



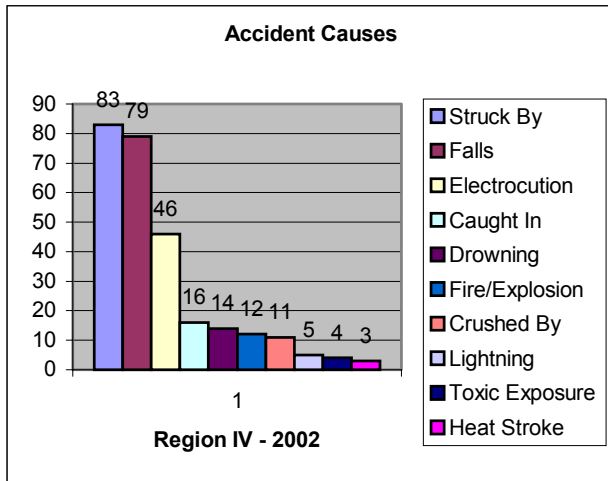
News from Region IV
Serving the Southeast United States

Special Report

Regional Fatality Report - FY 2002

Fatalities continued to plague businesses in 2002. During Fiscal Year 2002, (October 1, 2001 to September 30, 2002), 273 workers lost their lives while performing their jobs.

Of those 120 fatalities, **Special Trade Contractors** experienced 74 (62% of 120) while **general contractors** experienced 46 (38% of 120). **Highway and Street Construction** experienced the highest number of fatalities, within the General Contractors group, with 13 (28% of 46). Of **Special Trade Contractors**, **Electrical Contractors** experienced the highest number of fatalities, with 14 (30% of 46) reported, and was followed closely by **Roofing Contractors**, having 13 (28% of 46) reported.



The highest number of fatalities occurred in the **construction industry**, with 120, which represents 44% of the total.

Manufacturing had the next highest number of fatalities with 47 (17.2%).

Within manufacturing, **Lumber and Wood Products** saw the highest number

of fatal accidents with 11 (23% of 47).

Agriculture, Forestry and Fishing

experienced a total of 40 (15%) fatal incidents, with **Lawn and Garden Services** having the highest fatality rate of 10 (26% of 38).

Business Services followed with a total of 30 (11%) fatalities.

Transportation Equipment, Communications, Electric, Gas and Sanitary Services

reported 18 fatal accidents, with **Local Trucking** experiencing the highest number of 4 (22% of 18).

Wholesale and Retail Trades

experienced a total of 17 fatalities (6%) with **Newspaper Sales** having the highest fatality rate of 3 (18% of 17).

Finance, Insurance and Real Estate

experienced **one** fatality this fiscal year.



What are the odds that your workplace will experience a workplace fatality in FY 2003?

Being **struck by** an object was the leading cause of all occupational-related fatalities during FY 2002. In **83 (30%)** instances, objects struck employees and killed them. The leading "struck by" objects are vehicles! In **54 (66% of 83)** cases, a vehicle was involved in causing an occupational death.

The types of vehicles involved in "**struck by**" deaths include:

- 15 employees killed by **motorists**
- 11 employees killed by **tractor-trailer trucks**
- 6 employees killed by **harvesting equipment**
- 3 employees killed by **dump trucks**
- 3 employees killed by **front-end loaders**

- 3 employees killed by **logging equipment**
- 2 employees killed by **mowing equipment**
- 2 employees killed by **backhoes**
- 1 employee killed by a **motorcycle**
- 1 employee killed by an **all-terrain vehicle (ATV)**
- 1 employee killed by a truck-mounted **drilling rig**
- 1 employee killed by a **garbage truck**
- 1 employee killed by a **container lift vehicle**
- 1 employee killed by an **automotive lift**
- 1 employee killed by a **tow truck**
- 1 employee killed by a **road grader**
- 1 employee killed by **personnel lift equipment**

What Kind of Work was Involved?

What type of work was being performed when these employees' lives were lost?

The highest number of fatalities came during **highway/roadway** projects.

- 12 employees lost their lives while performing work on them. **Two-thirds (8)** of these fatalities occurred in **paving operations**.



Work Zone Safety has become a national focus because of the high rate of fatalities seen in this area of construction.

- 6 workers were **struck by mechanical harvesting equipment** and killed during **agriculture** operations
- 6 workers were killed when **struck by trucks**
- 5 workers were **struck by falling loads** from tractor-trailer trucks during **delivery/loading** operations
- 3 workers were killed when **struck by motorists** during **surveying operations**
- 3 workers were killed when **struck by motorists** while **selling newspapers** on roadway medians
- 3 workers were killed when **struck by logging equipment** during logging operations
- 3 workers were killed when

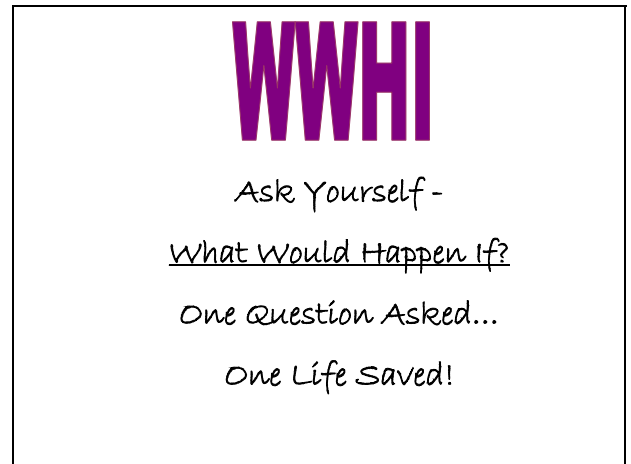
struck by mowers/tractors during landscaping/mowing operations

- 2 workers were killed during

garbage collection operations when one was struck by a motorist and one was struck by the garbage truck

- 1 worker was killed during site clearing operations
- 1 worker was killed while on beach patrol when the all-terrain vehicle he was riding overturned
- 1 worker killed while performing work on an automobile on a hydraulic lift and was struck by a vehicle on the lift
- 1 worker killed when retrieving shopping carts in a parking lot and was struck by the utility vehicle used to move the carts
- 1 worker killed when struck by the swing radius of a portable drilling rig
- 1 worker killed when driving a motorcycle on a test track
- 1 worker killed during longshoring operations and was struck by the wheel of a container-lift vehicle
- 1 worker killed when collecting chickens (poultry processing) and was struck by a pick-up truck
- 1 worker killed when struck by a

motorist during tree trimming operations



27 Workers Killed By Falling Objects/Materials

In addition to vehicles causing "struck by" fatalities, falling loads and materials claimed 27 lives.

Of these:

- 8 workers killed by structural failure
- 6 workers killed by falling construction equipment/materials
- 5 workers were killed when struck by operating machinery
- 3 workers killed by falling loads
- 3 workers killed when struck by exploding split wheel rims
- 1 worker killed by a falling tree

- 1 worker killed by a **falling animal**



[BLS Report on Falls](#)

The Bureau of Labor Statistics reported in the recently published report, "National Census of Fatal Occupational Injuries in 2001", that falls were responsible for 808 occupational fatalities during 2001. That number represents 14% of all occupational fatalities reported for that year.

[Falls Kill 79 in Region IV!](#)

Falls on the job claimed **79** lives during FY 2002. Every day jobs involving seemingly "routine tasks" turned deadly for 79 workers. Falls occurred in a variety of workplace settings:

- **12** workers were killed in falls from **roofs and/or roof openings**
- **11** workers were killed in falls from **ladders**
- **9** workers were killed in falls from **concrete form work.**
- **7** workers were killed in falls

- from **moving vehicles**
- **6** workers were killed in falls from **scaffolding**
- **5** workers were killed in falls from **lift equipment**
- **4** workers were killed in falls from **communication towers**
- **4** workers killed in falls from **leading edge work**
- **4** workers killed **installing trusses**
- **4** workers killed in falls from **trees/logging equipment**
- **4** workers killed in falls through **openings**
- **3** workers killed in falls during **shipbuilding/barge loading**
- **2** workers killed in falls during **steel erection**
- **2** workers killed in falls from the **same level**
- **2** workers killed in falls while **installing equipment**

[Falls From Ladders](#)

Falls from ladders accounted for **11 fatalities!** Ladders sizes ranged from a 28-foot extension ladder to a 4-foot step ladder.

In two cases, ladder footings were not secured against displacement which caused the ladders to slip from their intended position.

82% (9 of 11) of all ladder fatalities in Region IV last year occurred in the **construction** industry!

Too often ladder safety training is taken for granted in construction because it is seen as a basic work tool.

OSHA standards covering ladders in construction are contained in 29 CFR

1926.1053. General Industry standards for ladders are contained in 29 CFR 1910.24.

For more information regarding OSHA ladder standards you can access OSHA's web site at <http://www.osha.gov/>.

The following information regarding ladder safety training is from the **1926.1053 standards**:

1926.1060 Training

(a) Must train each employee using ladders and stairways, as necessary, to recognize hazards related to ladders and stairways, and the procedures to be followed to minimize these hazards.

(a)(1) A competent person must train each employee in the following areas, as applicable:

(a)(1)(i) The nature of fall hazards in the work area;

(a)(1)(ii) The correct procedures for erecting, maintaining, and disassembling the fall protection systems to be used;

(a)(1)(iii) The proper construction, use, placement, and care in handling of all stairways and ladders;

(a)(1)(iv) The maximum intended load-carrying capacities of ladders and

(a)(1)(v) The standards contained in this subpart.

(b) Retrain each employee as necessary to maintain the understanding and knowledge acquired through compliance with this section.

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[Electrical Fatalities Kill 46!](#)

Leading the Southeast in electrical-related fatalities, work on **Electrical Power Transmission Lines** led the region with a total of **19** during FY 2002.

Other electrical-related fatalities included:

- **11** workers killed **while installing electrical equipment**
- **4** workers killed **while installing ductwork**
- **2** workers killed when **ladders contacted overhead power lines**
- **2** workers killed using **ungrounded electrical power tools**

- 2 workers killed when **performing maintenance/equipment removal operations**
- 2 workers during **plumbing operations**
- 2 workers killed while **working on electric outdoor advertising signs**
- 1 worker killed when using **unapproved test equipment on underground power lines**
- 1 worker killed when **standing in water and attempting to turn circuit breaker off**

16 Workers Killed When Caught In Equipment/Materials!

Workers who worked with operating machinery and/or materials capable of engulfing them are at risk of being caught in their work environment.

10 workers died when caught in **operating machinery including:**

- 3 workers killed when caught in **augers and trenching machines.**
- 1 workers killed when caught in a **conveyor system**
- 1 worker killed when caught in a **metal lathe**
- 1 worker killed when caught in a **wood chipper**
- 1 worker killed when caught in a **paper board press**

- 1 worker killed when caught in **wire rope drawing machine**
- 1 worker killed when caught in **vertical milling machine**
- 1 worker killed when caught in **abrasive blasting machine**

6 workers died when caught in **loose materials** including:

- 3 workers killed when caught in **trench cave-ins**
- 2 workers killed when **engulfed in grain**
- 1 worker killed when **engulfed in wood chips**

14 Workers Drown On the Job!

These workers may not have considered **water** to be a hazard when performing their jobs, but the aqueous solution claimed the lives of **14** workers during FY 2002.

Among those killed were:

- 6 workers drowned when using **mowing equipment**
- 3 workers drowned while **diving**
- 1 worker drowned in a **sewer**
- 1 worker drowned **when inspecting pipe in a wetlands area**
- 1 worker drowned in **fall from barge**
- 1 worker drowned in **fall from jet ski**
- 1 worker drowned when **harvesting crops**

The operation of tractors and mowers near water has proved fatal for the majority of those who drowned. Operating mowers and tractors on sloped terrains led to the deaths of six workers when their equipment fell/slid into ponds or canals and trapped them under water.



12 Workers Killed by Fire/Explosion

Catastrophe Claims 5 Lives!

In a single incident, 5 workers died in an explosion and fire in a rubber manufacturing plant in Mississippi!

Other lives lost due to fire and/or explosion included:

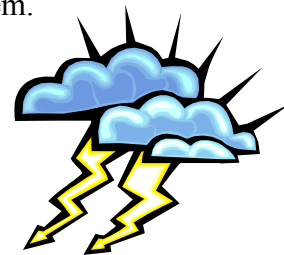
- **2 workers killed when flammable vapors ignited by battery chargers**

As happens all too often, workers find themselves in a “no win” position, particularly when working with heavy and/or vehicular equipment. Of the **11** crushing fatalities, **3** employees were crushed to death by **backing vehicles**.

- **1 worker killed in fire in a raw cotton warehouse**
- **1 worker killed when sprayed with hot, molten liquid while paint-stripping a highway**
- **1 worker killed in explosion while using a cutting torch on a fuel tank**
- **1 worker killed in an explosion when the bulldozer he was driving hit a propane tank**
- **1 worker killed in a recovery boiler explosion in a paper mill**

Crushing Injuries Fatal for 11 Workers!

We’ve all heard the phrase, “being caught between a rock and a hard place”, but when **11** workers found themselves **placed between a movable object and a fixed object** it proved fatal for them.



Among those killed:

- **2 workers were crushed between forklifts and stationary objects**

- 2 workers were crushed between **overhead cranes** and stationary objects
- 1 worker was crushed between the **loading dock and a tractor/trailer**
- 1 worker was crushed between and **asphalt truck and a dump truck**
- 1 worker was crushed between **the body of a front-end loader and its hydraulic lift mechanism**
- 1 worker was crushed by the **tailgate of a garbage truck**
- 1 worker was crushed **between two ship's modules in a shipyard**
- 1 worker was crushed between two **rail cars**
- 1 worker was crushed between a **pick-up truck and a scissor lift**



Mother Nature was the culprit in the deaths of five workers. The Southeast experiences a majority of lightning strikes.

Lightning originates around 15,000 to 25,000 feet above sea level when raindrops are carried upward until some of them convert to ice. For reasons that are not widely agreed upon, a cloud-to-ground lightning flash originates in this mixed water and ice region. The charge then moves downward in 50-yard sections called step leaders. It keeps moving toward the ground in these steps and produces a channel along which charge is deposited. Eventually, it encounters something on the ground that is a good connection. The circuit is complete at that time, and the charge is lowered from cloud to ground. These conditions are most often met

in summer. In general, the US mainland has a decreasing amount of lightning toward the northwest. **Over the entire year, the highest frequency of cloud-to-ground lightning is in Florida between Tampa and Orlando.**

Ft. Lauderdale and Tampa had three work-related lightning fatalities, while Mobile and Savannah both reported one.

Among those killed:

- 3 workers were killed by lightning while performing **construction work**
- 1 worker was killed by lightning while **loading plants**
- 1 worker was killed by lightning while **traveling to a break room**

Exposure to Toxic Substances Kills 4!

Four workers died as a result of inhalation of deadly levels of toxic substances during FY 2002.

Among those killed:

- 2 construction workers killed by **hydrogen sulfide gas** while working in a paper mill
- 1 worker killed by harmful vapors from **leaking chemicals**
- 1 worker killed by **diesel vapors** while cleaning storage tank

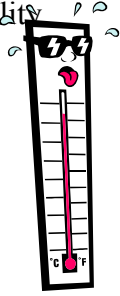


Heat Stress Kills 3 Workers!

Working in the Southeast has a price to pay if you work outside in the heat of the summer. When temperatures soar above 100 degrees F, workers are often subjected to extremely hazardous work environments. Such was the case for three workers during FY 2002.

Among those killed:

- **2 construction workers** were overcome by heat
- **1 worker** was overcome by heat while **collecting live chickens** at a poultry processing facility



The National Weather Service Reports

A National Problem

More to Follow!

This special edition newsletter will be followed up by versions that will focus on fatality types, prevention guidelines and compliance assistance as well as providing current information on Regional events, partnerships, alliances and much more.

Heat kills by taxing the human body beyond its abilities. In a normal year, about **175** Americans succumb to the demands of summer heat. Among the large continental family of natural hazards, only the cold of winter -- not lightning, hurricanes, tornadoes, floods, or earthquakes -- takes a greater toll.

In the 40-year period from 1936 through 1975, nearly 20,000 people were killed in the United States by the effects of heat and solar radiation. In the disastrous heat wave of 1980, more than 1,250 people died.

And those are the direct casualties. No one can know how many more deaths are advanced by heat wave weather -- how many diseased or aging hearts surrender, that under better conditions would have continued functioning.

North American summers are hot; most summers see heat waves in one section or another of the United States. East of the Rockies, they tend to combine both high temperatures and high humidity although some of the worst have been catastrophically dry.

For more information on heat stress, visit the National Weather Service's website:
<http://weather.noaa.gov/weather/hwave.html>

Take Time to Do It Right the
First Time



Your Life Depends On It!

** This newsletter was developed utilizing available current information on fatalities that occurred in Region IV during fiscal year 2002.**

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