



**RESEARCH**

## **U.S. FIREFIGHTER DEATHS WHILE AT THE FIRE STATION**

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## **U.S. Firefighter Deaths While at the Fire Station**

From 2006 through 2015, 115 career and volunteer firefighters in the U.S. died while at the fire station.

### Cause of Death

The largest share of these fatalities (89) were due to sudden cardiac death; another 10 deaths were due to strokes. Other medical-related causes that accounted for one death each were seizure, aneurysm, and blood clot. Two firefighters struck their heads and died after suffering medical emergencies (one a seizure and the other a heart attack).

There were 14 deaths due to internal trauma, crushing injuries and compressional asphyxia. These resulted from seven falls, four struck by fire department apparatus, one explosion, one trapped under a vehicle and one in a physical confrontation with another firefighter.

One firefighter died of septic shock almost three months after injuring his elbow in a training session.

Two firefighters died by suicide in the fire station.

### Type of Duty

Most of the victims (66) were engaged in normal station activities at the time they were fatally injured. Of those 66 fatalities, 58 were due to sudden cardiac death, stroke, seizure and blood clot, including a fatal fall after a seizure. Six other firefighters died as the result of internal trauma -- two fell from ladders; one was crushed between the railing of an aerial ladder and the header of the station bay door when he attempted to use the apparatus to reach a piece of equipment stuck overhead; one died when leaking propane caused an explosion at the station; one fell in the kitchen and struck his head on an appliance; and one lost his balance and fell, striking his head on the ground. The two deaths by suicide fall into this activity category.

The next largest share of deaths occurred during training activities. Of the 32 fatalities in the category, 23 were sudden cardiac deaths and five deaths were due to stroke. One firefighter was crushed between the top of a heavy rescue vehicle and a ceiling beam in the station when the driver moved the vehicle without knowing the victim was on top. They were getting the vehicle ready for a drill. One firefighter struck his elbow while working at a training drill and died of septic shock months later. One firefighter fell 6-8 feet (1.8-2.4 meters) after a rope skills class and struck his head. One firefighter fell from an aerial ladder. Of the 23 victims of sudden cardiac death, 14 were engaged in physical fitness activities and the others were preparing for an extrication class, attending a seminar, undergoing an annual SCBA endurance evaluation, and participating in hose training, ladder training, cadet training, driver training, air management training, and training on new apparatus.

Seven firefighters were involved in maintenance activities when they were fatally injured. Four suffered sudden cardiac death and one a stroke. One firefighter was pinned against the wall by a

brush truck that lunged forward while undergoing maintenance. A firefighter was changing the oil in a fire department vehicle when the jack failed and the vehicle fell on him, resulting in compressional asphyxia.

After emergency calls, two firefighters died as the result of falls – one when he suffered a heart attack and the other in a physical altercation with another firefighter. Another firefighter suffered a fatal cardiac event while preparing to respond to an emergency.

The remaining firefighters were involved in other official fire department duties. Four suffered sudden cardiac death while at or preparing for community events. One suffered sudden cardiac death while working on the construction of a new fire station. One firefighter fell from an antique fire apparatus as it was being loaded onto a trailer. And one firefighter was struck by the boom of an aerial apparatus that he had used to assist an insurance adjuster working on a post-hurricane insurance claim for damage to the fire station.

Copies of this analysis are available from:

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