction the golf cart is engaged in.

Recommendation #5: Manufacturers of golf carts should consider modifying the hill brake release to allow the operator to apply the driving brake when releasing the hill brake.

REFERENCES

1. NIOSH, 1999, Promoting safe work for young workers, A community based-approach, Cincinnati, OH: U.S. Department of Health and Human Services, Public Health Services, Center for Disease Control, DHHS (NIOSH) Publication No. 1999-141.
2. Massachusetts General Laws, Title XXI, Labor and Industries, Chapter 149. Labor and Industries, Section 62. Minors Under Eighteen.
3. Massachusetts General Laws, Title XXI, Labor and Industries, Chapter 149. Labor and Industries, Section 62, House, No. 4310.
4. Massachusetts General Laws, Title XIV, Public Ways and Works, Chapter 90. Motor Vehicles and Aircraft.

FIGURES

Figure 1 – Same model golf cart involved in the incident (side view). Arrow points to the direction control lever.

Figure 2 – Section of the deck the golf cart struck

SUMMARY OF OSHA'S DRAFT PROPOSED
SAFETY AND HEALTH PROGRAM RULE FOR EMPLOYERS
(29 CFR 1900.1 Docket No. S&H-0027)

Core elements

- Management leadership and employee participation
- Hazard identification, assessment, prevention and control
- Access to information and training
- Evaluation of program effectiveness

Basic obligations

- Set up a safety and health program, with employee input, to manage workplace safety and health to reduce injuries, illnesses and fatalities.
- Ensure that the safety and health program is appropriate to workplace conditions taking into account factors such as hazards employees are exposed to and number of employees.
- Establish and assign safety and health responsibilities to an employee. The assigned person must have access to relevant information and training to carryout their safety and health responsibilities and receive safety and health concerns, questions and ideas from other employees.

Employee participation

- Regularly communicate with employees about workplace safety and health matters and involve employees in hazard identification, assessment, prioritization, training, and program evaluation.
- Establish a way and encourage employees to report job-related fatalities, injuries, illnesses, incidents, and hazards promptly and to make recommendations about appropriate ways to control those hazards.

Identify and assess hazards to which employees are exposed

Safety and health program record keeping

- Keep records of identified hazards, their assessment and actions taken or the plan to control these hazards.

Hazard prevention and control

- Comply with the hazard prevention and control requirements of the OSHA standards by developing a plan for coming into compliance as promptly as possible, which includes setting priorities and deadlines for controlling hazards and tracking the progress.

Information and training

- Ensure each employee is provided with safety and health information and training.
- If an employee is exposed to hazards, training must be provided on the nature of the hazards to which they are exposed to and how to recognize these hazards. Training must include what is being done to control these hazards and protective measures employees must follow to prevent or minimize their exposures.
- Safety and health training must be provided to current and new employees and before assigning a job involving exposure to a hazard. The training should be provided routinely, when safety and health information is modified or a change in workplace conditions indicates a new or increased hazard exists.

Program evaluation and maintenance

- Evaluate the safety and health program at least once every two years or as often as necessary to ensure program effectiveness.
- Revise the safety and health program in a timely manner once deficiencies have been identified.

Multi-employer workplaces

• Conduct inspections of the workplace at least every two years and when safety and health information change or when a change in workplace conditions indicates that a new or increased hazard may be present. • Evaluate new equipment, materials, and processes for hazards before introducing them into the workplace and assess the severity of identified hazards and rank those hazards that cannot be corrected immediately according to their severity. **Investigate safety and health events in the workplace** • Thoroughly investigate each work-related death, serious injury, illness, or incident (near miss).	• The host employer's responsibility is to provide information about hazards and their controls, safety and health rules, and emergency procedures to all employers at the workplace. In addition, the host employer must ensure that assigned safety and health responsibilities are appropriate to other employers at the workplace. • The contract employer responsibility is to ensure that the host employer is aware of hazards associated with the contract employer's work and how the contract employer is addressing them. In addition, the contract employer must advise the host employer of any previously unidentified hazards at the workplace.

Date issued November 23, 1998. Full text available on www.osha.gov/dsg/topics/safetyhealth/nshp.html (https://www.osha.gov/dsg/topics/safetyhealth/nshp.html). (Link updated 3/20/2013)

To contact Massachusetts State FACE program personnel regarding State-based FACE reports, please use information listed on the Contact Sheet on the NIOSH FACE web site Please contact In-house FACE program personnel regarding In-house FACE reports and to gain assistance when State-FACE program personnel cannot be reached.

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