

Worker Suffers On-the-job Heart Attack in Wyoming

SUMMARY

A 57 year old male heavy equipment operator died from injuries suffered while applying diesel fuel to the gates of a belly-dump truck to minimize the probability of asphalt buildup while in use. The worker had climbed up on the gates and begun the application process when witnesses saw him grab his chest and fall to the ground. All indications are that the victim had a heart attack and that no traumatic injury occurred as a result of the fall. There is no indication as to whether the stress involved in conducting the task contributed to the heart attack.

Employers may be able to minimize the potential for occurrence of this type of incident through the following precautions:

- **Determine that workers who have potential heart or other stress related conditions be assigned tasks that cause minimal stress**

INTRODUCTION

On the morning of June 1, 1993, a heavy equipment operator was beginning his work day by applying a coating of diesel fuel to the gates of the belly dump truck that was to be used for asphalt laying on a nearby roadway. The victim had talked with one of the other workers at the site earlier that morning and had greeted his son (who was also employed at the work site), but had not mentioned to either of them that he had any medical concerns.

INVESTIGATION

Through a reciprocal notification agreement with the Director of the Occupational Safety and Health Division of the Department of Employment, the WY-Wyoming FACE Project was notified on June 2, 1993 that a worker had died from an apparent heart attack. Investigators from OSHA would not conduct an investigation as it appeared to be from medical causes unrelated to OSHA's jurisdictional authority. Later discussions with area personnel and newspaper accounts called the death a heart attack. There was no known review of whether the stress of climbing onto the equipment and beginning the task was a contributing factor to the death.

CAUSE OF DEATH

The Medical Examiner listed the cause of death as Occlusive Coronary Atherosclerosis with up to 100° narrowing, left anterior descending right coronary artery and up to 50° narrowing left circumflex coronary artery, along with a condition of cardiomegaly - Hepatosplenomegaly.

RECOMMENDATIONS/DISCUSSION

This incident could **possibly** have been prevented by awareness of the victim's potential for coronary heart disease and subsequent redefining of tasks as a preventive measure. It appears in this instance, based on available information, that the stress induced by the activity of climbing up onto the truck gates was minimal, but employers should be aware of the potential risk involved.

There are certain risk factors that are indicators of a high potential for Atherosclerosis, including cigarette smoking, high blood pressure, male gender, obesity, physical inactivity, high serum cholesterol levels, family history of arterial disease and anxious or aggressive personality traits. The risk of atherosclerosis increases with age and is more prominent in males than in females. Employers who encourage regular blood pressure tests and smoking cessation programs can protect workers who might be subject to such disorders.

FATAL ACCIDENT CIRCUMSTANCES AND EPIDEMIOLOGY (Wyoming FACE) PROJECT

The National Institute for Occupational Safety and Health (NIOSH), Division of Safety Research (DSR), performs Fatal Accident Circumstances and Epidemiology (Wyoming FACE) investigations when a participating state reports an occupational fatality and requests technical assistance. The goal of these evaluations is to prevent fatal work injuries in the future by studying the working 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.

States participating in this study include: Kentucky, Maryland, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, and West Virginia.

NIOSH Funded/State-based Wyoming FACE Projects providing surveillance and intervention capabilities to show a measurable reduction in workplace fatalities include: Alaska, California, Colorado, Georgia, Indiana, Iowa, Massachusetts, New Jersey, Minnesota, Missouri, Wisconsin and Wyoming.

Additional information regarding this report is available from:

Wyoming Occupational Fatality Analysis Program
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Cheyenne, WY 82002
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Please use information listed on the Contact Sheet on the NIOSH FACE web site to contact In-house FACE program personnel regarding In-house FACE reports and to gain assistance when State-FACE program personnel cannot be reached.