

STATE FIRE MARSHAL'S OFFICE

Firefighter Fatality Investigations



ANNUAL REPORT FY 2010

Texas Department of Insurance
Austin, Texas

October 2010

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Executive Summary

During the State of Texas fiscal year 2010, the State Fire Marshal's Office (SFMO) conducted one firefighter fatality incident investigation, involving one fatality.

The following table provides information on the firefighter fatality.

Table 1: 2010 FFF Description

Firefighter Name	Date of Death	Incident Description
Captain Thomas Araguz III	July 3, 2010	Fatally injured during firefighting operations

Texas Firefighter Fatality Investigation Authority

The State Fire Marshal's Office (SFMO) is statutorily required to conduct an investigation if a firefighter dies in the line of duty in connection with a firefighting incident in the State of Texas, as prescribed by Texas Government Code Section 417.0075.

The statute requires the SFMO to investigate the circumstances surrounding firefighter deaths to determine factors that may have contributed to the death. These factors include:

- the cause and origin of the fire;
- the condition of the structure; and
- the suppression operation.

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. Additionally, the State Fire Marshal may appoint an Advisory Committee to provide Firefighter Fatality Investigation Program policy guidance. The following entities serve on the Firefighter Fatality Advisory Committee:

- State Firemen's & Fire Marshals' Association of Texas;
- Texas State Association of Fire Fighters;
- Texas Fire Marshal's Association;
- Texas Fire Chiefs Association;
- Texas Commission on Fire Protection;
- Texas Forest Service;
- Texas Engineering Extension Service, Emergency Services Training Institute, Texas A&M University System; and
- Texas metropolitan fire departments (including Austin, Dallas, El Paso, Fort Worth, Houston, and San Antonio).

The Texas Commission on Fire Protection was charged with developing and establishing criteria to receive and analyze injury information pertaining to Texas firefighters, and to transmit their report to the State Fire Marshal for inclusion in this annual report, through §419.048 of Senate Bill 1011, passed during the 81st Legislature. Their first report is included as an appendix to this report.

Fiscal Year 2010 Investigation Summary

On July 3, 2010, Wharton Volunteer Fire Department Captain Thomas Araguz III was fatally injured during firefighting operations at a large industrial egg processing facility. At 9:41 P.M., Wharton County Sheriff's Office 911 received a report of a fire at the Maxim Egg Farm located at 3307 FM 442, Boling, Texas.

The fire involved the egg processing building including the storage areas holding the unused foam, plastic, and cardboard egg cartons and boxes. It is an approximately 30,000 square-foot structure of steel frame construction with steel exterior siding and roofing, on a concrete slab foundation.

Captain Araguz responded to the scene on Engine 1130 from the Wharton Fire Station, approximately 20 miles from the fire scene, arriving to the front, south side of the main entrance 20 minutes after dispatch. Captain Araguz, Captain Juan Cano, and Firefighter Paul Maldonado advanced a line through the main entrance along the south, interior wall to doors leading to a storage area at the southeast corner. Maldonado staffed the hose at the entry door, pulling hose as Captains Araguz and Cano advanced through the processing room. Araguz and Cano became separated from the hose line and then each other as smoke and heat descended. Captain Cano found an exterior wall and began kicking and hitting the wall as his air supply ran out. Firefighters cut through the exterior metal wall at the location of the knocking and pulled him out. Several attempts were made to locate Captain Araguz, including entering the building through the hole. Cano was rescued and firefighters cut an additional hole in the exterior wall where Cano believed Araguz was located. Fire conditions eventually drove the rescuers back and defensive firefighting operations were initiated.

Captain Cano was transported to the Gulf Coast Medical Center where he was treated and released. Captain Araguz' body was recovered approximately 50 feet from Cano's location at 7:40 A.M., the following morning. Initially transported by ambulance to the Wharton Funeral Home, Captain Araguz' body was taken to the Travis County Medical Examiner's Office in Austin, Texas, for a post-mortem examination.

The investigation is ongoing.

National Firefighter Death Composite, 2009

In September 2010, The United States Fire Administration (USFA) released *Firefighter Fatalities in the United States in 2009*. The report continues a series of annual studies by the USFA of on-duty firefighter fatalities in the United States.

The unique and specific objective of *Firefighter Fatalities in the United States* is to identify all on-duty firefighter fatalities that occurred in the United States and its protectorates during the calendar year and to present in summary narrative form the circumstances surrounding each occurrence.

Ninety on-duty firefighters from 33 states lost their lives as the result of incidents that occurred in 2009. Pennsylvania experienced the highest number of fatalities (8). In addition to Pennsylvania, only: New York (7), North Carolina (6), Louisiana (5), and Texas (5*), respectively, had 5 or more firefighter fatalities. The total number of fatalities in 2009 was one of the lowest totals in more than 30 years of record.

Included in the 90 on-duty firefighter fatalities are 13 Hometown Heroes. On December 15, 2003, the President of the United States signed into law the Hometown Heroes Survivors Benefit Act of 2003. After being signed by the President, the Act became Public Law 108-182. The law presumes that a heart attack or stroke are in the line of duty if the firefighter was engaged in non-routine stressful or strenuous physical activity while on-duty and the firefighter becomes ill while on-duty or within 24 hours after engaging in such activity.

"Over the past 10 years alone, the trend shows a 14 percent reduction in on-duty firefighter fatalities but we must continue every effort to be sure that when it comes to firefighter health and safety, everyone goes home," Acting United States Fire Administrator Glenn Gaines said.

* The number of on-duty deaths in the US Fire Administration report is higher for Texas than the number of deaths listed in this report because of the legislative definition of the SFMO's duty to investigate deaths occurring as a result of firefighting incidents.

Figure 1. Onduty Firefighter Fatalities (1977-2009)

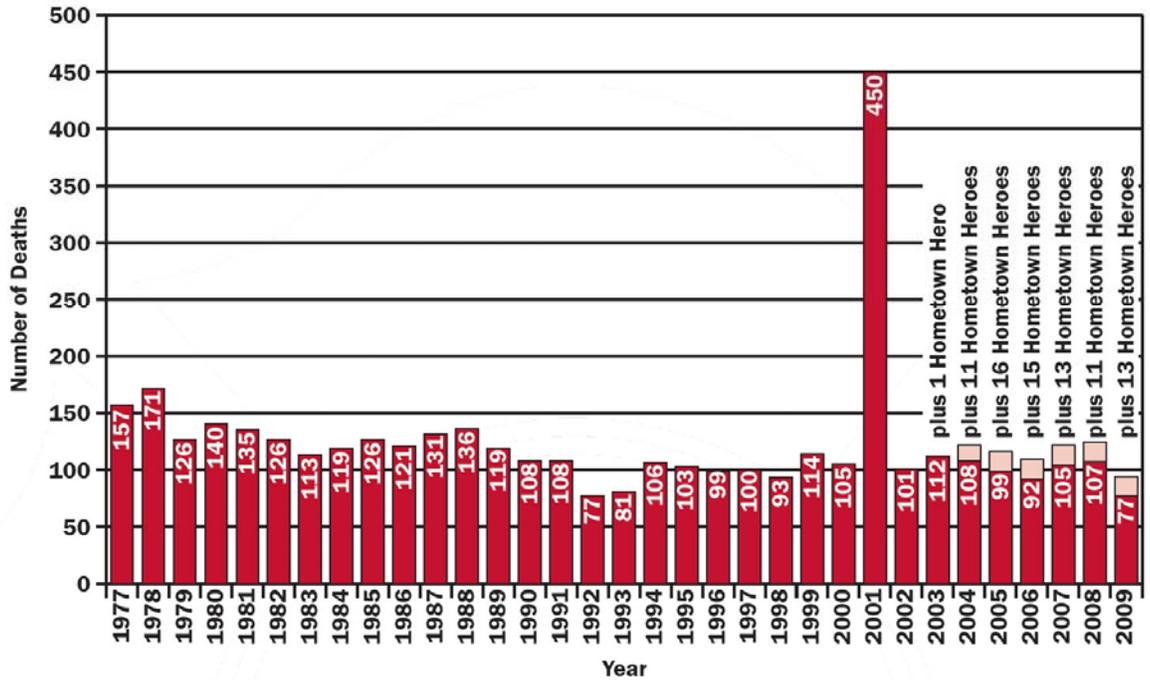
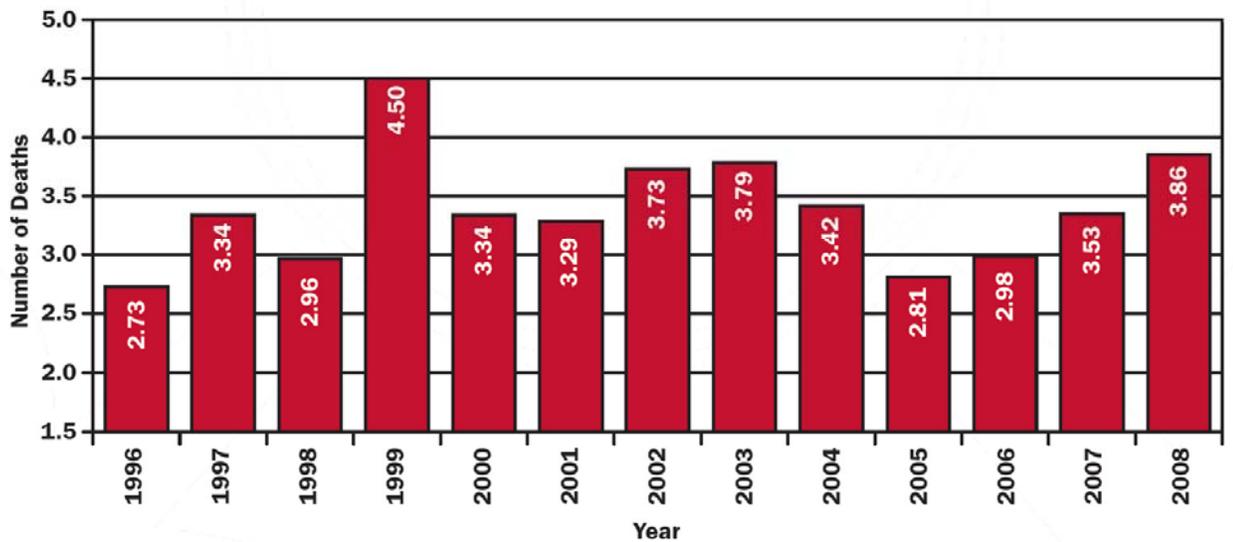


Figure 2. Firefighter Fatalities per 100,000 Fires



An overview of the 90 firefighters who died while on duty in 2009:

- The total break-down included 47 volunteer, 36 career, and 7 wildland agency firefighters.
- There were 6 firefighter fatality incidents where 2 or more firefighters were killed, claiming a total of 13 firefighters' lives.
- Sixteen firefighters died in duties associated with wildland fires, compared to 26 such fatalities in 2008.
- Activities related to emergency incidents resulted in the deaths of 57 firefighters.
- Thirty firefighters died while engaging in activities at the scene of a fire.
- Fifteen firefighters died while responding to, or returning from, 13 emergency incidents in 2009. This compares with 24 responding/returning fatalities in 2008.
- Ten firefighters died while they were engaged in training activities.
- Fourteen firefighters died after the conclusion of their on-duty activity.
- Heart attacks were the most frequent cause of death, with 39 firefighter deaths

For 33 years, the US Fire Administration (USFA) has tracked the number of firefighter fatalities and conducted an annual analysis. Through the collection of information on the causes of firefighter deaths, the USFA is able to focus on specific problems and direct efforts toward finding solutions to reduce the number of firefighter fatalities in the future. This information is also used by many organizations to measure the effectiveness of their current efforts directed toward firefighter health and safety.

Year-to-date monthly and annual USFA firefighter fatality reports are posted on the USFA's Web site at:

http://www.usfa.dhs.gov/fireservice/fatalities/statistics/ff_stats.shtm.

Strategies for Preventing Future Fatalities

Ongoing efforts to reduce firefighter fatalities include the following:

- Communicating “lessons learned” from firefighter fatality investigations through the publication of investigation reports, dissemination of information to the Firefighter Fatality Investigation Program Advisory Committee, and presentations at fire service conferences.
 - Upon release, firefighter fatality investigation reports are sent to the affected fire departments and placed on the agency’s website for access by the fire service, media, and the public.
- Participating in the Firefighter Safety Stand Down, sponsored by the International Association of Fire Chiefs and the International Association of Fire Fighters.
- Participating in the “Courage to be Safe” (CTBS) program which emphasizes the message “Everyone Goes Home.” Information on the CTBS program is available online at <http://www.everyonegoeshome.com>.
- Implementing or expanding existing fire prevention programs to assist in reducing fires.
- Participating in the National Fire Service Seat Belt Pledge, which encourages firefighters to wear seat belts when riding in a fire department vehicle. Information on the Seat Belt Pledge can be located online at <http://www.everyonegoeshome.com/seatbelts/>
- Exploring safer strategies and tactics for fighting fires in enclosed structures.
- Providing information to the fire service and the public on the effectiveness of residential sprinklers on reducing civilian and firefighter fatalities as well as property loss due to fire.
- Conducting pre-fire incident planning in high risk occupancies by suppression personnel in their response area. The prefire planning should include consideration of life safety for firefighters and occupants, water supply, and structural hazards.
- Including fire prevention and firefighter fatality prevention in all firefighter training and education, including initial training in the Firefighter Academy's across the state, as a top priority.
- Emphasizing the need for firefighter training on how modern construction technologies such as lightweight structural materials and green building practices can change building performance and fire behavior (<http://www.greenbuildingfiresafety.org/>), and how these new technologies impact firefighter safety and fire ground operations.

APPENDIX A – Texas Commission on Fire Protection Firefighter Injuries

In §419.048 of Senate Bill 1011 passed during the 81st Legislature, the Texas Commission on Fire Protection was charged with developing and establishing criteria to receive and analyze injury information pertaining to Texas firefighters. The Commission was to review this information and develop recommendations to reduce fire protection personnel injuries. The Commission was to provide this information to the State Fire Marshal's Office by September 1st of each year to be published in their annual Firefighter Fatality Investigation Report.

The Commission has enacted rules pertaining to the reporting of injuries in Texas Administrative Code (TAC) Title 37, Chapter 435 and established the criteria and policies required for reporting and analyzing the information. In May of 2010 the Commission had completed development and implementation of the data systems programming necessary to accomplish the gathering of this information. The entire process is accomplished online through the Commission's web site. Every fire department regulated by the Commission has been notified of the requirements to report. They have been provided instructions as how to open accounts and report the information online. The accounts have been established, and the injury data is being submitted.

The Commission began receiving data during the last three and a half months of fiscal year 2010. This did not provide sufficient time and information to perform a competent analysis and formulate valid recommendations. The Commission has established the following schedule to complete this task in a competent and timely manner. The Commission will have recommendations for inclusion in the State Fire Marshal's 2011 Firefighter Fatality Investigation Report.

Gary L. Warren, Sr.
Executive Director
Texas Commission on Fire Protection

APPENDIX B – Texas Commission on Fire Protection Injury Report Schedule

- Reporting Period is January 1st through December 31st
 - 2010 report will contain data gathered April 1, 2010 – December 31, 2010

 - Report for review presented to Fire Fighter Advisory Board
 - Spring 2011

 - Recommendations formulated by Fire Fighter Advisory Board
 - Commissioner Gonzalez is liaison for this report

 - Recommendations to the Commission
 - Presented at Commission's summer meeting – 2011

 - Report to State Fire Marshal
 - 2010 Injury Report and Recommendations – August 2011
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