

CONSTRUCTION
INDUSTRY RESEARCH
AND POLICY CENTER

Construction Fatality Digest



JULY — SEPTEMBER



OUARTERLY REPORT

Topics of Interest:

- Fatality Case File
 Statistics
- Case File Regional Report
- Top Standards
 Violated
- Summary of Fatal Events

Roof and Ladder Falls are Leading Fatal Events

Roof falls continue to lead all fatal events in the fatal construction case files reported to CIRPC in both 2011 and the third quarter of 2012. There were 126 cases received in the third quarter of 2012 (July to September) and roof falls accounted for 17.5% (22 cases) of all the case files. Similarly, in 2011 roof falls accounted for 19.7% (61 cases) of all fatal events during that year. All types of falls (roof, scaffold, structure, etc.) accounted for 38.1% (48 cases) of the third quarter case reports. For 2011 fall events were 42.9% (133 cases) of the total.

Rounding out the leading fatality causes for the quarter are "Fall from/with Ladder" with 8.7% (11 cases) followed by "Crush/Run-over of Non-Operator" with 7.9% (10 cases), "Electrocution by Equipment Contacting Wire" with 7.9% (10 cases), and "Crush/Run-over of Operator" with 7.1% (9 cases).

"Fall from/with Ladder" had the largest increase from the second to third quarter. No cases were reported for the previous quarter, but 11 cases were reported for the current quarter. "Fall from Roof" and "Fall from/with Ladder" accounted for over 26% of all the fatality categories.

Since the case files received each quarter can vary greatly, the quarterly statistics vary much more than annual statistics.

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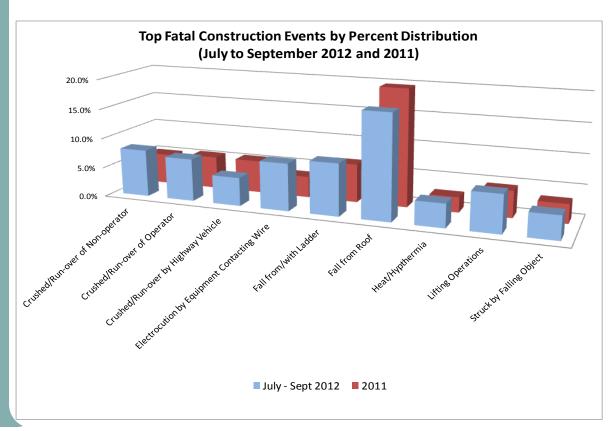
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Regional Breakdown

A total of 126 case reports were received from the regions in the third quarter of 2012. Of these 126 reports, a little more than 75% came from region 6 (95 reports), 15 came from region 4, and 10 from region 5.

Of the 95 from region 6, 25 were received from the Houston South Area Office, followed by Baton Rouge with 18 cases and Little Rock with 13 cases.

The 15 from region 4 were spread out within the region with Atlanta West leading with 4 cases. Michigan Area Offices led from region 5 with 4 cases.

Case Files by Region									
Ju	ly to Sept 20)12	2011						
Region	# of Cases	Percent	Region # of Cases Percent						
1	2	1.6%	1 6 1.9%						
2	0	0.0%	2 11 3.5%						
3	2	1.6%	3 46 14.8%						
4	15	11.9%	4 96 31.0%						
5	10	7.9%	5 22 7.1%						
6	95	75.4%	6 103 33.2%						
7	1	0.8%	7 14 4.5%						
8	1	0.8%	8 10 3.2%						
9	0	0.0%	9 2 0.6%						
10	0	0.0%	10 0 0.0%						
Total	126	100.0%	310 100.0%						

Top Construction Standard Violations

The I26 cases reported to CIRPC included 331 violations of OSHA standards. Of the I26, 24 reported no violations. With the 24 cases without violations removed, the average number of violations per case with citations issued was 3.25.

The previous quarter averaged 3.57 violations, indicating a slight drop of 0.32 violations per case from the previous quarter.

When comparing the quarterly violations with OSHA's Top 10 standards violated in FY2011 (per www.osha.gov), there are similarities and differences. Four of the most frequently violated OSHA standards can be found on the quarterly report list (Scaffolding, Fall Protection, Respiratory Protection, and Ladders).

The General Duty Clause jumped 6 places from 7th in the previous quarter to the top violated standard in the third quarter reports received. Fall Protection continued to rank no lower than third during the first three quarters of 2012.

Clause was the top ranking violation for the third

quarter of 2012.

The General Duty

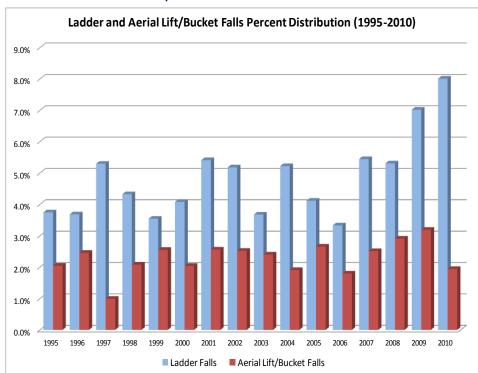
Top Standard Violations Reported During July to Sept 2012

_	Rank	Std # Description		# of Occurrences
	1	5a1	General Duty Clause	25
	2	1904.39	Fatality and Multiple Hospitalization Reporting	23
	3	1926.501	Fall Protection	19
	4	1926.21	Safety Training and Education	18
	5	1910.134	Respiratory Protection	16
	T 6	1926.416	Electrical - General Requirements	14
	T 6	1926.503	Fall Protection Training	14
	8	1926.20	General Safety and Health Provisions	12
	T 9	1926.1053	Ladders	11
	T 9	1926.451	Scaffolding	11

Trends in Fatalities: Ladder and Aerial Lift/Bucket Falls

The "Fall" categories of fatalities each year total a little over 40% of all the fatalities. While all would agree "Fall from Roofs" dominate the grouping and continue to lead the category year after year, are there any trends in the other types of "Falls?"

Since the early 1990's, CIRPC has undertaken an annual analysis of fatal construction events¹. One might think that over the span of the last 15 years there would be a change in the patterns of falls when comparing ladders with aerial lift/bucket falls. On the surface it might seem that technology and the ease of use of lifts would impact ladder use. The data shows otherwise. Ladder falls have shown a significant increase. They have risen from a little more than 3% to almost 8% of all fatalities. On the other hand Aerial Lifts/Bucket falls have been very stable and totaled around 2% of the fatalities.



The Intransigence of Fatal Falls

Since 1992 the frequency of work-related fatal events has fallen for three of the four most frequent fatality categories: highway incidents, homicides, and struck by object. The one major category running counter to this trend is "Falls". The table summarizes this data. Note that "Falls" is the only event category experiencing an increase in the absolute number of fatalities and the category with the least reduc-Ition in both absolute and relative terms compared to the peak observations for the period. The picture depicted here suggest the fatal fall phenomena as a promising area of emphasis if progress in reducing fatal work events is to be achieved. Indeed, it is to be hoped that the multi-organizational program "Campaign to Prevent Falls in Construction" with it's threefold emphasis on planning, proper equipment, and training will bring both short and long-Iterm benefits.

Four Most Frequent Work-Related Fatal Injury Events, 1992 - 2010

Type of Event	Number			2010 as %	2010 as %
Type of Event	1992	Peak Year	2010	of 1992	of Peak
Highway Incidents	1,158	1496 (1999)	968	83.5	64.7
Homicides	1,044	1080 (1994)	506	48.4	46.9
Falls	600	847 (2007)	635	105.8	75.0
Struck by Object	557	607 (2005)	402	72.2	66.2

Source: Bureau of Labor Statistics, 2011

¹ CIRPC's An Analysis of Fatal Events in the Construction Industry uses the data collected in IMIS from the fatal construction event case files. The report categorizes and ranks the fatality causes, project types, end uses, etc. Reports from 1991 to 2010 can be found on the CIRPC website: www.bus.utk.edu/cirpc.

²National Institute for Occupational Safety and Health (NIOSH), the Occupational Safety and Health Administration (OSHA), and the Construction Center for Research and Training (CPWR) involving a recent educational collaborative effort, called "Preventing Falls in Construction", http://stopconstructionfalls.com/.

Summary of Fatal Events

CATEGORY: ROOF FALLS

OSHA Inspection Number 396022

A 51 year old Hispanic roofer was fatally injured when he <u>fell through a skylight opening</u>. The victim was working on a corrugated steel roof when he stepped into an unguarded skylight opening. The employer was cited for lack of fall protection, no guarding or skylight cover, improper fall protection freefall distance, and fall protection not installed by qualified person.

OSHA Inspection Number 314302464

A 40 year old manager was fatally injured when he <u>fell from a roof</u>. The victim was on the roof of a sorority house installing three security cameras. There were no witnesses to the fall. The employer was cited for lack of fall protection, no fall protection training, and not reporting the fatality to OSHA within 8 hours.

OSHA Inspection Number 314775446

A 35 year old Hispanic day laborer was fatally injured when he <u>fell from a roof</u>. The victim was installing shingles around a chimney of an apartment building re-roof job when he slipped and fell 18 feet from the 4/12 pitched roof. The employer was cited for lack of fall protection and not reporting the event to OSHA within 8 hours.

OSHA Inspection Number 315277491

A 48 year old Hispanic roofer was fatally injured when he fell from a roof. The victim was caulking the edge of the roof of a commercial building when he fell 25 feet from the roof. The employer was cited for lack of fall protection and lack of fall protection training.

OSHA Inspection Number 314933318

A 54 year old roofer was fatally injured when he fell from a roof. The victim unhooked his single line lanyard to pass two employees, traveled 8-10 feet, and slipped/lost his balance and fell 46 feet. The employer was cited for lack of fall protection (use of double lanyard).

OSHA Inspection Number 315628883

A 40 year old laborer was fatally injured when he fell from a roof. The victim was replacing siding on a fireplace chimney of an apartment building. The roof had a 4/12 pitch and the victim fell 18 feet. The employer was cited for lack of fall protection, no fall protection training, and not reporting the fatality to OSHA within 8 hours.

OSHA Inspection Number 315625772

A 37 year old roofer was fatally injured when he <u>fell from a roof</u>. The victim had just removed the fall protection equipment and was walking back up the house's roof when he slipped on the water barrier material and slid off the roof. The employer was cited for lack of fall protection training, no written certification of fall training, and 2 other apparently unrelated violations.

OSHA Inspection Number 316079870

A 35 year old roofer was fatally injured when he fell from a roof. The victim was applying felt to the new home's roof when he slipped and fell 19 feet from the 8/12 pitched roof. The employer was cited for lack of fall protection, no fall training, and 4 additional apparently unrelated violations.

OSHA Inspection Number 316288547

A 20 year old roofer was fatally injured when he <u>fell from a roof</u> of an apartment building. The victim was cleaning up from a reroofing job and had carried debris to the roof edge to throw into a dumpster; he apparently slipped/tripped and fell from the roof. The employer was cited for failure to train on fall protection and not reporting the event to OSHA within 8 hours.

OSHA Inspection Number 316281203

A 42 year old roofer was fatally injured when he <u>fell from a roof</u>. The victim and co-workers were replacing the roof and skylights for a condominium. The roof ranged from flat to steep pitched. The victim had just removed a skylight (on a section of the steep pitch) when he fell 35 feet off the back of the roof. The employer was cited for failure to use fall protection, no fall training, and one violation apparently unrelated to the event.

OSHA Inspection Number 315629824

A 44 year old Hispanic roofer was fatally injured when he fell from a roof. The victim was finishing up a roof on a new home and was in process of inspecting it and caulking for water tightness when he slipped and fell 24 feet. No citations were issued because the company ceased operations.

OSHA Inspection Number 315178590

A 21 year old Hispanic roofer was fatally injured when he fell from a roof of a new school building. The victim had removed his fall protection and was walking across the roof to get to the lift (used to get on and off the roof) when he slipped and fell 30 feet from the roof. The employer was not cited for any violations.

OSHA Inspection Number 315981134

A 49 year old male fell through a rusted roof on which he was taking measurements. The employer was not cited; no jurisdiction in the

OSHA Inspection Number 3156480772

A 52 year old laborer was fatally injured when he <u>fell through a roof</u>. The victim was installing angle iron and wood on a roof when he stepped backwards onto a piece of steel decking that was not fastened down. The victim fell when the decking moved. The employer was cited for no fall protection, no hole protection, cover not secured, cover not marked, lack of fall protection training, and three other violations apparently unrelated to the event.

OSHA Inspection Number 316283241

A 47 year old Hispanic roofer was fatally injured when he <u>fell through a roof</u> of a warehouse. The victim fell 25 feet through the roof during a roof repair job. The employer was not cited for any violations because the business only employed family members.

OSHA Inspection Number 314928300

A 32 year old Hispanic roofer was fatally injured when he <u>fell through a roof</u> of a commercial re-roofing job. The victim climbed onto the roof when other workers told him to go get his harness; he turned, slipped and fell through a roof opening. The employer was cited for lack of fall protection for a roof opening.

OSHA Inspection Number 314644782

A 23 year old roofer was fatally injured when he fell from a roof. The victim was removing an old roof of an aircraft hangar when he fell. The employer was cited for lack of fall protection, no fall training, and no safety and health plan.

OSHA Inspection Number 314935719

A 66 year old lab manager was fatally injured when he fell through a skylight. The victim was normally a lab manager and was asked by the employer to build a barn over a stock pen. The victim was on the roof of the barn when he stepped on a skylight and fell through it. The employer was cited for improper skylights (would not hold the weight of a person), lack of fall training, and not reporting the event to OSHA within 8 hours.

OSHA Inspection Number 316093343

A 45 year old roofer was fatally injured when he fell through a skylight opening. The victim was replacing sections of a metal roof on a warehouse when he stepped into an unguarded skylight opening and fell. The employer was cited for lack of an accident prevention program, no training in hazard recognition, lack of fall protection, lack of guarding around a hole, and one violation apparently unrelated to the event.

OSHA Inspection Number 395942

A 19 year old roofer was fatally injured when he <u>fell through a skylight</u>. The victim was starting to pressure wash and coat a commercial building roof. While walking over to the pressure washer, the victim stepped on and fell through a skylight. The employer was cited for lifelines not attached, fall protection not installed by a qualified person, no fall training, and not guarding holes/openings.

OSHA Inspection Number 280832

A 32 year old HVAC supervisor was fatally injured when he fell through a roof opening. The victim was installing air conditioning units and duct work on an existing warehouse when he fell 23 feet through one of the roof duct openings. The employer was cited for lack of opening guarding, lack of fall training, and not reporting the event to OSHA within 8 hours.

CATEGORY: LADDER FALLS

OSHA Inspection Number 312919699

A 31 year old laborer was fatally injured when he fell from a ladder. The victim had just finished repairing a gutter of an apartment building, when he stepped with one foot onto the ladder. His foot slipped off the rung and he fell 18 feet. The employer was cited for lack of ladder training and not reporting the event to OSHA within 8 hours.

OSHA Inspection Number 315722512

A 33 year old electrician was fatally injured when he <u>fell from a ladder</u>. The victim was installing light fixtures on an existing apartment complex when he lost his balance and fell 15 feet. The employer was cited for failure to report the event to OSHA within 8 hours.

OSHA Inspection Number 329076

A 51 year old electrician's helper was fatally injured when he fell from a ladder. The victim was installing a light fixture, when he fell from the ladder. There were no witnesses to the event. The employer was not cited for any violations.

OSHA Inspection Number 314179193

A 37 year old male was fatally injured when he <u>fell from a ladder</u>. The victim was standing on the uppermost rung using a gas torch to cut the bolts off a raw-sewage holding tank pipe when he fell. The employer was cited for not furnishing a workplace free from hazards and 2 other violations apparently unrelated to the event.

OSHA Inspection Number 314303900

A 50 year old Hispanic day laborer was fatally injured when he fell from a ladder. The victim was painting sprinkler pipe while standing on a ladder. There were no witnesses to the event. The employer was cited for lack of ladder training, no warning/safety signs on the ladder, and 2 other violations apparently unrelated to the event.

OSHA Inspection Number 110272

A 58 year old Korean laborer was fatally injured when she fell from a ladder. The victim was using a step ladder to install decals on a mirrored wall of a retail store when she fell. The employer was cited for improper ladder use, using the top ladder rung as a step, and no ladder training.

OSHA Inspection Number 316092907

A 69 year old painter was fatally injured when he <u>fell from a ladder</u>. The victim was painting walls of a residential home when the ladder slid out from under him and he and the ladder fell 10 feet. The employer was cited for using a ladder without slip resistant feet and lack of ladder training.

OSHA Inspection Number 314771817

A 36 year old day laborer was fatally injured when he <u>fell from a ladder</u>. The victim was handing sheet metal pieces to the foreman who was installing them on a roof of a recreation center/baseball park. After a piece was passed up, the victim lost his balance and fell with the ladder to the ground below. The employer was cited for lack of ladder training and not reporting the fatality to OSHA within 8 hours.

OSHA Inspection Number 315714600

A 43 year old Hispanic drywaller was fatally injured when he <u>fell from a ladder</u>. The victim had climbed an extension ladder to apply texture to an area around a skylight on a new residential home. While applying the texture, the victim fell from the ladder. The employer was cited for the use of a ladder with known defects/damage.

OSHA Inspection Number 409482

A 29 year old Hispanic laborer was fatally injured when he <u>fell from a ladder</u>. The victim was spraying foam insulation on a wall for a new residential home. The victim was using a ladder on top of a scaffold. While pulling on the insulation hose, the ladder slipped, causing the employee to fall. The employer was cited for using a ladder on a scaffold, lack of a written hazard communications program, 4 scaffold usage/set up violations, and 8 violations apparently unrelated to the event.

OSHA Inspection Number 315887034

A 65 year old electrician was fatally injured when he fell from a ladder. The victim was using a closed stepladder against a wall of a Goodwill Store drilling holes into the wall. The ladder slipped out from under him and he fell 15 feet. The employer was not cited for any violations.

OSHA Inspection Number 313334476

A 67 year old plumber was fatally injured when he <u>fell from a ladder</u>. The victim was drilling through a floor joist while standing on a six foot ladder. The victim lost his balance/slipped and fell, striking his head and chest on the floor. Safety recommendations were issued to the employer.

CATEGORY: OTHER FALLS

OSHA Inspection Number 314771601

A 62 year old truck driver was fatally injured when he fell from a trailer. The victim was pulling on a chain, which had wrapped around a pallet, when it suddenly released causing the victim to lose his balance and fall. The employer was not cited for any violations.

OSHA Inspection Number 315554204

A laborer was fatally injured when he <u>fell from a balcony</u>. The victim was replacing a fabric awning of a home, when he was pulling on the old awning to remove it. A piece was pulled off and momentum carried him over the balcony railing. The employer was cited for improper top rail height.

OSHA Inspection Number 281517

A 58 year old carpenter was fatally injured when he fell from a structure. The victim was installing window jam inserts in the home under construction when he fell from the loft. The employer was cited for failure to use fall protection.

OSHA Inspection Number 315723304

A 43 year old Hispanic steel worker was fatally injured when he <u>fell from a structure</u>. The victim was connecting a horizontal I-beam with a wrench when the wrench slipped off the bolt and the victim lost his balance and fell I3 feet. The employer was cited for lack of steel work training and one violation apparently unrelated to the event.

OSHA Inspection Number 201273109

A 44 year old male <u>fell through the wire rope handrail system of a platform</u>. The employer was cited for scaffold issues, but the citation was later withdrawn.

OSHA Inspection Number 314180084

A 34 year old Hispanic carpenter was fatally injured when he <u>fell through an unguarded opening</u>. The victim was carrying a bathroom cabinet for a new single family home, when he stepping into the opening, falling to the foyer below. The employer was cited for lack of guarding/fall protection and 4 other violations apparently unrelated to the event.

OSHA Inspection Number 316093087

A 46 year old Hispanic laborer was fatally injured when he <u>fell from a vehicle</u>. The victim was part of a road work crew moving "Road Work" signs to a new location, when he fell from the truck. The employer was cited for not furnishing a workplace free from hazards and not reporting the event to OSHA within 8 hours.

OSHA Inspection Number 329851

The victim, a 58 year old laborer, was fatally injured when he <u>fell from a vehicle</u>. The victim was flung off the back of a truck trailer while trying to hold rolling pipe on the truck. The pipes rolled off, taking the victim with them. The employer was cited for not furnishing a work-place free from hazards.

OSHA Inspection Number 312926181

A 27 year old male <u>fell from a scaffold</u> while in the process of sponge-coating stucco to the exterior of a building. The guardrail may have given way. The employer was cited for failing to have the scaffold constructed by a qualified person.

OSHA Inspection Number 315277517

A 39 year old scaffold assembler was fatally injured when he fell from a scaffold. The victim was dismantling a scaffold used to construct a new apartment building. While dismantling and throwing sections to the ground, a section caught on the victim's clothes and he was pulled off the scaffold. The employer was cited for lack of fall protection and lack of scaffold cross brace usage.

OSHA Inspection Number 313317794

A 27 year old laborer was fatally injured when he <u>fell from a scaffold</u>. The victim was removing clips on a scaffold decking so the scaffold could be moved, when the deck shifted causing the victim to fall. The employer was cited for lack of accident prevention program, lack of fall protection, no competent scaffold person, no scaffold training, and two other violations apparently unrelated to the event.

OSHA Inspection Number 316247998

A 59 year old laborer was fatally injured when he <u>fell from a lift</u>. The victim and a co-worker were removing moss from trees while standing on a platform elevated by a forklift. The platform came off the forks and the victim fell 40 feet. The employer was cited for lack of fork lift training, platform not attached to forks, not furnishing a workplace free of hazards, and no PPE usage.

OSHA Inspection Number 314936899

Two linemen were fatally injured when they <u>fell from a basket/aerial lift</u>. The two victims were upgrading a power transmission line, when the line released from the pole, striking the basket they were in. The force of the hit knocked the pin loose that holds the basket. Both victims and basket fell to the ground. The employer was cited for not furnishing a workplace free from hazards, lack of crane training, and no crane proof test/trial lifts.

OSHA Inspection Number 314305434

A 25 year old Hispanic painter was fatally injured when he <u>fell from a platform</u> on a forklift. The victim was caulking a parapet wall for a new apartment building when the job-made platform tipped off the forks of the lift. The employer was cited for lack of fall protection, no fall training, no hazard recognition training, platform not attached to the forks, no safety and health plan, modifications to equipment without approval, not furnishing a workplace free from hazards, and 2 other violations apparently unrelated to the event.

OSHA Inspection Number 92425

A 52 year old male <u>fell from a steel beam</u> during a steel erection operation. He did not have his fall arrest harness attached to an anchor point. The employer was cited for failing to protect the worker from a fall hazard of more than two stories or 30 feet.

CATEGORY: ELECTROCUTIONS

OSHA Inspection Number 312925415

A Hispanic day laborer was fatally injured when his ladder made <u>contact with an overhead power line</u>. The victim was re-roofing a large condominium, when his ladder contacted the power line. The employer was not cited for violations because he had left the country.

OSHA Inspection Number 315655449

Two males, 35 and 22 years old, were electrocuted when they attempted to stand a ladder up against a building and the ladder contacted an overhead power line. The employer was cited for failing to train in hazard recognition, working too close to energized hazards, and using a conductive ladder too close to a power line.

OSHA Inspection Number 316136175

A 50 year old laborer was fatally electrocuted when his ladder <u>contacted an overhead power line</u>. The victim was re-roofing a commercial building and was setting up the ladder when he lost control of it and it made contact with the power line. The employer was cited for no accident prevention program, no ladder training, and using a ladder too close to an over head power line.

OSHA Inspection Number 315174235

Two Hispanic masons were fatally injured when their scaffold contacted an overhead power line. The victims were renovating a residential home. The victims had been warned about the closeness of the power line and attempted to push the scaffold away from the line. In doing so the scaffold leaned and contacted the line, electrocuting the victims. The employer was not cited because one of the victims was the owner of the company

OSHA Inspection Number 314477288

A 35 year old electrician was fatally <u>electrocuted</u> while changing out a compressor on an air conditioning unit. The victim tried "by passing" the hot lead and when the new compressor's live black wire was connected to the leads, he was electrocuted. The employer was cited for not de-energizing the unit, not using PPE, and 2 other violations additional apparently unrelated to the event.

OSHA Inspection Number 315306407

A 41 year old male lineman was <u>electrocuted</u> when a rod he lifted made contacted with an energized line. The energized line had not been covered and insulated gloves were not worn. The employer was cited for allowing the employee to approach an uninsulated energized line too closely.

OSHA Inspection Number 281477

A 47 year old male employee was <u>electrocuted</u> while installing boxes with electrical controls. The victim did not de-energize the circuit. The employer was cited for allowing work on an energized circuit and for not using lockout with tags.

OSHA Inspection Number 316248004

A 29 year old crane operator was fatally injured when the boom of his crane <u>contacted a power line</u> and he was electrocuted. The victim was lifting parts of a disassembled fan of a smudge pot to place on a semi trailer when contact was made. The employer was cited for failure to guard/de-energize the power line and lack of electrical training.

OSHA Inspection Number 314775495

A 24 year old iron worker was fatally injured when the aerial lift he was operating contacted an overhead power line. The victim was in the lift with a load of soffit panels to install on the roof trim. As the lift was elevated the victim made contact with the power line and was electrocuted. The employer was cited for not de-energizing/grounding the power line and operating a lift less than 10 feet from a power line.

OSHA Inspection Number 315041160

The victim, a 46 year old concrete finisher, was electrocuted when his finishing broom <u>contacted an overhead power line</u>. The employer was cited for working near an energized line, not furnishing a workplace free from hazards, lack of electrical warning signs, no hazard recognition training, and 4 other violations apparently unrelated to the event.

OSHA Inspection Number 315571877

A 39 year old Hispanic painter was electrocuted when his ladder make <u>contact with an overhead power line</u>. The victim was painting the exterior walls of an apartment building, when he made contact with the power line. The employer was cited for not grounding/de-energizing the power line and lack of warning signs of an energized line.

OSHA Inspection Number 123448680

The victim was attempting to remove a live circuit from a junction box on top of a wall being demolished. He grabbed the metal clad wiring and pulled it from the box. In doing so, the metal armor became energized and <u>electrocuted</u> the victim. The employer was cited for lack of hazard recognition training, not de-energizing the circuit, and using a ladder with conductive side rails near a possible exposure to an energized source.

OSHA Inspection Number 316223593

A 29 year old male employee was <u>electrocuted</u>. The victim was removing an uninsulated metal steam pipe and the pipe came into contact with an overhead power line. The employer was cited for allowing work too close to an electric circuit that could be contacted.

OSHA Inspection Number 315483545

A 50 year old electrician was fatally <u>electrocuted</u>. The victim was standing on a ladder and using a telescoping aluminum painter's pole to reach up and close a fuse feeding a 26kV transmission line. Citations were not issued for this event.

OSHA Inspection Number 312924624

A 31 year old HVAC tech was fatally <u>electrocuted</u> while repairing duct work under a house. The victim was replacing damaged duct work, from a hurricane, when the sharp edge of the duct accidently cut through a 240 volt line running under the house. The employer was cited for lack of a worksite hazard inspection and 3 additional violations apparently unrelated to the event.

OSHA Inspection Number 314769571

A 27 year old Hispanic bricklayer was fatally <u>electrocuted</u> while repairing a basement wall of a residential home. The victim was reaching for a brick being passed to him through a window when he made contact with a cord delivering power to the house. The employer was cited for failure to have a competent person inspection.

OSHA Inspection Number 523318

A 40 year old Hispanic ironworker was fatally <u>electrocuted</u> during an alteration of an existing commercial building. The victim and coworkers were placing a steel beam into position using two scissor lifts and a fork lift. While moving the beam into place, the victim made contact with exposed live wires on the ceiling and was electrocuted. Citations are still pending for the event.

OSHA Inspection Number 314304593

A 52 year old Hispanic electrician was fatally <u>electrocuted</u>. The victim was installing light fixtures in a commercial building renovation, when he made contact with an energized circuit. The employer was cited for lack of hazard recognition training, not de-energizing/guarding a circuit, lack of lock out/tag out usage, and one violation apparently unrelated to the event.

CATEGORY: STRUCK BY, RUN OVER, CRUSHED BY OPERATING CONSTRUCTION EQUIPMENT/VEHICLE

OSHA Inspection Number 314928094

A 49 year old site foreman was <u>struck by and run over</u> by a dump truck at a road milling project. The dump truck was backing up to a front end loader to receive a load of asphalt millings when the victim walked between and towards the loader with his back to the dump truck. The dump truck struck him, knocking him down, and running over him. The employer was cited for not ensuring back up alarms are audible above the surrounding noise levels.

OSHA Inspection Number 314767955

A 50 year old spotter/laborer was <u>struck by</u> a bulldozer while working at a highway construction site. During a dump truck delivery, the dozer operator backed up the dozer to get closer to the interstate barrier to allow more room to the dump truck; in doing so it struck and ran over the victim. The employer was not cited for any violations.

OSHA Inspection Number 312927759

A 47 year old male was run over by the operator of a cement mixer on the jobsite. The employer was not cited for any violations.

OSHA Inspection Number 314644642

A 50 year old male was <u>run over</u> by a backing up dump truck. It is unknown why the victim walked behind the dump truck. The employer was not cited for any violations.

OSHA Inspection Number 100266345

The victim was <u>struck and run over</u> by a grader during the construction of a new parking lot. The victim was bent over measuring the distance from one hub to another, when the grader backed up and struck the victim. The employer was not cited for any violations.

OSHA Inspection Number 421703

A laborer was fatally injured when he was <u>struck by and crushed</u> by a crane cab. The victim and co-workers were in the process of assembling a crawler crane under repair when the victim was crushed between the track of the undercarriage and the cribbing. The employer was cited for lack of competent person inspection, no crane plan developed, assembly of crane without com-

petent person present, and one violation apparently unrelated to the event.

OSHA Inspection Number 314643933

A 29 year old male was <u>crushed</u> when he cut a hydraulic line while dismantling a platform lift, causing the platform lift to fall on him. The employer was cited for failing to furnish a workplace free from hazards.

OSHA Inspection Number 315438259

The victim was performing maintenance on a truck and trailer when it rolled backwards, <u>striking and running over</u> him. The victim was adjusting the brakes on the trailer and had just released them when the incident occurred. The brakes in the truck had not been set. The employer was cited for not reporting the event to OSHA within 8 hours.

OSHA Inspection Number 312922867

A 52 year old Hispanic laborer was fatally injured when he was <u>struck by</u> a motor vehicle. The victim was installing reflective markers in an existing roadway when a tractor trailer struck him. The employer was cited for failure to furnish a workplace free of hazards and not reporting the event to OSHA within 8 hours.

OSHA Inspection Number 316177344

A 28 year old laborer was fatally injured when he was <u>struck by</u> a motor vehicle. The victim was installing arrows on a turn lane for an existing mall when he was struck. The employer was not cited for any violations.

OSHA Inspection Number 314934456

A 44 year old Hispanic laborer was <u>struck by</u> a truck while installing rumble strips. A passenger vehicle rear-ended the shadow vehicle causing it to strike the victim in the construction zone. The employer was cited for not furnishing a workplace free from hazards.

OSHA Inspection Number 314096561

A 27 year old compactor operator was fatally injured when a passenger vehicle <u>struck</u> him. The victim was operating an asphalt compactor while engaged in roadway patchwork when he was struck. The employer was cited for insufficient advanced warning signs and drums.

OSHA Inspection Number 316306539

A 20 year old male was <u>run over</u> by a passenger car. The victim was installing traffic signals when he was struck as he walked into the street to retrieve a piece of equipment. The employer was cited for failing to use proper traffic control signs or devices for protection of workers.

OSHA Inspection Number 313321374

A 27 year old surveyor was fatally injured when he was <u>struck by</u> a motor vehicle. The victim had finished setting up traffic control and was evaluating the traffic flow when an SUV was struck by a semi and lost control, entering the worksite and striking the victim. The employer was cited for lack of hazard recognition training, improper temporary traffic control set up, and not reporting the event within 8 hours.

OSHA Inspection Number 315041434

The victim was struck and run over by a grader during a re-asphalting project. The victim was laying strips on the road, when a grader approached him. It is believed the blade of the grader struck the victim, knocking him over and into the tires of the grader. The worksite was dark and the sun had set. The employer was cited for lack of hazard recognition training, lack of light at the worksite, lack of written hazard communications program, and one violation apparently unrelated to the event.

OSHA Inspection Number 314183062

A 24 year old laborer was fatally injured when he was <u>struck and run over</u> by a JLG telehandler. The victim was walking beside the telehandler as it was moving large concrete panels to be used as retaining walls for a road project. While carrying the load, a gust of wind caused the load to sway, the victim tried to stabilize it, but slipped and fell under the wheels of the telehandler. The employer was cited for lack of forklift and hazard recognition training, not furnishing a workplace free from hazards, and 4 other violations apparently unrelated to the event

OSHA Inspection Number 283614

A 49 year old male was <u>crushed by</u> an excavator that swung around to pick up a load. The victim walked into the swing radius which was not clearly marked or guarded. The employer was cited for failure to provide a safe workplace free from hazards and lack of safety training.

OSHA Inspection Number 315367565

A 54 year old equipment operator was fatally injured when he was <u>struck by</u> and crushed by a dump truck. The victim attached chains from the front of his belly dump truck to another vehicle in order to pull it out of gravel it was stuck in. Unknown to the victim, another scraper operator came up behind the stuck dump truck to push it out, which caused the dump truck to move and crushed the victim. The employer was cited for lack of an accident prevention plan, no hazard recognition training, no one trained in first-aid on site, and no provisions for requesting medical help.

OSHA Inspection Number 315454033

A 22 year old laborer was fatally injured when he was <u>struck by</u> a bulldozer. The victim was taking laser grade readings as a bulldozer was spreading the dirt for a foundation. The victim was struck by and run over by the bulldozer. The employer was cited for failure to furnish a workplace free from hazards and 2 other violations apparently unrelated to the event.

OSHA Inspection Number 312925811

A 35 year old Hispanic painter was fatally <u>crushed by</u> an aerial lift. The victim was raising the lift when he was caught between a garage's edge and the control panel of the lift. The employer was cited for lack of scaffold training, not ensuring prompt medical attention, and not reporting the event to OSHA within 8 hours.

OSHA Inspection Number 314179938

The victim, a 20 year old Hispanic laborer, was fatally injured when he was <u>struck and crushed by</u> the bucket of a skid steer loader during foundation work on a new apartment. The victim was in the cab of the loader when he reached out of the cab for a tool. The bucket was in an elevated position and when the victim reached out, the controls were bumped, and the bucket lowered, pinning the victim between the bucket and the frame. The employer was cited for lack of training on the loader.

OSHA Inspection Number 313501280

A 74 year old truck driver was <u>struck by</u> a chip spreader and pinned against a dump truck during a resurfacing operation. The victim had just stepped out of the dump truck when he was struck. The employer was cited for equipment not having a back-up alarm.

OSHA Inspection Number 314932088

A 27 year old equipment operator was fatally <u>crushed by</u> the skid loader he was operating. The victim was unloading push frames off a dump truck and was found with his head and shoulder wedged against the lift arm and landing gear. The employer was cited for not furnishing a worksite free from hazards and lack of hazard recognition training.

OSHA Inspection Number 314184862

A 40 year old Hispanic foreman was fatally injured when a boring machine <u>tipped over and crushed</u> him. The victim was operating a boring machine inside an excavation for underground utilities when the rotating auger jammed, causing the machine to tip over. The employer was cited for lack of training on the boring machine and not furnishing a workplace free from hazards.

OSHA Inspection Number 314770439

A 38 year old laborer was fatally injured when the aerial lift he was driving flipped over. The victim was driving the lift down a slope next to the bridge under construction, counterweights first. The lift became unbalanced, fell over the edge, and flipped end-over-end down the embankment. The employer was cited for not furnishing a workplace free from hazards.

OSHA Inspection Number 315785246

An equipment operator was fatally injured when he was <u>struck by/crushed by</u> a backhoe trencher he was operating. There were no witnesses to the event. The victim was found under the trenching blade of the backhoe. The employer was cited for not having a person trained in first-aid on site.

OSHA Inspection Number 314775487

A 48 year old female truck driver was fatally injured when she was <u>crushed by</u> the dump truck bed. The victim had elevated the bed on the dump truck to dump a load of rocks for a high school ball field, but forgot to unlatch the tail gate. She then lowered the bed, but the load shifted, causing the bed to stay elevated. While under the dump bed the victim used a shovel to unlatch the tail gate. The load dumped, and the bed lowered quickly and crushed the victim. The employer was not cited for any violations.

OSHA Inspection Number 514078

A 19 year old equipment operator was fatally injured when he was <u>struck by</u> a backhoe. The victim had used a backhoe to travel to a tool trailer to retrieve a pipe beveling machine. The victim placed the tool in the backhoe. It then fell forward and struck a control lever causing the bucket to swing and crush the victim between the bucket and the outrigger. The employer was cited for failure to train in heavy equipment operations.

OSHA Inspection Number 312920549

A 34 year old Hispanic laborer was fatally injured by a gooseneck dump truck while performing maintenance on it. The victim had crawled under it because the dump bed was stuck in an elevated position. As it lowered, the victim was crushed underneath. The employer was cited for lack of hazard recognition training, lack of equipment training (dump truck), not blocking/lowering equipment during repair, no accident prevention plan, and not reporting the event to OSHA within 8 hours.



CATEGORY: OTHER FATALITY CAUSES

OSHA Inspection Number 314767260

A 33 year old was fatally overcome by hydrogen sulfide and <u>asphyxiated</u>. The victim was attempting to seal a leak in a gas line. After working for 1.5 hours on the project, the victim collapsed from overexposure. The employer was cited for incorrect respirator use, improper fit test, lack of pre-job evaluation of worksite, chemical exposure, not completing a respirator questionnaire, and one other violation apparently unrelated to the event.

OSHA Inspection Number 312921158

A 23 year old Hispanic laborer <u>asphyxiated</u> while in a manhole. The victim had started to descend into a manhole when he was overcome and fell to the bottom of the sanitary sewer. The employer was cited for lack of respirators, no chemical training, no confined space training, no confined space inspection, not furnishing a workplace free from hazards, and 3 additional violations apparently unrelated to the event.

OSHA Inspection Number 312927858

A 46 year old laborer was fatally injured when he was <u>thermally burned</u> by steam. The victim and co-workers were cleaning a boiler. The victim was attempting to fill 2 buckets with water from the boiler's sump pump/condensation pit, when the victim fell into the pit and received steam burns on 85% of his body. The employer was cited for failure to furnish a workplace free from hazards and one other violation apparently unrelated to the event.

OSHA Inspection Number 312927437

A 57 year old welder was fatally injured when an <u>explosion</u> occurred. The victim was installing a new pipe at the top of a tank dome while welding the pipe to a flanged section, when an explosion occurred. The employer was cited for no PPE, energy isolation not checked, lack of training in all work practices, no procedures developed to handle hazards, cutting/welding in an explosive atmosphere, and 4 additional violations apparently unrelated to the event.

OSHA Inspection Number 312926553

A 47 year old laborer was fatally injured when a refinery <u>explosion</u> occurred. The victim and his co-workers were blinding flanges of a section of piping when there was a gas leak and then an explosion. The employer of the victim was not cited, but the controlling employer was.

OSHA Inspection Number 312923824

A 49 year old Hispanic day laborer passed away from heat stroke. The victim and co-workers were trimming trees and shredding branches when the victim suffered hyperthermia. The employer was cited for failure to furnish a workplace free of hazards.

OSHA Inspection Number 312928443

A 33 year old male died of <u>heat stroke</u> while moving brick, scaffold boards, and mudding bricks. The environmental temperature was 91-94 degrees and his core temperature was 101.1. The employer was cited for not providing a workplace free from hazards.

OSHA Inspection Number 314934662

A 23 year old laborer suffered heat stroke during construction of a fabric building structure. The worksite had temperatures of 106 degrees, which lead to the victim passing away from hyperthermia. The employer was cited for not furnishing a workplace free from hazards, lack of hazard recognition training, and not reporting the event to OSHA within 8 hours.

OSHA Inspection Number 123448706

A laborer for an electrical company passed away after exhibiting signs of <u>heat stroke</u>. The victim had been working (on a roof) in the sun running wire and leveling light poles. The employer was cited for 3 violations apparently unrelated to the heat stroke event.

OSHA Inspection Number 315488676

A 28 year old welder's helper passed away from heat stroke. The victim and co-workers were working on a new pipeline when the victim collapsed. The employer was cited for lack of hazard recognition training and not having a person trained in first aid at the worksite.

OSHA Inspection Number 315718924

A 65 year old male was working on a building demolition when a wall <u>collapsed</u> on him. The employer was cited for failing to have an employee wear a protective helmet.

OSHA Inspection Number 316289404

A 60 year old supervisor was <u>struck by</u> an elevated load and crushed. The victim and other employees had used a forklift to lift a chemical tote. The forklift boom was extended to the maximum length, causing the rear tires to leave the ground and the forklift to tilt. This caused the load to slide off the forks and fall onto the victim. The employer was cited for lack of power truck training, exceeding capacity load for forklift, working under elevated loads, and one other violation apparently unrelated to the event.

OSHA Inspection Number 312922057

A 42 year old supervisor was injured when a crane <u>boom collapsed during a lifting</u> operation. The victim was standing under the counterweights of the crane being assembled when the boom failed, dropping the boom and counterweights onto the victim. The employer was cited for not following the manufactures specs and limits and not keeping the employees clear of loads being lifted.

OSHA Inspection Number 312928880

A 25 year old laborer was fatally injured during a <u>lifting operation</u>. The victim walked behind a lifted load and was crushed between the load and a concrete wall. The employer was cited for lack of barricades for the crane's boundaries and 9 additional violations unrelated to the event.

OSHA Inspection Number 315174227

Two steelworkers were fatally injured when a <u>crane collapsed</u>. The victims were in an aerial lift cutting steel from a bridge. Cut sections were then lifted out by a crane. As the crane was going to lift the next section, it malfunctioned, part of the boom collapsed and struck the aerial lift, causing the victims to fall 30 feet. The employer was not cited due to limited access to the worksite (the crane location).

OSHA Inspection Number 314770447

A 46 year old laborer was attempting to install safety cribbing under an elevated house that was being raised to prevent flooding. While under the house, and before cribbing could be installed, the house shifted and <u>collapsed</u> onto the victim. The employer was cited for not furnishing a workplace free from hazards.

OSHA Inspection Number 314281569

A 44 year old laborer was fatally injured when he was <u>struck by</u> a concrete bucket. A crane was used to lift the bucket, after which the victim would pull a rope to release the concrete. As the bucket was over overhead it fell and struck the victim. The employer was cited for working under an elevated load, lack of hazard recognition training, and lack of pre-job meeting to set up signals.

OSHA Inspection Number 331247

A 37 year old ironworker was fatally injured when the <u>rigging on a lifting operation failed</u>. The victim was placing steel for a new bridge, when the rigging failed on a steel beam lift. The beam fell and struck the victim. The employer was cited for improper rigging.

OSHA Inspection Number 279364

A 42 year old supervisor was fatally injured when a steel beam <u>fell during a lifting operation</u>. The victim was using a forklift to lift the steel beam. The beam was lifted, and the victim was placing cribbing under it when it fell and struck him. The employer was not cited for any violations.

OSHA Inspection Number 312922149

A 31 year old mechanic was fatally injured when he was <u>struck by a projectile</u>. The victim was diagnosing a malfunction of the concrete pumping boom when he loosened a valve mounting bolt and it violently released. The bolt and pressurized hydraulic fluid struck the victim. The employer was cited for not having an energy control program.

OSHA Inspection Number 314767641

A 57 year old laborer was fatally injured when he was <u>struck by a projectile</u>. During a pile driving operations for a new bridge, a small structural member of the pile driving leads broke loose and struck the victim. The employer was cited for not furnishing a workplace free from hazards.

OSHA Inspection Number 312928906

A 32 year old male was struck by a towing hook which broke free from a truck that was attempting to free a stuck vehicle. The employer was not cited for any violations.

OSHA Inspection Number 314770074

A 32 year old laborer was fatally injured when he was <u>struck by a falling object/projectile</u>. The victim was helping lower an intake pipe for a new pump onto a flanged pipe using an excavator. The pipe was placed and the lift slings were being removed when the pipe flipped off the flange and struck the victim. The employer was cited for lack of hazard recognition training and one violation apparently unrelated to the event.

OSHA Inspection Number 314774712

A 53 year old equipment operator was fatally injured when a <u>sand pile collapsed</u> on him. The victim was engaged in sand stripping and stockpiling, when the excavator he was operating was engulfed in wet sand. The employer was cited for lack of a competent person inspection and lack of hazard recognition training.

OSHA Inspection Number 315785113

A 31 year old welder was fatally injured when he was <u>struck by a projectile</u>. The victim was walking by a welding operation on a steel rectangular truss structure supported by saw horses. As he walked by, the structure suddenly moved and fell, striking the victim. The employer was cited for failure to furnish a workplace free from hazards and 5 additional violations apparently unrelated to the event.

OSHA Inspection Number 314182668

A 40 year old truck driver was fatally injured while <u>unloading</u> pipes. Another employee was using a forklift to unload the pipes when the load shifted and the pipes rolled off the truck and onto the victim. The employer was not cited for any violations.

OSHA Inspection Number 409422

A 37 year old Hispanic day laborer was fatally injured when he was <u>struck by lightning</u>. The victim and his co-workers had finished laying a concrete slab for a new residential home, and were about to enter into the company truck to leave for the day, when the victim was struck. No citations were issued for the event.

OSHA Inspection Number 312927213

A 22 year old male working on a steel beam fell with the beam when the <u>structure collapsed</u>. The employer was cited for failing to ensure the concrete footings for the steel had reached sufficient strength, failing to properly anchor the columns, and for not bracing the steel columns.

OSHA Inspection Number 316288513

A 41 year old laborer was fatally injured when he was <u>crushed by a collapsing</u> ceiling. The victim was demolishing a wall of a storage closet at a college when the ceiling broke free from the rafter, swung down, and crushed the victim between the wall and the ceiling section. The employer was cited for lack of hazard recognition training and failure to report the event to OSHA with 8 hours.

OSHA Inspection Number 316070044

A laborer <u>drowned</u> when his boat flipped over. The victim was building a new floating walkway to irrigation pumps at the center of a pond. There were no witnesses to the event. The employer was cited for lack of life jackets, ring buoys, a life saving skiff, no PPE, no PPE assessment before work began, and 10 additional violations apparently unrelated to the event.

OSHA Inspection Number 315969279

A 54 year old male was struck by a passing elevator car while working on an adjacent car. The employer was cited for failure to provide a worksite free from hazards.



We maintain, for OSHA, a comprehensive collection of construction fatality case files. The efforts of OSHA area offices in submitting fatality case files are crucial to expanding our database and research capabilities. Thanks to all for your submissions (For reference, you may send fatality case files to the address on the right).

We would like to especially recognize Region 6 for sending in an amazing 95 cases this quarter! While this is notable and much appreciated we encourage other regions to continue and/or expand their submissions so that the database is as representative as possible of the geographic, ethnic, and workplace events.

We welcome any suggestions and comments (they can be directed to John Wagner, jpwagner@utk.edu) as we work together to reduce fatal construction events.

Construction Industry Research and Policy Center The University of Tennessee Stokely Management Center, Room 202 916 Volunteer Boulevard Knoxville, Tennessee 37996

Phone: 865-974-4422 E-mail: cirpc@utk.edu

