

# Safety Bulletin

# REPORTING WORK-RELATED HEART ATTACKS

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#### **PURPOSE**

The Occupational Safety and Health (OSH) Act of 1970 requires Federal agencies to prepare and maintain records of occupational injuries and illnesses. Title 29 Code of Federal Regulation (CFR) 1904 and 1952 provide specific recording and reporting requirements. Title 10 CFR 851, Worker Safety and Health Program, adopted by reference Title 29 CFR 1904 "Recording and Reporting Occupational Injuries and Illnesses."

Department of Energy (DOE) recordkeeping and reporting requirements mirror the private sector's requirements. This helps to assure that DOE injury and illness records can be reliably compared to other Federal and private records. Additionally, recordkeeping and reporting increase employee awareness of job-related injuries and illnesses, and permit DOE to collect information about occupational injuries and illnesses that may be used in the management of safety and health programs.

#### BACKGROUND

In June 2007, a fatality occurred when a member of the protective force staff suffered a fatal heart attack. The circumstances of this event did not warrant a Type A Accident Investigation, however, the significance of the event led the Chief Health, Safety and Security Officer to initiate a Limited Scope Investigation.

Initially, the employer did not agree that the case was recordable based partly on an exception in Part 1904.5(b)(2)(ii) which makes an event non-recordable, if: "The injury or illness involves signs or symptoms that surface at work but result solely from a nonwork-related event or exposure that occurs outside the work environment." After review of information concerning the case, the Office of Health, Safety and Security (HSS) staff concluded that this case was recordable. Title 29 CFR 1904.5 (Determination of work-relatedness) states: ".... consider an injury or illness to be work-related if an event or exposure in the work environment either caused or contributed to the resulting condition or significantly aggravated a pre-existing injury or illness. Work-relatedness is presumed for injuries and illnesses resulting from events or exposures occurring in the work environment, unless an exception in Section 1904.5(b)(2) specifically applies." The Occupational Safety and Health Administration (OSHA) interpretation regarding this case is available at:

http://www.hss.energy.gov/CSA/Analysis/cairs/fag.html

#### **FINDINGS**

The Security Police Officer had concluded an unsupervised onshift treadmill interval training session, where he was witnessed experiencing difficulty managing the equipment. During the cool down following the training, he suddenly was observed to lose consciousness. Although cardiopulmonary resuscitation (CPR) and emergency medical care, including defibrillation, were initiated immediately, he was pronounced dead shortly after arrival at a hospital emergency room.

#### SUMMARY

OSH reporting and recordkeeping requirements do <u>not</u> require experts to prove substantial causation or contribution to the development of an event. The test for recording of such events requires the employer to determine if an event or exposure in the workplace is more likely than not the cause of the resulting injury or illness.

Heart attacks are well known to occur during or shortly after the onset of heavy physical exertion (see <a href="http://www.cdc.gov/nccdphp/dnpa/physical/measuring/met.htm">http://www.cdc.gov/nccdphp/dnpa/physical/measuring/met.htm</a> for activities regarded as vigorous activity or heavy exertion). In addition, prolonged work at near maximal heart rates, heat stress with fluid loss (decreasing cardiac output and electrolyte imbalances may result) may be contributing factors in the occupational setting. Lastly, workplace exposures to solvent vapors, carbon monoxide, and even the increased respiratory effort associated with prolonged use of respiratory protection may contribute to the development of heart attacks under certain conditions.

To help ensure complete and accurate DOE information, all cardiac events occurring to employees in the work environment should be investigated. Current job descriptions supported by a job task analysis can be used to assist in establishing if the individual was performing essential tasks associated with his/her position and if work events contributed to the medical condition.

#### Additional Sources of Information

- Your Safety and Health Office
- DOE limited scope investigation report http://www.hss.energy.gov/CSA/CSP/AIP/
- DOE OSH Regulatory and Policy Response Line http://www.hss.energy.gov/HealthSafety/WSHP/il/
- OSHA letters of interpretation http://www.osha.gov/recordkeeping/RKinterpretations.html
- OSHA Web-based Recordkeeping Handbook http://www.osha.gov/recordkeeping/index.html

If you have any questions, please contact Dr. Robert Czincila by telephone at (301) 903-8008 or at Robert Czincila@hq.doe.gov.

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## PREVENT EVENTS

### Learning from Industry Experience

PREVENT EVENTS is intended for use by personnel during morning meetings, pre-job briefings, and work unit meetings to communicate key industry experience.

#### Management:

- Do we have Automated External Defibrillators (AED) in all of our facilities?
- 2. Do we have a written program and procedures regarding the use of AEDs?
- 3. Have our safety personnel been trained in the use of AEDs and cardiopulmonary resuscitation (CPR)?
- 4. Have we also provided training for designated workers in each facility in the use of AEDs and CPR?
- 5. Are these designated workers prepared to assist onscene responders?
- 6. Do we have a program that offers post event emotional assistance and mandatory counseling?
- 7. Do we provide post-event lessons learned for managers, supervisors, first aid responders, and safety personnel?

#### Supervisors and Workers:

- 1. Where are the locations of the AEDs in my work areas?
- 2. Who can get training in the use of AEDs and CPR?
- 3. Is there a back-up person trained in the use of the AED if the designated individual for AED use is not present during an emergency?
- 4. Do we have procedures and telephone numbers posted for notification of the proper people in the event of a health or safety emergency?
- 5. Who do we contact for emotional assistance and counseling of needs?

