

OSHA Construction—Cranes, Confined Space, Data, Residential, Steel Erection, etc.

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Introduction

As Dr. Michaels, Assistant Secretary of Labor for the Occupational Safety and Health Administration (OSHA), testified on Capitol Hill, March 16, 2011:

The results of [the Occupational Safety and Health Act] speak for themselves. In the four decades since the OSH Act was enacted, the nation has made dramatic progress in reducing work-related deaths and injuries. Since 1970, workplace fatalities have been reduced by more than 65 percent. Reported occupational injury and illness rates have decreased by over 67 percent since 1973, but far too many preventable injuries and fatalities continue to occur. In 1971, the National Safety Council estimated that 38 workers died on the job every day of the year. Today, the Bureau of Labor Statistics puts that number at 12 per day, with a workforce that is almost twice as large.

Dr. Michaels continued by discussing private industry construction.

Construction is among the most dangerous industries in the country and construction inspections comprise 60% of OSHA's total inspections. In 2009, preliminary data from the Bureau of Labor Statistics indicate that there were 816 fatal on-the-job injuries to construction workers – more than in any other single industry sector and nearly one out of every five work-related deaths in the U.S. that year.

In 2009, private industry construction workers had a fatal occupational injury rate nearly three times that of all workers in the United States: 9.7 per 100,000 full-time equivalent construction workers vs. 3.3 for all workers. Construction also had two of the ten occupations with the highest fatal injury rates: roofers at 34.7 fatal work injuries per 100,000 full-time equivalent workers and structural iron and steel workers at 30.3. The number of fatal injuries in construction declined from 975 in 2008 to 816 in 2009. The Bureau of Labor Statistics attributes much of the drop in construction fatalities to a weak economy. The challenge for OSHA will be to keep these numbers down as the economy begins to pick up.

The leading causes of worker deaths in the construction industry were: falls, struck by object, caught-in-between, and electrocution. These "Fatal Four" were responsible for nearly three out of five (59%) construction worker deaths in 2009, BLS reports. In 2009, falls accounted for more than one-third of fatal occupational injuries in construction (34%). Nearly half (48%) of all fatal falls in private industry involved construction workers. Transportation-related events were the second leading fatal injury event (25%) in construction, followed by contact with objects and equipment (19%) and exposure to harmful substances and environments (16%). Illnesses in construction include lead poisoning, lung disease and cancer from exposure to asbestos and silica, hearing loss, and musculoskeletal disorders.

Additionally Dr. Michaels pointed out that:

One of the goals of [OSHA] enforcement is to level the playing field for the vast majority of employers, who play by the rules and make the health and safety of their employees a priority. While most employers strive to do the right thing, too many try to save a few dollars by cutting corners on safety and health – often with tragic results.

He gave examples of OSHA regulations and staff saving lives.

[In March] ... the nation witnessed the dramatic demonstration of lives saved when a scaffold holding two workers collapsed 12 stories above the ground in Yonkers, NY. The two men on that scaffold were protected by fall protection equipment until rescuers were able to bring them safely to the ground.

[Also in March] ... in the state of Ohio, we were reminded again about the life-saving value of OSHA regulations. Our inspectors were called to investigate a report of a worker in a deep construction trench. Upon arrival, OSHA inspector Rick Burns identified a worker in a 10-foot deep unprotected trench. OSHA regulations require trenches greater than 5 feet deep to be shored, sloped or protected in some way.

Burns immediately directed the worker to leave the trench. The worker exited the trench and 5 minutes later, the walls of the trench collapsed right where the worker had been standing. There is little doubt that he would have been seriously injured or killed.

Assistant Secretary Michaels stressed that, in addition to regulating, OSHA is:

committed to a robust compliance assistance effort. We recognize that most small construction businesses may not be able to hire full time health and safety staff, nor are many able to afford to hire consultants to address their safety and health obligations. To assist these small employers, OSHA's Onsite Consultation Service provides free workplace safety and health evaluations and advice to small businesses with 250 or fewer employees, and is completely separate and independent from OSHA's enforcement program with very few exceptions. Last year, the Consultation Service conducted over 30,000 consultation visits, more than 9,000 in small construction companies.

We also invest heavily in compliance assistance to ensure that employers know how to comply with our standards. OSHA has compliance assistance specialists in most of our area offices – ready to provide assistance and information. In FY 2010, we helped over 200,000 individuals through our toll-free number. In addition, we develop materials for employers to help with compliance. For example, with respect to our new cranes standard that I mentioned before, in addition to the materials we have already published, we are currently developing 4 fact sheets to help employees and employers implement the new standard. Last week we issued a Small Entity Compliance Guide for Cranes and Derricks, and we are working on a compliance directive, as well as adding additional frequently asked questions.

OSHA has also been working closely with the building industry and labor unions to find and implement solutions to worker injuries and deaths by incorporating engineering controls into construction practices. For example, Prevention through Design, a novel idea a few years ago, is finding wider acceptance in the industry. With the support and leadership of IMPACT, Building Trades Employers' Association of NY, ACCSH and others, these life-saving controls are moving toward becoming the norm for new and renovated buildings.

Examples of Prevention through Design that OSHA has promoted include reinforcing skylights and designing parapets for rooftop workers, and the idea of "cocooning" for poured-in-place concrete buildings is now providing added safety for workers erecting One World Trade Center in New York. Cocooning means wrapping entire floors of a building in plastic, preventing falls and avoiding the need for fall protection equipment and other more expensive and less safe measures.

The following topics give a brief overview of construction safety regulatory activities at the Occupational Safety and Health Administration (OSHA).

On Monday, August 9, 2010, OSHA published its Final Rule for Cranes and Derricks in Construction. It was in Federal Register, Volume 75, and Number 152 at page 47906 (75 FR 47906). The Final Rule, excluding some requirements to be phased in, became effective on November 8, 2010. For example, while some requirements for qualification and certification of operators became effective November 8, 2011 others do not become fully effective until November 10, 2014. Likewise some requirements for insulating links became effective on November 8th; the requirement that the links be approval by a Nationally Recognized Testing Laboratory becomes fully effective on November 8, 2013. This rule is codified in the Code of Federal Regulations at 29 CFR 1926 Subpart CC and can be found on OSHA's website, www.osha.gov, where it will over time become hyperlinked with interpretive, guidance and compliance materials. Also the Final Rule is available at the Government Printing Office's Federal Digital System (www.gpo.gov by selecting FDsys). There the published notice, 75 FR 47906, is downloadable in its entirety, including the preamble and the regulatory text. In addition numerous outreach materials for 1926 Subpart CC are available on OSHA's webpage, www.osha.gov.

The Final Rule is the culmination of many efforts by industry, OSHA, the Solicitor of Labor, the Department of Labor, the Advisory Committee on Construction Safety and Health

(ACCSH), the Crane and Derrick Negotiated Rulemaking Advisory Committee (CDAC), the public and many others. In the late 1990's ACCSH held open work group meetings to discuss revising 29 CFR 1926.550, Cranes and Derricks, in construction. Note that Section 550 included references to Society of Automotive Engineers (SAE), American National Standards Institute (ANSI), Association of Mechanical Engineers (ASME), and Power Crane and Shovel Association (PCSA), standards that date from before the OSH Act of 1970.

The ACCSH work group produced a draft that became one of the bases for CDAC's negotiated rulemaking endeavors. CDAC negotiated from mid 2003 through mid 2004 and produced a comprehensive consensus, which became the underpinnings of the proposed and then final rule. Both the ACCSH work group's and CDAC's meetings were open to the public and included input from numerous, varied interests.

On Wednesday, November 28, 2007, OSHA published its Proposed Rule for Confined Spaces in Construction. The comment period ran through January 28, 2008 and was extended to February 28, 2010 after requests from several groups. Additionally OSHA conducted public hearings, received post hearing briefs from participants, and closed the record for the proposed rule on October 23, 2010. Since then, Agency staff members have been busy analyzing and addressing the comments, testimony and post hearing submissions. See Department of Labor Semiannual Regulatory Agenda, December 20, 2010, (75 FR 79804), Confined Spaces in Construction, Sequence Number 404 scheduled for final action in November 2011. This rulemaking record is available to the public at www.regulations.gov. The docket ID is OSHA-2007-0026. The legacy docket number, OSHA's old docket number, is S107A, but the materials have been migrated to regulations.gov and are no longer available at <http://dockets.osha.gov/>.

While the Bureau of Labor Statistics (BLS) is scheduled to release revised (final) numbers for its 2009 Injury, Illness and Fatality data in April 2011, the preliminary data suggest a reduction in construction fatalities from 2008 numbers. Taken with the 2008 fatality numbers, which were considerably lower than the 2007 numbers, the 2009 numbers seem to indicate a trend that tracks the reduction in construction work and employment.

On December 22, 2010, OSHA published in the Federal Register a Notice of Significant Enforcement Policy Change (75 FR 80315). The notice published compliance directive STD 03-11-002 for residential fall protection. STD 03-11-002 replaces and rescinds STD 03-00-001, originally known as STD 3.1A, which was the plain language revision of STD 3.1 the Agency's interim residential fall protection policy. The STD 03-11-002 rescinds STD 03-00-001 in its entirety including its activity categories and unique terminology. STD 03-11-002 includes OSHA's interpretation of "residential construction" for the purposes of 29 CFR 1926.501(b) (13). The new directive is scheduled to take effect June 16, 2011. Visit www.osha.gov for residential construction outreach materials.

On April 30, 2010, OSHA's CPL 02-01-048 for Steel Erection became effective and clarified Agency enforcement policy on the requirements regarding: (1) fully planked or decked floors or nets, which was announced in Question and Answer #23 in OSHA Instruction CPL 02-01-034 formerly CPL 2-1.34, issued March 22, 2002, and (2) pre-installed shear connectors, which was announced in Question and Answer #25 also in CPL 02-01-034, March 22, 2002.

On December 20, 2010 the Department of Labor published its Regulatory Plan, part of its Semiannual Regulatory Agenda in the Federal Register (75 Number 238, Monday, December 20,

2010). For OSHA construction safety the Department listed two items at the pre-rule stage as follows: “Reinforcing and Post-Tensioned Steel Construction, Sequence No.94, RIN 1218-AC51,” and “Backing Operations, Sequence No. 95, RIN 1218-AC52.”

Cranes and Derricks in Construction

- Federal Register / Vol. 75, No. 152 / Monday, August 9, 2010 / Rules and Regulations
 - 29 CFR 1926 Cranes and Derricks in Construction; Final Rule (1926 Subpart CC)
 - Effective date: November 8, 2010 – with phase ins e.g. operator certification, insulating links
- Crane and Derrick Negotiated Rulemaking Advisory Committee (CDAC)
 - 23 Members – employer users (10), government (1), insurance (1), labor (4), lessors/maintenance (1), manufacturers/suppliers (4), power line owners (1), trainer and operator testing (1)
 - Negotiated July 2003 to August 2004
 - Heard testimony from numerous presenters
 - Received input from ACCSH
 - ◆ ACCSH work group late 1990’s early 2000’s
 - ◆ ACCSH work group draft document – December 5, 2002
- Negotiated Rulemaking Act – 5 U.S.C. § 562(2) “consensus” means unanimous concurrence among the interests represented on a negotiated rulemaking committee, established under this subchapter, unless such committee –
 - (A) agrees to define such term to mean a general but not unanimous concurrence; or
 - (B) agrees upon another specified definition;
 - Consensus – not more than two non-Federal dissents
- Operator Qualification and Certification - Overview
 - Employers must provide at no cost to operators employed by November 8, 2010 by the employer
 - Four Options and Pre-qualification/Certification Training Period
 - Option 1: Certification by an accredited crane operator testing organization
 - Option 2: Qualification by an audited employer program
 - Option 3: Qualification by the U.S. Military
 - Option 4: Licensing by a government entity
 - Pre-qualification/certification training period (operator in training)
 - ◆ Trainer
 - ◆ Continuous Monitoring
 - Qualifications and Certification Minimum Criteria
 - Written test
 - ◆ Controls and operational performance characteristics
 - ◆ Use of and ability to calculate load capacity for variety of configurations
 - ◆ Power line contact prevention and responses to contact
 - ◆ Technical knowledge of ground support, site hazards, site access
 - ◆ Subpart CC
 - Read/locate relevant information in equipment manuals
 - Practical test

- ◆ Ability to recognize, from visual and auditory observation, the items listed in section 1926.1412(d) shift inspection
 - ◆ Operational and maneuvering skills
 - ◆ Application of load chart information
 - ◆ Application of safe shut-down and securing procedures
- Signal Person Qualification - Overview
 - Option 1: Third Party qualified evaluator
 - Option 2: Employer's qualified evaluator
 - Qualification requirements
 - Know and understand types of signals used / Standard Hand signals
 - Be competent in application of signals to be used
 - Basic understanding of equipment operation/limitations
 - ◆ Crane dynamics, stopping/swinging loads
 - ◆ Boom deflection
 - ◆ Know relevant parts of Subpart CC
 - Demonstrate through oral/written test AND practical test
- Scope of the standard – Overview
 - Power operated equipment used in construction to hoist, lower and horizontally move a suspended load.
 - Such equipment:
 - Articulating (knuckleboom) cranes, crawler cranes, floating cranes, cranes on barges, locomotive cranes, mobile cranes (wheel mounted, rough terrain, all-terrain, boom truck cranes), multi-purpose machines configured to hoist/lower with winch or hook and horizontally move suspended load, industrial cranes (carry decks), dedicated pile drivers, service/mechanic truck with hoisting devices, monorail cranes, tower cranes (hammerhead and luffing jib)
 - ◆ Attachments: hooks, clamshell buckets, pile leads, personnel baskets, magnets, etc.
 - Numerous exceptions
 - ◆ Delivery cranes (knucklebooms) when delivering
 - ◆ Digger Derricks when digging placing poles and installing equipment on poles
 - ◆ Converted cranes/power shovels, excavators
 - ◆ Concrete pumps, industrial trucks, aerial platforms, excavators, backhoes, etc.
- Ground conditions
 - Controlling entity must ensure necessary preparation / conditions are met
- Assembly/Disassembly requirements
 - Significant procedures generally
 - Specialized additional procedures for assembly/disassembly close to power lines
- Operational requirements
 - Generally
 - Additional requirements when operating close to power lines

- Includes varying stringency depending on proximity and Voltage
 - Additional requirements when traveling crane close to power lines
 - Keeping clear of load
 - Use routes that minimize exposure to hoisted loads
 - Limitations on those receiving load/being in fall zone
 - Qualified rigger
 - Assembly/disassembly
 - When employees are in fall zone connecting, placing concrete, unhooking load
- Inspections
- Each shift
 - Monthly
 - Annually
 - Post modification of crane/equipment
 - Post repair/adjustment of crane/equipment
 - Post assembly of crane/equipment
 - Running rigging (wire rope)
- The Agency published its Small Entity Compliance Guide For Final Rule For Cranes And Derricks In Construction
- Section by section discussion how to apply
 - Available at www.osha.gov in March 2011
- Additional outreach materials like fact sheets and FAQ's are also available at www.osha.gov

Proposed Rule for Confined Spaces in Construction

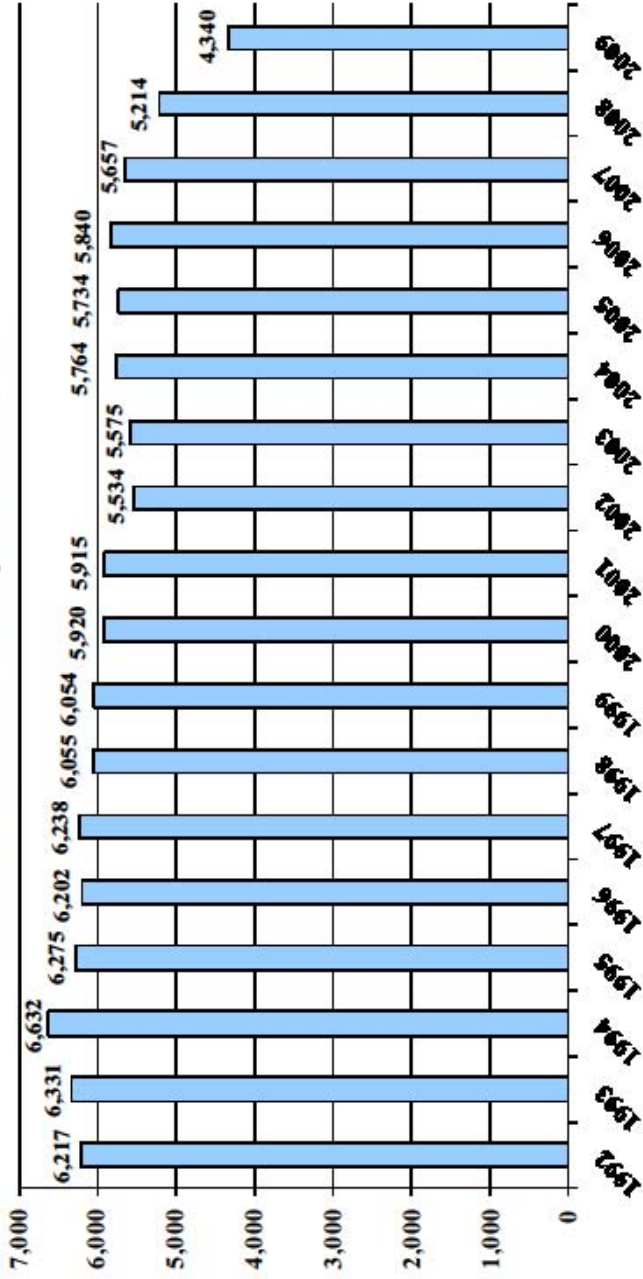
- Department of Labor Semiannual Regulatory Agenda on December 20, 2010 (75 FR 79804). Confined Spaces in Construction, Sequence Number 404
- Scheduled for final action in November 2011.
 - OSHA closed the record for the proposed rule on October 23, 2010.
 - Since then, Agency staff members have been analyzing and addressing the comments, testimony and post hearing submissions.
- This rulemaking record is available to the public at www.regulations.gov. The docket ID is OSHA-2007-0026. The legacy docket number, OSHA's old docket number, is S107A

Occupational Fatality Data

- According to BLS in its August 2010 Summary of the Census of Fatal Occupational Injuries (CFOI):
- Workers in construction incurred the most fatal injuries of any industry in the private sector in 2009,
 - The number of fatalities in construction declined 16 percent in 2009 after a decline of 19 percent in 2008.
 - With this decrease, private construction fatalities are down by more than a third since reaching a series high in 2006.

- ◆ Economic conditions may explain much of this decline with total hours worked having declined 17 percent in construction in 2009, after a decline of 10 percent the year before.
- ◆ Fatal injuries involving workers in the construction of buildings were down 27 percent from 2008, with most of the decrease occurring in nonresidential building construction (down 44 percent to 55 cases).
- ◆ Heavy and civil engineering construction was down 12 percent,
- ◆ The subsector with the largest number of fatal work injuries, specialty trade contractors, had 16 percent fewer fatalities in 2009 than in 2008.

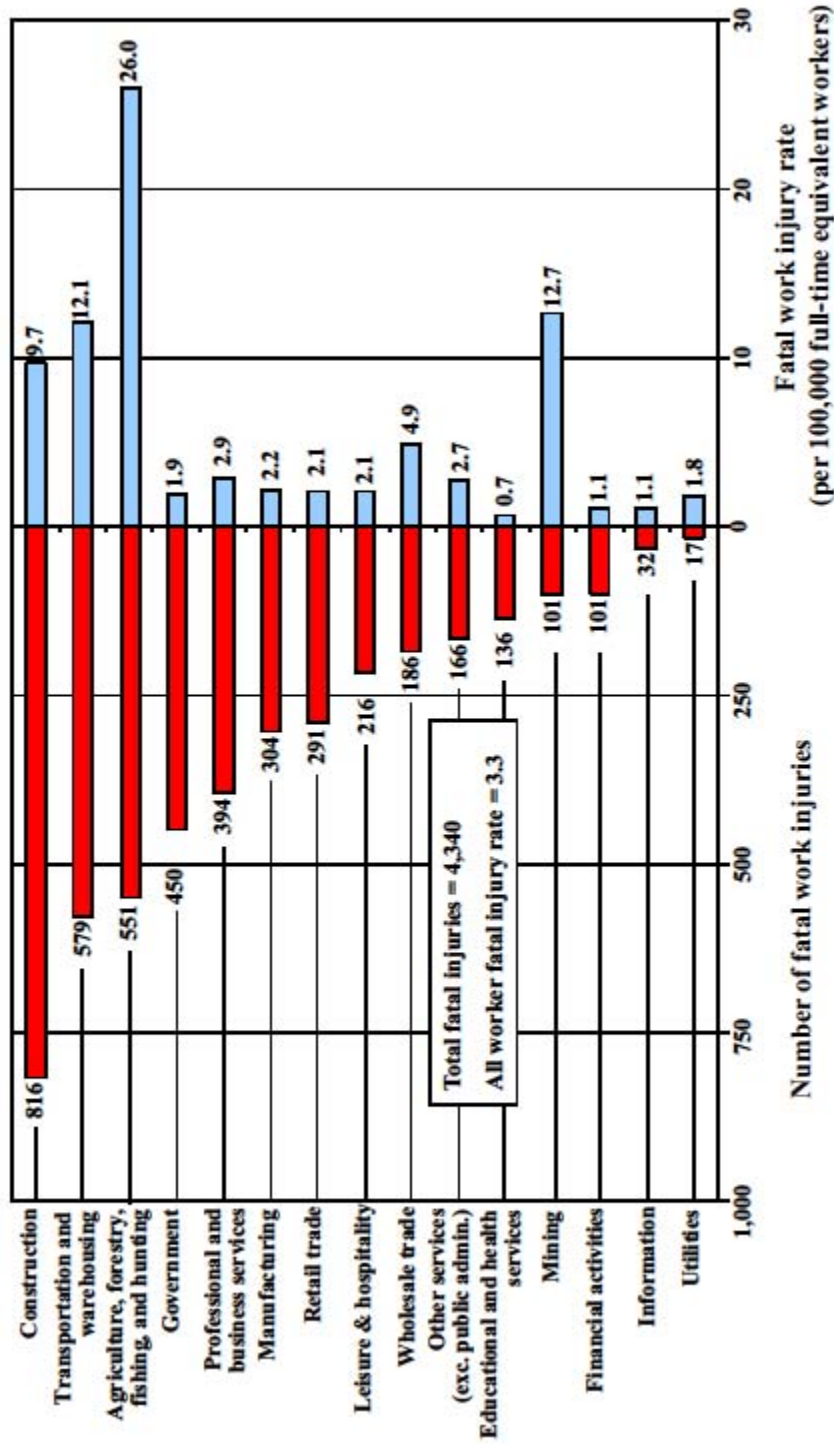
Number of fatal work injuries, 1992–2009*



The 2009 preliminary total of 4,340 fatal work injuries represents a 17 percent decrease from the 5,214 fatal work injuries reported for 2008.

*Data for 2009 are preliminary. Data for prior years are revised and final.
 NOTE: Data from 2001 exclude fatal work injuries resulting from the September 11 terrorist attacks.
 SOURCE: U.S. Bureau of Labor Statistics, U.S. Department of Labor, 2010.

Number and rate of fatal occupational injuries, by industry sector, 2009*



Although construction had the highest number of fatal injuries in 2009, agriculture, forestry, fishing, and hunting had the highest fatal work injury rate.

*Data for 2009 are preliminary.
SOURCE: U.S. Bureau of Labor Statistics, U.S. Department of Labor, 2010.

TABLE A-6. Fatal occupational injuries by occupation and event or exposure, All United States, 2009 - Continued

Occupation ¹	Total fatalities (number)	Event or exposure ²					Exposure to harmful substances or environments	Fines and explosions
		Transportation incidents ³	Assaults and violent acts ⁴	Contact with objects and equipment	Falls			
Fishers and related fishing workers	56	43	3	3	—	—	—	—
Forest, conservation, and logging workers	37	7	—	28	—	—	—	—
Forest and conservation workers	3	—	—	—	—	—	—	—
Logging workers	34	6	—	28	—	—	—	—
Fallers	21	—	—	19	—	—	—	—
Logging equipment operators	7	4	—	3	—	—	—	—
Logging workers, all other	6	—	—	4	—	—	—	—
Construction and extraction occupations	818	205	34	173	261	125	19	—
Supervisors, construction and extraction workers	111	34	7	30	23	14	3	—
First-line supervisors/managers of construction trades and extraction workers	111	34	7	30	23	14	3	—
First-line supervisors/managers of construction trades and extraction workers	111	34	7	30	23	14	3	—
Construction trades workers	607	136	23	105	231	100	12	—
Brickmasons, blockmasons, and stone masons	10	—	—	3	5	—	—	—
Brickmasons and blockmasons	8	—	—	3	4	—	—	—
Carpenters	80	12	7	10	38	12	—	—
Carpet, floor, and tile installers and finishers	80	12	7	10	38	12	—	—
Carpenters	4	—	—	—	—	—	—	—
Construction laborers	224	53	6	58	72	30	5	—
Construction laborers	224	53	6	58	72	30	5	—
Construction equipment operators	49	39	—	10	—	—	—	—
Roving, surfacing, and tending equipment operators	8	7	—	—	—	—	—	—
Operating engineers and other construction equipment operators	40	31	—	9	—	—	—	—
Drywall installers, ceiling tile installers, and tapers	6	—	—	—	—	—	—	—
Drywall and ceiling tile installers	6	—	—	—	—	—	—	—
Electricians	82	14	—	6	4	—	—	—
Electricians	14	—	—	—	—	—	—	—
Electricians	82	14	—	6	4	—	—	—
Painters and paperhangers	26	—	—	—	—	—	—	—
Painters, construction and maintenance	26	—	—	—	—	—	—	—
Pipelayers, plumbers, pipefitters, and steamfitters	38	11	5	8	18	4	—	—
Plumbers, pipefitters, and steamfitters	36	10	5	7	16	7	—	—
Roofters	60	4	3	3	42	8	—	—
Roofters	60	4	3	3	42	8	—	—
Sheet metal workers	3	—	—	—	—	—	—	—
Sheet metal workers	3	—	—	—	—	—	—	—
Structural iron and steel workers	18	—	—	—	—	—	—	—
Structural iron and steel workers	18	—	—	—	—	—	—	—
Helpers, construction trades	18	—	—	—	—	—	—	—
Helpers, construction trades	18	—	—	—	—	—	—	—
Helpers, construction trades	8	—	—	—	—	—	—	—
Helpers, construction trades	8	—	—	—	—	—	—	—

See footnotes at end of table.

□ Data slides from BLS March 17, 2011.

- Preliminary Data and Rate per 100,000 full time equivalent workers – BLS explanation
 - Data for 2009 are preliminary. Data for prior years are revised and final.
 - Employment-Based Rate = (Fatal work injuries/Employment) x 100,000. The employment figures, except for resident military, are annual average estimates of employed civilians, 16 years of age and older, from the Current Population Survey (CPS). The resident military figure, obtained from the Department of Defense, was added to the CPS employment total.
 - Hours-Based Rate = (Fatal work injuries/Total hours worked by all employees) x 200,000,000 where 200,000,000 = base for 100,000 full-time equivalent workers (FTEs) working 40 hours per week, 50 weeks per year. The total hours worked figures are annual average estimates of total at work multiplied by average hours for civilians, 16 years of age and older, from the Current Population Survey (CPS).
 - For additional information on the fatal work injury rate methodology changes please see <http://www.bls.gov/iif/oshnotice10.htm>. SOURCE: U.S. Bureau of Labor Statistics, U.S. Department of Labor, Current Population Survey, Census of Fatal Occupational Injuries, U.S. Census Bureau, and U.S. Department of Defense, 2010.

Notice of Significant Enforcement Policy Change – Residential Fall Protection

STD 03-11-002, published December 22, 2010, is scheduled to take effect June 16, 2011. The following is quoted from the STD, itself:

- IX. Definition of “residential construction.”
 - Under STD 03-00-001, a project was considered residential construction “where the working environment, materials, methods and procedures [we]re essentially the same as those used in building a typical single-family home or townhouse.” OSHA explained that for purposes of the directive, residential construction was characterized by wood framing and wooden floor joists and roof structures and involved traditional wood frame construction techniques. A discrete part of a large commercial building, e.g., a wood frame, shingled entranceway to a mall, could fall under the definition of residential construction if the aforementioned characteristics were present. This definition was always intended to clarify the scope of the directive; it was not meant to represent OSHA’s view of the scope of 1926.501(b) (13). Now that OSHA is rescinding the directive, the Agency believes that adopting a clear interpretation of “residential construction” for purposes of 1926.501(b)(13) will facilitate enforcement as well as compliance efforts.
 - In the 1999 ANPR, OSHA requested comments on the definition of “residential construction.” OSHA has considered the comments received in response to that request (see discussion below). The Agency is adopting an interpretation of “residential construction” that reflects what it originally intended when it promulgated the provision specific to “residential construction” in 1994. The Agency’s interpretation of “residential construction” for purposes of 1926.501(b)(13) combines two elements – both of which must be satisfied for a project to fall under that provision: (1) the end-use of the structure being built must be as a home, i.e., a dwelling; and (2) the structure being built must be constructed using traditional wood frame construction materials and methods (although the limited use of structural steel in a predominantly wood-framed home, such as a steel

I-beam to help support wood framing, does not disqualify a structure from being considered residential construction).

- A. Residence Requirement.
 - To fall within the definition of “residential construction,” the end-use of the building in question must be as a home or dwelling. This comports with the plain meaning of the term “residential” in the text of 1926.501(b) (13) and is consistent with OSHA’s original intent in promulgating that provision.
 - OSHA received several comments in response to the ANPR that recommended excluding an end-use requirement from the definition of residential construction. The NAHB (Ex. 3-2453) asked OSHA not to “make an arbitrary and capricious assessment that the end use of the structure has any correlation to the hazard to which an employee may be exposed or the type of fall protection systems that can be used.” The NRCA (OSHAS206C-2006-0924-0189) agreed, commenting that “emphasis should be placed on the best way to protect workers, not on the building’s use.” Other commenters supported the positions of the NCRA and the NAHB. And in December 2009, ACCSH recommended a definition of “residential construction” that would have covered the building of nonresidential structures where the environment, methods, materials and procedures used were similar to those used to build single-family residences. (OSHA-2009-0030-0024.)
 - OSHA has given these comments full consideration; however, the Agency has decided that an end-use requirement is necessary to comport with the plain language of 1926.501(b) (13) and OSHA’s intent in promulgating that provision. In the original Subpart M rulemaking, various commenters on the proposed rule urged OSHA to establish unique fall protection requirements for “the residential/light commercial sector” or for “residential and light commercial construction.” (59 FR at 40693.) For example, the Home Builders Association of Denver (HBAD) commented that “a majority of residential builders also perform some amount of light commercial work and [suggested that] the two types of construction should be categorized [and treated together] as ‘light construction.’” (59 FR at 40693.) Other commenters specifically urged OSHA to distinguish light construction from heavy commercial construction. OSHA responded that evidence did not warrant having different rules for light and heavy construction. (59 FR at 40695.) And while OSHA was aware of terms like “light construction,” which avoid reference to the use of the structure and instead create a category of building defined solely by materials and methods, it declined to use such terms in the text of 1926.501(b)(13) and elected to use the phrase “residential construction” instead. This approach reflected an intent by the Agency to limit the applicability of that paragraph to structures with a residential end-use, i.e., dwellings.
- B. Wood Frame Construction Requirement.
 - To fall within the definition of “residential construction,” the building in question must be constructed using traditional wood frame construction materials and methods. All of the comments received during the original Subpart M rulemaking that suggested feasibility problems with conventional fall protection dealt with wood framing work. (59 FR at 40693-40695.) Therefore, the term “residential

construction” in 1926.501(b) (13) was designed to apply only to the construction of homes using traditional wood frame construction materials and methods. This includes the construction of otherwise covered residences if there is limited use of structural steel in a predominantly wood-framed home, such as a steel I-beam to support wood framing.

- Recently it has become more common to use metal studs for framing in residential construction rather than wood. Some commenters to the ANPR believed that the use of metal studs for framing should be included in the definition of residential construction. (See, e.g., NAHB (Ex. 3-2453); NRCA (OSHA-S206C-2006-0924-0189).) Furthermore, at its December 2009 meeting, ACCSH recommended a definition of residential construction that listed metal studs, along with wood, as materials used for framing. (See OSHA-2009-0030-0024.) OSHA agrees with the commenters and ACCSH on this point. The same feasibility concerns that apply to wood framing apply to framing done using metal studs. Accordingly, OSHA will consider it within the bounds of “traditional wood frame construction materials and methods” to use cold-formed sheet metal studs in framing.
- And finally, OSHA is aware that many homes and townhouses, especially in the southern and southwestern regions of the country, have usually been built using traditional wood frame construction throughout the structure except for the exterior walls, which are often built with masonry brick or block. In a March 27, 2006, letter, the NAHB advocated for masonry block construction to be treated as wood frame construction because “masonry block wall construction has the equivalent strength of traditional wood frame, stick-built walls.” Because the same fall protection methods are likely to be used in the construction of homes built with wood framed and masonry brick or block exterior walls, the Agency has decided that it is consistent with the original purpose of 1926.501(b) (13) to treat the construction of residences with masonry brick or block in the exterior walls as residential construction.
- In accord with the discussion above, and for purposes of the interpretation of “residential construction” adopted herein, “traditional wood frame construction materials and methods” will be characterized by:
 - ◇ *Framing materials*: Wood (or equivalent cold-formed sheet metal stud) framing, not steel or concrete; wooden floor joists and roof structures.
 - ◇ *Exterior wall structure*: Wood (or equivalent cold-formed sheet metal stud) framing or masonry brick or block.
 - ◇ *Methods*: Traditional wood frame construction techniques.
- C. Nursing homes, hotels, and similar facilities.
 - As noted above, to fall within the definition of “residential construction,” the end use of the building must be as a home or dwelling and the building must be constructed using traditional wood frame construction materials and methods. Construction of nursing homes, hotels, and similar facilities typically involves the use of the following materials in the framework of the structure: precast concrete, steel I-beams (beyond the limited use of steel I-beams in conjunction with wood framing, described above), rebar, and/or poured concrete. These materials are not used in traditional

wood frame construction, and buildings constructed using these materials will not be considered “residential construction” for purposes of 1926.501(b) (13). For this reason, OSHA expects that in the vast majority of cases the Compliance Safety and Health Officer (CSHO) will be able to readily ascertain that the building of structures such as hotels, motels, and nursing homes is not “residential construction,” as that term is interpreted in this directive. However, if a CSHO encounters an unusual situation in which a project such as a hotel, motel, or nursing home is being constructed using traditional wood frame construction materials and methods, he or she should contact the Directorate of Construction, Office of Construction Standards and Guidance, at the address listed above, by telephone at (202)693-2020, or by facsimile at (202)693-1689, for assistance.

X. Citation Policy.

- A. If an employer is engaged in residential construction, but does not provide guardrail systems, safety net systems, personal fall arrest systems, or other fall protection allowed under 1926.501(b), a citation for violating 1926.501(b) (13) should be issued unless the employer can demonstrate the infeasibility of these protective measures or the existence of a greater hazard. If the employer demonstrates infeasibility or a greater hazard, the CSHO must determine if the employer has implemented a fall protection plan meeting the requirements of 1926.502(k). Part of that determination will be based on whether the employer has instituted alternative measures to reduce or eliminate fall hazards.
- B. Under STD 03-00-001, the employer was not required to have a fall protection plan that was written and site-specific. With the cancellation of STD 03-00-001, fall protection plans under 1926.502(k) must be written and site-specific. If the fall protection plan is not written, site-specific, or otherwise fails to meet the requirements of 1926.502(k), the violation should be cited as a grouped citation of 1926.501(b) (13) and 1926.502(k). A written plan developed for repetitive use for a particular style/model home will be considered site-specific with respect to a particular site only if it fully addresses all issues related to fall protection at that site.
- C. See CPL 02-00-111, Citation Policy for Paperwork and Written Program Requirement Violations, November 27, 1995, for additional guidance when citing violations of the requirement for a written fall protection plan in 1926.501(b)(13) and 1926.502(k).

Note: As of February 2011, STD 03-11-002 was the subject of on going litigation.

Additional materials including interpretive letters, FAQ’s and outreach materials are available at www.osha.gov

OSHA’s CPL 02-01-048 for Steel Erection

VIII. Significant Changes. This Instruction amends OSHA Instruction CPL 02-01-034 (formerly CPL 2-1.34) issued March 22, 2002, as follows:

- A. In Chapter 4, Section V, Structural Steel Assembly, Question and Answer #23, a policy was announced in which a failure to comply with the requirement in 29 C.F.R. 1926.754(b)(3) for a fully planked or decked floor or net was considered a de minimis violation where the employer required that all workers be protected by fall protection. The Agency is rescinding that policy. The revised Question and Answer #23 shall read:

- Question 23: Section 1926.754 (b) (3) requires a “fully planked or decked floor or nets” in multi-story structures within two stories or 30 feet, whichever is less. Section 1926.760 requires workers above 15 feet to be protected from falls, with two exceptions: section 1926.760(b)(3) and (c) allows workers engaged in certain steel erection activities (initial connecting; decking in a Controlled Decking Zone) below 30 feet to work without using fall protection. Can an employer’s requirement that all workers be protected by fall arrest systems, including those engaged in connecting and decking, take the place of compliance with the 1926.754(b) (3) floor/net requirement?
 - Answer: While OSHA encourages employers to exceed the fall protection requirements of the standard and have all workers use fall protection, section 1926.754(b) (3) provides additional safeguards. Therefore, such an employer would be required to comply with 1926.754(b) (3). However, compliance staff retain their normal discretion to determine, on a case by case basis, that violations are de minimis where there is no direct or immediate relationship to safety or health, and the employer’s use of personal fall protection systems at all times may be a factor in such a determination. See OSHA’s Field Operations Manual, CPL 02-00-148 (Nov. 9, 2009), section VIII.
- The revision of Question and Answer #23 is effective as of the issuance date of the directive.
- B. In Chapter 4, Section V, Structural Steel Assembly, Question and Answer #25, a policy was announced in which a failure to comply with a requirement in 29 C.F.R. 1926.754(c)(1) that shear connectors be field-installed after installation of decking would be considered a de minimis violation where the employer required that all workers be protected by fall protection. The Agency is rescinding that policy. The revised Question and Answer #25 shall read:
 - Question 25: If an employer requires the use of fall protection for all workers, including workers engaged in connecting and decking, would the employer still be required to comply with 1926.754(c)(1) – would the employer still be prohibited from erecting beams, joists or beam attachments with shop-installed shear connectors?
 - Answer: While OSHA encourages employers to exceed the fall protection requirements of the standard and have all workers use fall protection, section 1926.754(c)(1) is an engineering control that helps prevent tripping, which helps to prevent injury from falling on a shear connector and helps to prevent falls. Therefore, such an employer would be required to comply with section 1926.754(c) (1). However, compliance staff retain their normal discretion to determine, on a case by case basis, that violations are de minimis where there is no direct or immediate relationship to safety or health, and the employer’s use of personal fall protection systems at all times may be a factor in such a determination. See OSHA’s Field Operations Manual, CPL 02-00-148 (November 9, 2009), section VIII.

NOTE: Phase-in of revision: This revised version of Q & A 25 will not be applied where: (1) the component was fabricated with shear connectors or other similar devices prior to April 30, 2011, or (2) the contract date for fabrication of the component with factory-installed shear connectors or other similar devices was prior to April 30, 2011. In all

other instances the revised version of Question and Answer #25 is effective as of April 30, 2010.

This Instruction does not alter any other provisions of OSHA Instruction CPL 02-01-034 (formerly CPL 2-1.34), which remains in full force and effect. The revision to Question and Answer #23 is effective as of April 30, 2010. The de minimis policy described in the original version of Question and Answer #25 will continue to apply where the component was fabricated with shear connectors or other similar devices prior to April 30, 2011, or where the contract date for fabrication of the component with factory-installed shear connectors or other similar devices was prior to April 30, 2011. In all other instances the revised version of Question and Answer #25 is effective as of April 30, 2010. The text of the OSHA Instruction CPL 02-01-034 (formerly CPL 2-1.34) on the web will be amended accordingly within two weeks of the issuance date.

Department of Labor: Regulatory Plan (Federal Register 75 No. 238, December 20, 2010), part of its Semiannual Regulatory Agenda – (Federal Register 75 No. 243, December 20, 2010)

- Reinforcing and Post-Tensioned Steel Construction, Sequence No.94, RIN 1218-AC51. The notice includes an ANPRM scheduled for March of 2011. The following is from the notice:
 - “Current rules regarding reinforcing steel and post-tensioning activities do not adequately address worker hazards in work related to post tensioning and reinforcing steel. Both are techniques for reinforcing concrete ...”

* * *
 - “The Occupational Safety and Health Administration (OSHA) is seeking public comment on Post-tensioning and Reinforcing Steel from professionals who work in the post-tensioning and reinforcing steel field and will consider rulemaking to prevent worker deaths and injuries related to these operations. By requesting information from professionals who work in the reinforcing steel and post-tensioning fields and other members of the public, OSHA hopes to determine whether a new rule is necessary, and, if so, what hazards need to be addressed. “
- Backing Operations, Sequence No. 95, RIN 1218-AC52. The notice includes an RFI scheduled for May of 2011. The following is from the notice:
 - “NIOSH reports that half of the fatalities involving construction equipment occur while the equipment is backing. ... Emerging technologies in the field of backing operations include after market devices, such as camera, radar, and sonar, to help monitor the presence of workers on foot in blind areas, and new monitoring technology, such as tag-based warning systems that use radio frequency (RFID) and magnetic field generators on equipment to detect electronic tags worn by workers.”
- Both these items are at the pre-rule stage and are designed to encourage contribution and comment from, among others the affected industries and the interested public.
- Note: The Department of Labor publishes its regulatory agenda twice a year. The most recent publication provides the most up-to-date information. The editions are generally published in the spring and fall. Available at: www.dol.gov and www.gpo.gov.