

**FACE**

Fatality Assessment and Control Evaluation Program

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Temporary Service Worker Dies After Mower Rolls Over on Him - North Carolina

SUMMARY

A 43-year-old male temporary service worker (the victim) died after the mower he was operating rolled over on top of him as he was mowing up a bank. The victim was a member of a five-person crew performing maintenance at an interstate highway rest stop. While the victim mowed the grass on the rest stop grounds, the crew leader and two coworkers cleaned the inside of the rest stop buildings and rest rooms. One coworker remained outside with the victim and cleaned up around the landscaping on the rest stop grounds. At the time of the incident, the victim had begun to mow along a bank bordering one of the rest stop's parking lots. A 15-foot-high bank with a 35-degree slope was present on the side of the parking lot. The victim had been instructed by the crew leader to mow across the bank and approximately $\frac{2}{3}$ of the way up the bank due to the steep slope. The victim was instructed to use a weed eater to finish cutting the grass the rest of the way up the bank. Work proceeded all morning, and shortly after lunch, as the victim began to cut the bank, the coworker working outside with him notified the victim that he was going inside to get a drink and to get out of the sun for a while. The victim told the coworker that he would continue mowing. When the coworker returned $\frac{1}{2}$ hour later, he found the mower overturned, with the victim pinned underneath it. The coworker summoned the rest of the crew to help him lift the mower off the victim. A crew member called the Emergency Medical Service (EMS) from a phone in the rest stop. EMS personnel contacted the county coroner who pronounced the victim dead at the scene. NIOSH investigators concluded that, to help prevent similar occurrences, employers should

- *ensure that employees operate machinery in accordance with manufacturers' recommendations and guidelines*
- *ensure that foreign-born workers fully understand all information, particularly safety-related information, pertaining to their jobs*

Fatality Assessment and Control Evaluation (FACE) Project

The National Institute for Occupational Safety and Health (NIOSH), Division of Safety Research (DSR), performs Fatality Assessment and Control Evaluation (FACE) investigations when notified by participating states (North Carolina, Pennsylvania, South Carolina, Tennessee, and Virginia); by the Wage and Hour Division, Department of Labor; or when a request for technical assistance is received from NIOSH-funded state-level FACE programs in Alaska, California, Iowa, Kentucky, Massachusetts, Minnesota, Missouri, Nebraska, New Jersey, Ohio, Oklahoma, Texas, Washington, West Virginia, and Wisconsin. The goal of these evaluations is to prevent fatal work injuries in the future by studying the work environment, the worker, the task the worker was performing, the tools the worker was using, the energy exchange resulting in fatal injury, and the role of management in controlling how these factors interact. The FACE program does not seek to determine fault or place blame on companies or individual workers. For further information visit the FACE website at www.cdc.gov/niosh/face/faceweb.html or call toll free 1-800-35-NIOSH.



INTRODUCTION

On July 17, 2000, a 43-year-old male temporary service worker (the victim) died after the mower he was operating rolled over on top of him as he was mowing a steep bank. On July 23, 2000, officials of the North Carolina Occupational Safety and Health Administration (NCOSHA) notified the National Institute for Occupational Safety and Health (NIOSH), Division of Safety Research (DSR), of the incident. On August 13, 2000, a DSR occupational health and safety specialist conducted an investigation of the incident. The incident was reviewed with officials from NCOSHA, the state police, and the county coroner. The incident site was visited and police and NCOSHA photos were reviewed.

The employer was a temporary employee service that had been in operation 19 years and employed 250 workers at the time of the incident. The employer had been contracted by the state to maintain the rest stops along an interstate highway. This included cleaning in and around the buildings at the rest stops and maintaining the grounds. The employer had a written safety program and written safe operating procedures for all tasks being performed by employees. The victim had received hands-on training in the operation of the 25-horsepower commercial mower with a 60-inch cutting deck. The victim, who had worked for the employer for approximately 1 year, had to demonstrate his proficiency in the operation of the mower on level ground before being allowed to operate the mower on his own on the job. This was the first fatality experienced by the company.

INVESTIGATION

The employer had been contracted by the state to provide service and maintenance to rest stops along an interstate highway. On the day of the incident, the five-person crew arrived at the site at approximately 6 a.m. in a company truck driven by the crew leader. The truck pulled a utility trailer that contained the equipment needed to service the rest stop, including a 25-horsepower commercial mower with a 60-inch mower deck. The total weight of the mower was 1,020 pounds.

Once the equipment was unloaded, the crew leader made the assignments for the day. The victim was assigned to mow the grass, while one coworker was assigned the task of cleaning around the landscaping on the rest stop grounds. The crew leader and the other two coworkers were to clean in and around the rest stop's buildings.

After work assignments were made, the crew leader took the victim to an area beside one of the rest stop parking lots. Approximately 10 feet from the curb of the parking lot, the ground began to slope upward 35 degrees, creating a 15-foot-high bank. The crew leader instructed the victim to mow across the lower **a** of the bank and not to mow up and down the bank because of the steep slope. The victim was instructed to use a weed eater to cut the grass on the remainder of the bank. The victim was of Haitian descent and spoke broken English; however, during OSHA interviews, coworkers stated that they could communicate with the victim, and they felt he understood them.

The crew worked throughout the morning and took a lunch break from noon until 12:30 p.m., then returned to work. At approximately 1:30 p.m., the victim began to cut the bank. He had made three passes across the bank with the mower when the coworker working outside with him notified the

victim that he was going to go inside one of the buildings to get a drink and to get out of the heat of the sun. The temperature was in the mid-90s and the humidity was high. The victim informed the coworker that he wanted to finish the bank before he went inside. As the coworker left the area, the victim continued mowing.

The coworker returned to the area approximately ½ hour later and found the victim pinned underneath the overturned mower at the bottom of the bank. Marks on the ground indicated the victim had attempted to mow up and down the bank. The coworker ran to summon the other crew members, and the Emergency Medical Service (EMS) was called from a phone located inside one of the buildings. The crew lifted the mower off the victim but did not attempt first aid due to the extent of the victim's injuries. Upon arrival, EMS personnel summoned the county coroner, who pronounced the victim dead at the scene.

CAUSE OF DEATH

The coroner listed the cause of death as massive head and chest trauma.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Employers should ensure that employees operate machinery in accordance with manufacturers' recommendations and guidelines.

Discussion: The manufacturer's safety precautions stated the mower should always be operated across slopes, never up and down a slope, and that the mower should not be operated on slopes greater than 15 degrees. The slope of the bank being mowed had an approximate slope of 35 degrees. Coworkers stated during OSHA interviews that the victim had been warned several times by the crew chief while tasks were being assigned not to operate the mower up and down the slope, and only to mow a portion of the bank with the mower. Markings on the ground indicated the victim had attempted to mow up and down the bank, which resulted in the mower overturning onto the victim. Because of the possible language barrier, the victim may have required more direct supervision.

Recommendation #2: Employers should ensure that foreign-born workers fully understand all information, particularly safety-related information, pertaining to their jobs.

Discussion: Although the crew chief warned the victim several times not to operate the mower straight up the bank, the victim, who was of Haitian descent, could speak only broken English and may not have fully understood the directions. Coworkers said during OSHA interviews that they could communicate with the victim but were unsure whether he could fully understand the hazards associated with operating the mower on a sloped surface. Employers should ensure that all workers understand the hazards associated with the work they are performing. Employers that employ foreign-born (immigrant) workers should identify the different languages spoken by the employees and design, implement, and enforce a comprehensive multilanguage safety program. The program should include, but not be limited to, a competent interpreter to explain the safety regulations to the foreign-speaking employees. Also, the employer should develop and post, at conspicuous places,



safety posters/signs in those languages. Additionally, employers should ask manufacturers about the availability of multilingual warning stickers that could be placed on equipment.

INVESTIGATOR INFORMATION

This investigation was conducted by Virgil J. Casini, Team Leader, Fatality Assessment and Control Evaluation Team, Surveillance and Field Investigations Branch, Division of Safety Research.



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