STATE FIRE MARSHAL'S OFFICE

Line of Duty Death Investigation



Investigation Number 04-086-11

District Chief Ricardo Armando Gonzales

Beaumont Fire Department November 5, 2003

Texas Department of Insurance Austin, Texas

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Summary

A career District Chief, age 47, died of a suspected heart attack on November 5, 2003, 13 days after developing symptoms of a heart attack while on duty and subsequently undergoing stent insertion in his coronary arteries.

District Chief Ricardo Armando Gonzales, a career member of the Beaumont Fire Department, was on duty on October 24, 2003 and told other department members he was feeling ill. After resting for a short time, Gonzales left the fire station to drive himself to his home in Jasper, Texas, approximately 66 miles away. Gonzales drove himself directly to his physician's office, was diagnosed as having a heart attack and was admitted to Jasper Memorial Hospital. Gonzales was transferred by ambulance to Saint Elizabeth Hospital in Beaumont, Texas on October 25.

Gonzales underwent an arteriogram on October 27. Some arteries in Gonzalez' heart were blocked and cardiac catheterization was performed on October 28 and four stents inserted. Gonzales was discharged from the hospital on the afternoon of the 29th.

Gonzales spent the next week at home convalescing and doing light exercise. He had spoken with several people and relatives and stated he felt much better. On the morning of November 5, Gonzales spoke to his wife at 7:45 AM before she left for work and they made arrangements for him to visit her workplace. When she called later that morning to make sure he was ready to be picked up, Gonzales failed to answer the telephone.

Gonzales' wife left her workplace for home and arrived at about the same time as his mother. Gonzales was found unresponsive on the bathroom floor. EMS was called and determined that Gonzales had sustained cardiac and respiratory arrest at some earlier time and no resuscitation attempt was made.

Jasper County Justice of the Peace Freddie Miller estimated the time of death as approximately 9:30 AM. No autopsy was conducted.

District Chief Ricardo Armando Gonzales served in the Beaumont Fire Department for almost 27 years. He is survived by his wife and three adult children.

Introduction

The Texas State Fire Marshal's Office was notified of the death of Beaumont District Fire Chief Ricardo Gonzales on November 12, 2003. State Fire Marshal's Office (SFMO) Chief Inspector Richard L. Bishop was assigned as the lead investigator. Bishop traveled to the Beaumont Fire Department on November 13, 2003 to conduct an investigation of the incident.

Upon arrival, Bishop was advised that Ricardo Armando Gonzales, a Beaumont Fire Department District Chief, had developed tightness in his chest and pain in his throat while on duty on the morning of October 24, 2003. Gonzales left on sick leave that afternoon and drove himself to his physician's office where he was diagnosed as having a heart attack and admitted to a local hospital. Gonzales was transferred to a larger hospital on October 25. Four stents were inserted in his coronary arteries on October 27 and Gonzales was discharged from the hospital on October 29.

After a week of convalescence at home with no apparent complications, Gonzales was found dead in his home the morning of November 5. No autopsy was performed.

The SFMO commenced an LODD investigation under the authority of Texas Government Code Section 417.0075. The statute requires SFMO to investigate the circumstances surrounding the death of the firefighter, including the cause and origin of the fire, the condition of the structure, and the suppression operation, to determine the factors that may have contributed to the death of the District Chief. The State Fire Marshal is required to coordinate the investigative efforts of local government officials and may enlist established fire service organizations and private entities to assist in the investigation.

The National Fallen Firefighters Foundation and the National Institute for Occupational Safety and Health (NIOSH) Fire Fighter Fatality Investigation and Prevention Program were notified.

Origin and Cause Investigation

This investigation involved a study of the victim's activities the day of the acute onset of his illness. The victim did not attend any fire scenes that day but did respond to two other emergencies.

District Chief Gonzales reported for duty the morning of October 24, 2003. At 8:46 AM, Beaumont Reserve Engine 7 engine was involved in a traffic accident with a civilian vehicle and overturned. District Chief Gonzales was dispatched on the call and served as the Incident Commander at the accident scene. After the incident was stabilized, Gonzales transported the three firefighters from the overturned engine in his command vehicle to a local hospital for evaluation of their minor injuries and returned to service. At 10:42 AM, Gonzales was dispatched with Beaumont Engine 4 to investigate the

activation of a private fire alarm. The investigation did not discover any fire or emergency and Gonzales returned to Beaumont Station 1.

Gonzales was not dispatched to any other emergency calls and left work at 2:00 PM.

Building Structure and Systems

No buildings or structures played a factor in the fatality.

Investigation of the Death of the Firefighter

On November 5, 2003 at approximately 10:00 AM, Jasper Emergency Medical Services (EMS) received a call reporting an emergency at the Gonzalez residence on Walnut Run in Jasper, Texas. When the EMS ambulance arrived on the scene, they observed Gonzales in cardiac and respiratory arrest in a bathroom of the home.

The crew of the EMS ambulance examined Gonzales and determined that he had sustained cardiac and respiratory arrest at some unknown time and was beyond resuscitation. Jasper County Justice of the Peace Freddie Miller was summoned to the scene. A death certificate prepared by Judge Miller attributed the death to "cardiac arrest" with an estimated time of death of 9:30 AM. No autopsy was ordered.

Personal Protective Equipment Evaluation

District Chief Gonzales was wearing his uniform while on duty on October 24. He had not donned any protective clothing at the two calls he responded to during his abbreviated shift. Gonzales was not involved in involved in any firefighting operations and did not enter any hazardous areas.

Medical Background of Victim

Employment records from the Beaumont Fire Department were examined. Ricardo Gonzales was hired by the Beaumont Fire Department on January 3, 1977.

Relatives stated that District Chief Gonzales had no personal history of high blood pressure, heart disease or diabetes. His wife stated he was not a smoker, nor was she. The only family history available was that Gonzales' father died at age 57 from a heart attack and had high blood pressure and emphysema.

Gonzales led an active life style, playing golf almost every day off, and enjoyed walking and hunting. Beaumont Fire Chief Micky Bertrand stated that during a hunting trip on October 23, Gonzales stated to Beaumont Fire Captain Chapman that he was not

feeling well and was considering taking a sick day on October 24. According to Chief Bertrand, Gonzales had talked to his wife on October 24 about not feeling well.

After responding to the two emergency calls on the morning of October 24, Gonzales told other fire department members he was feeling ill with a severe headache and flulike symptoms including tightness and pain in throat and felt he needed to take the rest of the shift off.

Gonzales stated to co-workers that he did not feel up to driving the 60+ miles to his home in Jasper, Texas at that time. Gonzales rested on a bed in the bunk room of Station 1 until 2:00 PM when he went on sick leave and departed for home.

Gonzales later told his wife that he felt so bad when he reached Jasper he drove himself directly to his physician's office, and based on an electrocardiogram and cardiac enzyme testing, Gonzales was diagnosed as having a heart attack and was admitted to Jasper Memorial Hospital on the afternoon of October 24. Gonzales was transferred by ambulance to Saint Elizabeth Hospital in Beaumont, Texas on October 25.

Gonzales underwent an arteriogram on October 27. Some arteries in Gonzalez' heart were partially blocked and cardiac catheterization was performed on October 28 and four stents inserted to restore full blood flow to the heart muscle. Gonzales was discharged from the hospital on the afternoon of the 29th.

Gonzales spent the next seven days at home convalescing and doing light exercise including walking. He had spoken with several co-workers and relatives and stated he felt much better. His wife stated he was not having any discomfort and wanted to get back on the golf course.

On the morning of November 5, Gonzales spoke to his wife at 7:45 AM before she left for work and they made arrangements for him to visit her at her workplace. When she called later that morning to make sure he was ready to be picked up, Gonzales failed to answer the telephone.

Gonzales' wife left her workplace for home and arrived at about the same time as his mother. Gonzales was found unresponsive on the bathroom floor. No CPR was initiated. EMS was called and determined that Gonzales had sustained cardiac and respiratory arrest at some earlier time and no resuscitation attempt was made.

Jasper County Justice of the Peace Freddie Miller estimated the time of death as approximately 9:30 AM. No autopsy was ordered by Justice of the Peace Miller.

Findings and Recommendations

The following findings of fact and recommendations are based upon nationally recognized consensus standards for the fire service. Career fire departments are not required by state statute to comply with these standards. All fire departments should be aware of the content of the standards and may choose to develop programs based on them to increase the level of safety for fire department personnel.

Finding #1: The Beaumont Fire Department did not have a requirement that all fire protection personnel undergo an annual medical and fitness evaluation. At the time of the incident, the Beaumont Fire Department required regular physical examinations for members of the hazardous material teams and the dive team. Annual chest X-rays and electrocardiograms are available to all fire department members on request. The fire department does not require annual physical examinations of all fire protection personnel.

Recommendations:

- Fire departments should make every reasonable effort to screen fire protection personnel for heart disease in an effort to reduce the number of heart attack deaths.
- The State Fire Marshal's Office recommends that all fire departments use NFPA 1500, Standard on Fire Department Occupational Safety and Health Program, as a guide for all fire protection operations.

NFPA 1500, Standard on Fire Department Occupational Safety and Health Program, Chapter 10.1.3 states: "Candidates and members who will engage in fire suppression shall meet the medical requirements specified in NFPA 1582, Standard on Medical Requirements for Fire Fighters and Information for Fire Department Physicians, prior to being medically certified for duty..."

NFPA 1582, Chapter 7.1.1 recommends that every fire department establish and maintain a confidential medical evaluation program for members at the time of hire and annually thereafter, or as indicated by occupational exposure, illness, injury, or protracted absence from the job.

The purpose of the annual occupational medical evaluation of members shall include but is not limited to the following:

- Identifying conditions that interfere with a member's physical or mental ability to safely perform essential job tasks without undue risk of harm to self or others.
- Monitoring the effects of exposure to specific biological, physical, or chemical agents on individual members.

- Detecting changes in a member's health that can be related to harmful working conditions.
- Detecting patterns of disease or injury occurrence in the workforce that could indicate underlying work-related problems.
- Providing members with information about their current health, promoting wellness, and referring them for appropriate further evaluation and treatment.
- Providing members with information and education about occupational hazards.
- Providing a cost-effective investment in work-related disease prevention, early detection, and health promotion for members.
- Complying with federal, state, provincial, local, and/or other jurisdictional requirements

In addition to the annual occupational medical evaluation, NFPA 1582 recommends an annual Occupational Fitness Evaluation of members to include at least the following:

- Weight and body composition.
- Strength, fitness, flexibility, and aerobic capacity evaluation as it relates to jobspecific tasks for fire protection personnel.

Finding #2: At the time of the incident, District Chief Gonzales had two recognized risk factors for heart disease and stroke - a family history of heart disease and being overweight. http://www.utmbhealthcare.org/hil/CARD4298.asp?header=

At the time of admission to the hospital, relatives stated the hospital records indicated District Chief Gonzales was 170 centimeters in height (5'7") and weighted 113.6 kilograms (250 lbs.) Based on calculation methods developed by the United States Center for Disease Control and Prevention, (CDC) District Chief Gonzales had a Body Mass Index (BMI) of 39.3. http://www.cdc.gov/nccdphp/dnpa/bmi/calc-bmi.htm

CDC charts indicate a BMI of 30.0 or above should be considered an obese condition. While BMI is just one method of determining body fat composition, a high score would indicate the need for additional examination such as use of skin fold measurements or hydrostatic weighing. Justice of the Peace Miller described Gonzales as short and stocky in his physical examination of the deceased.

Recommendations:

Firefighters must take personal responsibility for their health and safety. Firefighters are encouraged to contact their personal physicians to discuss how their health relates to their duties and undergo periodic physical examinations.

- Many fire department employee health insurance plans (including Beaumont) provide for a physical examination by the members personal physician for the cost of the office visit co-payment. This examination will supplement any department mandated examinations.
- One way to prevent or detect early disease is by having periodic health evaluations. The examinations and tests are designed to detect disease and monitor health status. Screening tests may catch a problem at an early, treatable stage.
- Periodic medical examinations by personal physicians and early detection of disease will reduce the number of on-duty volunteer and career fire fighter deaths attributed to cardiovascular disease and stroke.