



# Here's To Your Health!

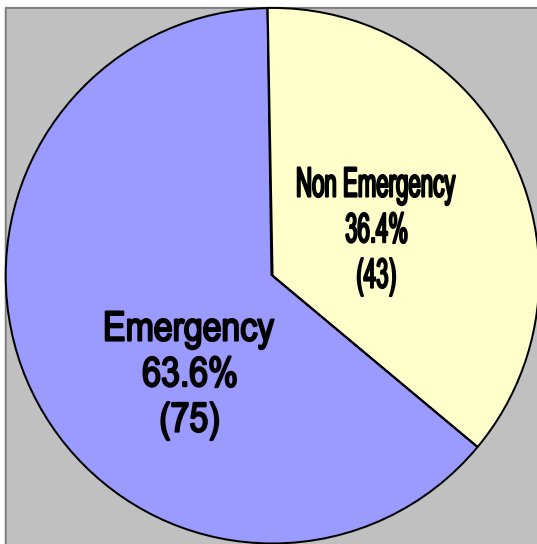
A Phoenix Fire Department Health Center Publication  
[www.phoenixfirehealth.com](http://www.phoenixfirehealth.com)



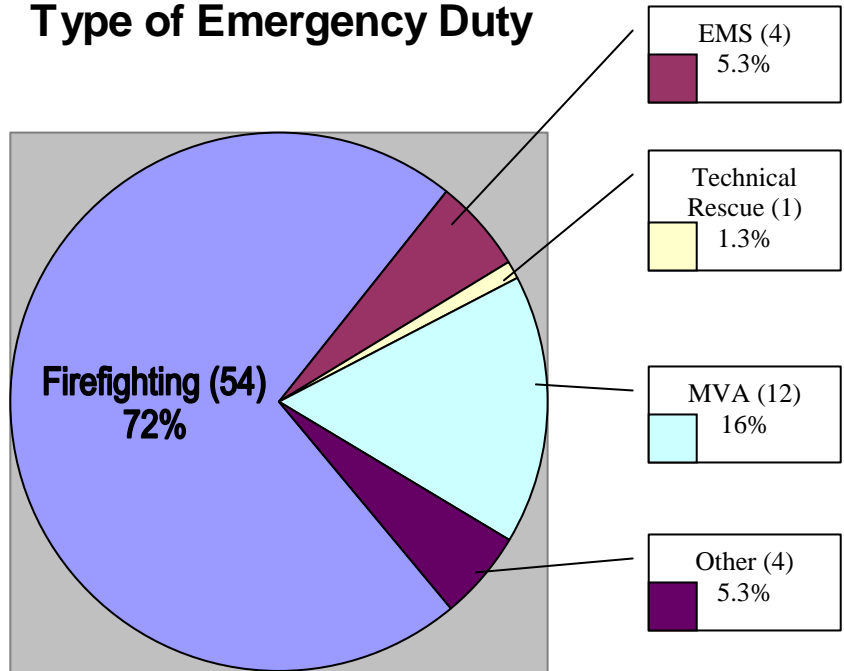
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The U.S. Fire Administration has just released data on firefighter fatalities in 2008. The entire document can be downloaded at <http://www.usfa.dhs.gov/fireservice/fatalities/statistics/report.shtm>.

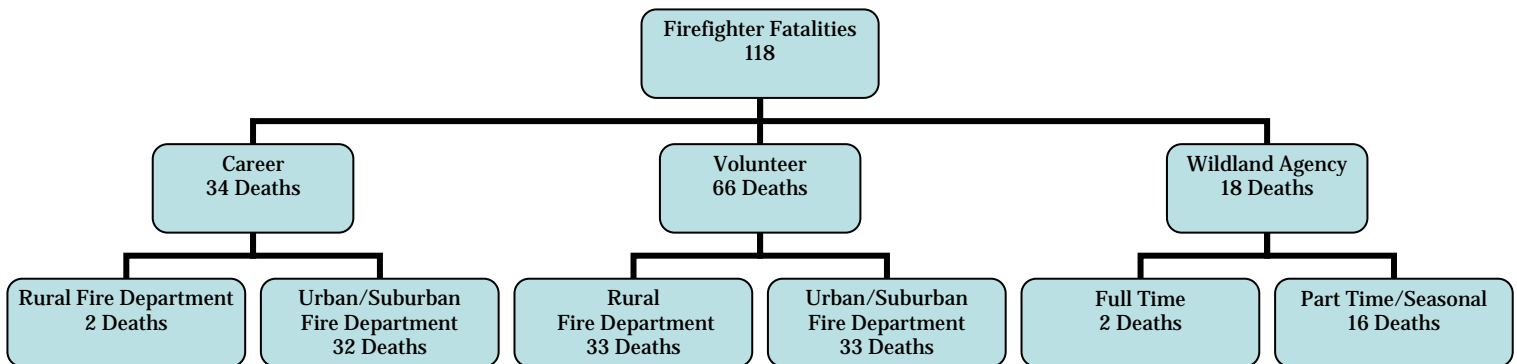
**Firefighter Deaths by Type of Duty (2008)**



**Type of Emergency Duty**



**Career, Volunteer and Wildland Agency Deaths (2008)**



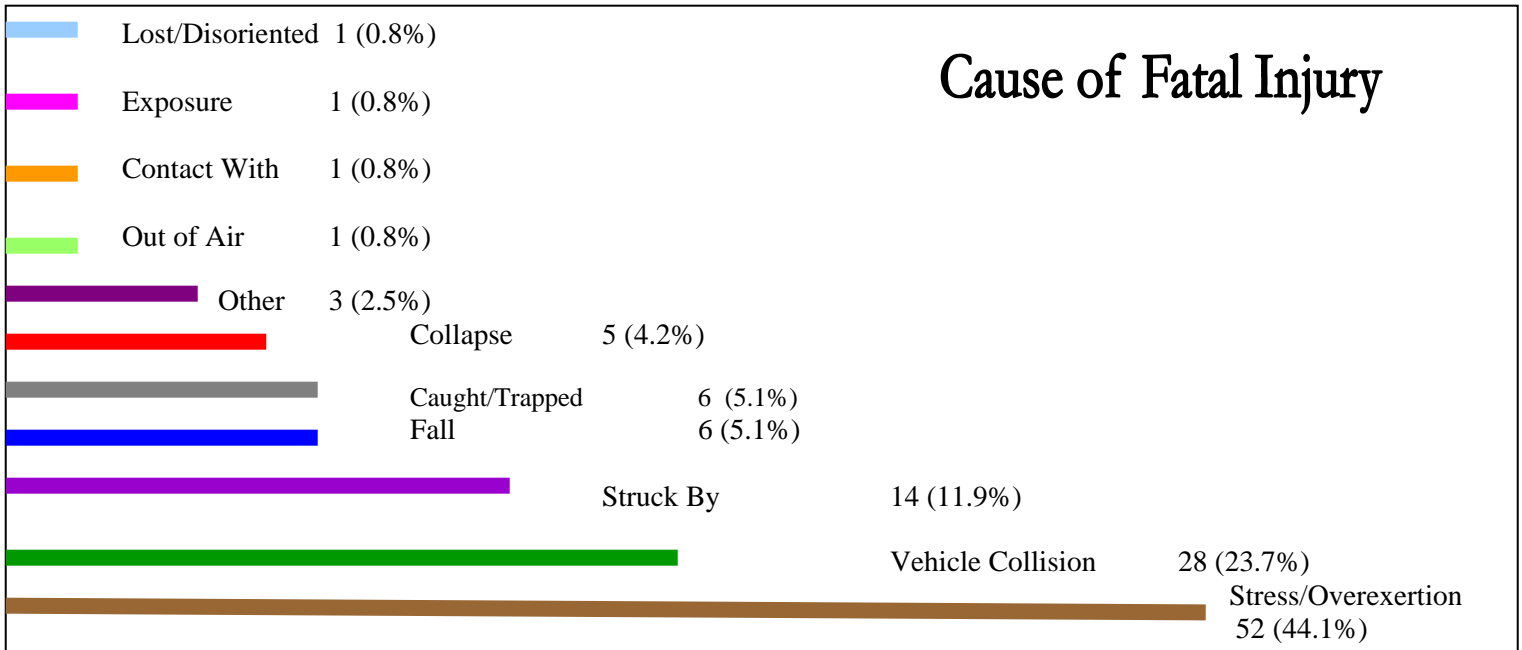
## Firefighter Deaths by Type of Duty (2008)



Firefighting is extremely strenuous physical work and is likely one of the most physically demanding activities that the human body performs.

Stress or overexertion is a general category that includes all firefighter deaths that are cardiac or cerebrovascular in nature such as heart attacks, strokes, and other events such as extreme climatic thermal exposure. Classification of firefighter fatality in this cause of fatal injury category does not necessarily indicate that a firefighter was in poor physical condition.

*Editor's note: While this injury category does not necessarily indicate that a firefighter was in poor physical condition, it is important to realize that good physical conditioning better prepares the body for this type of extremely strenuous physical work, thus decreasing the chances physical harm.*



## Nature of Fatal Injury

Heart Attack	46 (39.0%)
Trauma	42 (35.6%)
Asphyxiation	9 (7.6%)
Other	6 (5.1%)
CVA	5 (4.2%)
Burns	4 (3.4%)
Violence	3 (2.5%)
Crushed	2 (1.7%)
Electrocution	1 (0.8%)

# Bedtime Aspirin Lowers Ambulatory Blood Pressure

Aspirin taken at bedtime reduces ambulatory blood pressure in patients with prehypertension, according to a report in the August issue of the American Journal of Hypertension.

"Bedtime ingestion of low-dose aspirin could provide a cost-effective approach for blood pressure control in subjects with prehypertension, thus delaying the actual development of hypertension and the need for costly pharmacologic treatment," Dr. Ramon C. Hermida from University of Vigo, Spain, told Reuters Health in an email.

Dr. Hermida and colleagues investigated the influence of aspirin on ambulatory blood pressure in patients who received aspirin at different times of the day according to their rest-activity cycle and who were evaluated by 48-hour ambulatory blood pressure monitoring before and after 3 months of pharmacologic intervention.

Blood pressure did not change after nonpharmacological intervention or after administration of aspirin upon awakening, the researchers note.

In contrast, the authors report, systolic blood pressure decreased by 6 mm Hg and diastolic blood pressure decreased by 3 mm Hg in patients who took 100 mg aspirin at bedtime.

Nearly three quarters (71%) of the patients who took aspirin at bedtime experienced at least a 3 mm Hg reduction in 24-hour systolic blood pressure, but only 6% showed an increase in blood pressure after treatment.

Heart rate was unchanged in all treatment groups.

"Aspirin given at the end of the activity cycle, but not upon awakening, could thus target the nocturnal peak of plasma renin activity, while enhancing the nocturnal trough in the production of nitric oxide," the investigators suggest.

"Thus," they continue, "the enhanced reduction in plasma renin activity, beneficial impact on endothelial function and blocking of alpha- and beta-adrenergic receptors associated (with) bedtime administration of low-dose aspirin could explain the impact of this intervention on blood pressure here documented in subjects with high-normal blood pressure."

"We are currently developing a new multicenter prospective trial with awakening versus bedtime administration of low-dose aspirin for primary prevention of cardiovascular events in subjects with impaired fasting glucose or diabetes," Dr. Hermida explained. "The study will involve 3200 subjects who will be followed for over 5 years."

**Source: Will Boggs, MD for Reuters Health**

More blood pressure information coming soon.

Dr. Howard Wernick will be providing more information on the silent killer known as hypertension including prevention, effects and treatment of this deadly disease.

Hypertension is known as the silent killer because it produces few, if any, symptoms and often goes undetected. If gone undetected for as little as 6 months, it can begin to damage organs like the eyes, kidneys, the heart, the brain and peripheral vascular system. It is a major risk factor for cardiovascular disease (CHD, DVA, CHF) and renal disease.



**Dr. Howard Wernick M.D.**

## Snuff and Chewing Tobacco Linked to Increased Risk of Fatal MI or Stroke

Smokeless tobacco—such as snuff and chewing tobacco—is not harmless when it comes to heart health, according to a new meta-analysis. A review of 11 studies from Sweden and the US, almost entirely in men, showed that smokeless-tobacco users had an increased risk of death from MI or stroke. The study, by researchers at the **International Agency for Research on Cancer (IARC)**, is published online August 18, 2009 in *BMJ*.

Contrary to common belief that smokeless tobacco has very little effect on health, these products have been shown to increase cancer risk, coauthor and IARC researcher **Dr Kurt Straif** (Lyon, France) told *heartwire*. “There is sufficient evidence for a causal association between smokeless tobacco and oral and pancreatic cancer and probably also esophageal cancer” he said. “Now, this study adds evidence that smokeless tobacco causes death from cardiovascular diseases,” Straif summarized.

Types of smokeless tobacco used in North America and Europe include dry snuff that is inhaled, as well as moist snuff (called snus in Sweden) and chewing tobacco (or spit tobacco), which are sucked inside the cheek. These products have been around for centuries, and after a decline in consumption for most of the 20th century, use has rebounded in the past few decades, the authors write.

In 2000, 23.9% of men and 4.1% of women in Sweden reported using snus daily or occasionally. In the same year, in the US, 4.4% of men and 0.3% of women were current users of snuff or chewing tobacco.

To determine whether users of smokeless tobacco are at increased risk of death from MI or stroke, the researchers systematically reviewed worldwide studies published until 2009. They then excluded studies from Asia, because the smokeless tobacco used there is a different type—generally betel quid, which contains other ingredients such as areca nut, Straif said. The meta-analysis included eight studies from Sweden—where the use of snus is widespread—and three studies from the US. Ten studies were in men only, and apart from two studies, all were in people who had never smoked tobacco

Smokeless-tobacco use was linked with a greater risk of cardiac fatalities.

In eight studies, compared with nonusers, smokeless-tobacco users had a relative risk of fatal MI of 1.13 (95% CI 1.06-1.21). Similarly, in five studies, compared with nonusers, smokeless-tobacco users had a relative risk of fatal stroke of 1.40 (95% CI 1.28-1.54). Results were comparable in studies from Sweden and the US.

The researchers estimate that in 2000, 0.5% of deaths from MI and 1.7% of deaths from stroke in American men were due to smokeless-tobacco use. Similarly, they estimate that in 2001, 5.6% of deaths from MI and 5.4% of deaths from stroke in Swedish men were due to smokeless-tobacco use. The authors acknowledge that the review’s limitations include potential other confounders that were not accounted for.

However, “if the association [between smokeless tobacco and fatal cardiovascular outcomes] is real, its public-health and clinical implications might be substantial, despite the fact that the magnitude of the excess risk is small,” they write. “Given the recent increase in use of smokeless tobacco, it is important to stress that all forms of tobacco are harmful and that the best prevention is not to start using any kind of tobacco, or—for users—to stop using all kinds of tobacco,” Straif said.

### **Baseball players and spitballs**

In a comment to *heartwire*, **AHA** spokesperson **Dr Nieca Goldberg** (New York University School of Medicine, NY) said that most people know that smoking cigarettes is harmful, but they may not realize that smokeless tobacco also presents a health risk—for oral cancer, heart attack, and stroke. Young people who watch baseball on television may be influenced by seeing baseball players who chew tobacco, she added. “Cardiologists [and other physicians] need to remember to ask patients not only about cigarettes but also about smokeless tobacco,” she said

**Source: Marlene Busko for WebMD**