TO: Director, National Institute for Occupational Safety and Health

FROM: California Fatality Assessment and Control Evaluation (FACE) Program

SUBJECT: Janitor falls from personnel platform resting on forklift prongs and dies in California

SUMMARY
California FACE Report 98CA013

A 50-year old janitor (decedent) died when he fell from a personnel platform that had been lifted by a forklift. When he leaned out during a wall washing operation, the platform tilted and the decedent fell over the platform's guardrail dropping 12 feet to the concrete floor. The personnel platform had not been lifted by placing the forklift prongs into the channels in the bottom of the platform. The platform was just resting on the top of the forklift prongs since the decedent had lifted it from the side rather than the front. The decedent was not authorized to drive the forklift and, according to company management and two employees, had never driven the forklift prior to this incident. The top guard rail was 35 inches above the platform's base. There was no means to secure the platform to the forks or mast. The decedent was not wearing fall protection. The forklift operator who had lifted the decedent to the 12 foot height, was not at the controls of the forklift when the decedent fell. The CA/FACE investigator determined that, in order to prevent future occurrences, employers should:

- ensure employees do not operate machinery until they are trained and authorized.
- ensure personnel platforms conform to industry regulations.
- ensure forklift operators remain at the forklift controls when employees are in raised personnel platforms.
- ensure employees working at heights wear personal fall protection.
- develop and implement a comprehensive employee safety program.

INTRODUCTION

On August 22, 1998, at 4:20 a.m., a 50-year old male janitor was fatally injured when he fell from a personnel platform that had been lifted by the prongs of a forklift. The platform was resting on top of the forks and not otherwise secured. When the decedent leaned over the platform tipped and he fell to the concrete floor. The CA/FACE investigator learned of this incident on August 25, 1998 from the local legal office of the California Occupational Safety & Health Administration (Cal/OSHA). On August 26, 1998, the CA/FACE investigator traveled to the incident site where he met with the company controller, the day supervisor, the night supervisor, the night leadman, and two investigators from the district attorney's office, one of

whom acted as an interpreter. The CA/FACE investigator also took photographs of the equipment and the area where the incident happened.

The employer, a produce packer and distributor, had been in business for 10 years at the time of the incident. The company has 125 employees with 40 working on site at the time of the incident. The decedent had worked for the company for 2 years and 9 months all of which was at the location of the incident.

According to the company controller, he had company safety responsibilities. The company could not produce an Injury and Illness Prevention Program (IIPP), a code of safe practices or safety training documentation. According to the controller, the company had written rules and procedures in place for the task, but they could not produce them. The controller stated that the decedent not was trained in the duties of the task. The decedent was also not authorized or trained in forklift operation.

INVESTIGATION

The site of the incident is a large commercial produce warehouse. Many types of fruits and vegetables are unloaded, stored or ripened, and distributed. There were loading docks at both the west and north ends of the building. The building houses a number of ripening and cooler rooms for the produce. The incident occurred in one of the ripening rooms.

Most of the activity, such as packaging and shipping the produce occurs in the early morning hours. On the morning of the incident, the decedent was performing his normal duties. Most of his work included dumping trash and keeping the floors clean and clear of trash and fallen produce. He swept and mopped the floors to accomplish his tasks. The night prior to the incident, the night supervisor had informed the decedent that they would be washing down the walls of the ripening room. The day supervisor stated that he told the decedent to wait until he arrived before beginning the job.

As one of the forklift operators, who acts as a leadman, was loading and unloading trucks at the north end docks, he noticed the decedent driving into the ripening room with a forklift (**exhibit 1**) on which a personnel platform (**exhibit 2 & 3**) had been placed. When the decedent placed the platform on the prongs of the forklift, he did not run them through the channels in the bottom of the platform. He ran the prongs under the platform and under the channels because he picked up the platform from the side rather than from the front. As the leadman's work slowed, he went to the ripening room to check on the decedent. He found the decedent up on the personnel platform, with the base of the platform at about the four foot level. The decedent was using a pressure washer (**exhibit 4**) to wash down the walls. The heavy mist produced by the washing prevented the leadman from seeing how the platform was attached to the forklift.

When the leadman saw the decedent washing he also noticed that water was beginning to flood the ripening room floor. The room has no drains. The wash water must be squeegeed from the ripening room to drains located outside the room. The leadman called over several co-employees to help with the removal of the water so it did not flood a nearby area where many employees were working. The ripening room is long and narrow. The employees were stationed such that one employee would squeegee the water to the next until the employee

nearest the entrance squeegeed it toward a drain.

The night supervisor, who was working at the west end of the building had not noticed the wall washing activity. However, he did notice that a number of his employees were missing from the the production line. The supervisor thought the employees might all be in the restroom and headed that direction. It was at this time that he noticed the wall washing activity. He went to the ripening room, entered a short way, shouted at the employees inside, but they could not hear him.

The supervisor then decided to go find the other missing employees so he could get the production line back into normal operation. The supervisor stated that he was going to go back to the ripening room after he redistributed the workload so production could resume. His intention upon return to the ripening room was to stop the wall washing since it was not supposed to be done until later and that the water could interfere with production. Also, two of his key production employees had been taken away to help with the washing task.

While the supervisor was trying to resume normal production, the wall washing continued. As the lower portion of the wall was washed, the forklift was used to raise the personnel platform. The leadman, who was a certified forklift operator, had raised the platform so that its base was at about the 12 foot level. He stated that he did not notice that the platform was not properly attached to the forklift. The leadman turned off the forklift engine, set the parking brake and went back to squeegeeing. Shortly thereafter, the leadman saw the decedent lean out over the upper guard rail of the personnel platform at which time the platform tipped. The decedent fell from the platform to the concrete floor. The platform fell off the forklift prongs to the floor but did not strike the decedent.

The leadman could see that the decedent was badly injured and yelled to the co-worker closest to the entrance to go get the supervisor. The co-worker left to attempt to locate the supervisor. The employees had not been trained in first aid or cardiopulmonary resuscitation (CPR) and did not attempt to provide first aid or CPR.

As the supervisor was on his way back to the ripening room, he was intercepted by the employee sent to find him. The supervisor headed toward the ripening room, but was met by the leadman. The supervisor stated that by the look on the leadman's face that he knew something serious had happened and he immediately went to the nearest phone to call 911.

The 911 operator asked the supervisor if the decedent was breathing. He said he did not know and went to the ripening room to check. He found the decedent gasping, called out his name but got no response. The supervisor ran back to the telephone to inform the 911 operator of the decedent's condition. He was met by the arriving police officers who then accompanied him to the ripening room.

The police officers stated that they should leave the decedent alone until the paramedics arrived. The paramedics were dispatched at 4:39 a.m. and arrived at 4:46 a.m. They treated the decedent and transported him to a local hospital where he pronounced dead at 9:30 a.m.

CAUSE OF DEATH

The death certificate stated the cause of death to be multiple blunt injuries**.**

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Employers should ensure employees do not operate machinery until they are trained and authorized.

Discussion: In this incident the decedent had not been trained in the operation of a forklift. He was not authorized by management or certified to operate a forklift. Forklift operators in the company are trained by trainers from outside the company. They are certified and issued a forklift operator's license. They are given refresher training once year. The decedent also had not been trained to attach the personnel platform to the forklift. Although he had performed the wall washing task before, he had not done the set up for the task of wall washing. Employers can help ensure employees adhere to company rules through a program of training and progressive disciplinary measures.

Recommendation #2: Employers should ensure personnel platforms conform to industry regulations.

Discussion: In this instance, the personnel platform did not meet industry regulations. Industry standard guardrails are required to be 42-inches above the platform floor. The guardrail of the personnel platform used in this instance was 35 inches above the platform floor. The platform is required to be secured to either the forklift prongs or the mast to prevent it from separating from the forklift. There was no means in this incident to secure the platform to the forklift prongs or mast. If the personnel platform had been properly secured to the forklift and had appropriate guardrails installed, this incident may not have happened.

Recommendation #3: Employers should ensure forklift operators remain at the forklift controls when employees are in raised personnel platforms.

Discussion: In this incident, the forklift operator who raised the decedent in the personnel platform did not remain at the controls of the forklift. The personnel platform had no controls for lowering, raising or moving the platform. Industry regulations require that the operator remain at the forklift controls when the platform has no controls of its own and employees are in an elevated position. In order for the platform to be moved to another position to continue the wall washing, the decedent would have had to call to the forklift operator to come back to the forklift to operate the controls. Not having ready access to moving the platform could have caused the decedent to lean out over the guardrail to wash a portion of the wall further away than he could have reached by staying within the confines of the platform.

Recommendation #4: Employers should ensure employees working at heights wear personal fall protection.

Discussion: In this case, the decedent was not wearing any personal fall protection. Although industry regulations do not require personal fall protection to be worn when working from personnel platforms, falls from personnel platforms have resulted in injuries and fatalities. There was a greater danger of falling from the personnel platform used in this incident because the guardrails did not conform to industry standards. Injury or death is likely because of the heights the personnel platform is lifted above the floor.

Recommendation #5: Employers should develop and implement a comprehensive employee safety program.
Discussion: The company involved in this incident could not produce an Injury and Illness Prevention Program. It is paramount to the safety and health of employees to have an effective safety program. The program should include identification of the person responsible for the program, assurance that employees comply with the program (including progressive discipline for safety violations), methods of communicating the program elements to employees, scheduled periodic inspections of the workplace and equipment, investigation of injuries and illnesses, a procedure for correcting hazards in the workplace, and employee safety training (both initial and refresher). Records of workplace and equipment inspections and training should be kept for a minimum of three years. Safety meetings should be held regularly, but not less than once a month and should include management and regular employees.

References:
Barclays Official California Code of Regulations, Vol. 9, Title 8, Industrial Relations, South San Francisco, 1998

For general information regarding fall protection, forklift operation and elevating employees with forklifts refer to:
http.www.dir.ca.gov./title8/1670.html, /3299.html, /3648.html, /5004.html, /3656.html, /3657.html, /3210.html, /3650.html, /3664.html

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FATALITY ASSESSMENT AND CONTROL EVALUATION PROGRAM

The California Department of Health Services, in cooperation with the Public Health Institute, and the National Institute for Occupational Safety and Health (NIOSH), conducts investigations on work-related fatalities. The goal of this program, known as the California Fatality Assessment and Control Evaluation (CA/FACE), is to prevent fatal work injuries in the future. CA/FACE aims to achieve this goal 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.

NIOSH funded state-based FACE programs include: Alaska, California, Iowa, Kentucky, Maryland, Massachusetts, Maryland, Minnesota, Missouri, Nebraska, New Jersey, Ohio, Oklahoma, Texas, Washington, West Virginia, and Wisconsin.

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Additional information regarding the CA/FACE program is available from:

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