

TOP 5 OSHA VIOLATIONS IN SINGLE FAMILY HOME CONSTRUCTION

When we think of construction worker injuries, we often think of large construction operations where workers are hundreds of feet off the ground and a lot of heavy equipment is involved. However, many occupational hazards exist for workers on small residential construction sites as well.



According to 2004 data from the Bureau of Labor Statistics (BLS), the number of workers injured on residential construction sites each year is essentially the same as the number injured during non-residential construction (approximately 40,000 per year). Framing contractors are at a particular risk for injuries, with a rate more than double the injury rate for residential construction workers overall (11% vs. 5%). The vast majority of injuries occurring in residential construction are easily preventable because many of them happen when OSHA regulations that have been put in place for the construction industry are not followed.

Below you will find a list of the top five specific topics cited by OSHA during inspections of small construction companies (less than 20 employees) involved in single-family residential construction. Information is also provided about the specific standards to which the violations refer. Details about these and all other OSHA standards for the construction industry can be found on the OSHA website at <http://www.osha.gov>

Scaffolding – 29 CFR 1926.451

This OSHA standard provides detail on the proper construction, use, and maintenance of construction scaffolds. According to OSHA, 65% of construction workers spend a significant amount of time working on scaffolds. In addition, a recent BLS study showed that 72% of scaffolding accidents happened when either planking or supports gave way, or workers slipped or were struck by falling objects.



Fall Protection Application and Training – 29 CFR 1926.501 and 1926.503

These OSHA standards provide information on when fall protection is required to be used on construction sites and what types of training are required for workers using fall protection. According to BLS data for 2004, 36% of all workplace fatalities are due to falls. The two main requirements of these standards are that any employee working at a height of 6 feet or more above a lower level is required to be protected from falling through the use of guardrails, safety nets, or personal fall arrest systems (1926.501(b)(1)) and employers must provide training to each employee who might be exposed to fall hazards (1926.503(a)(1)).

Ladders – 29 CFR 1926.1053

Portable ladders can be found on any small residential construction site and are one of the most important, and most often used, pieces of equipment for this type of work. If not used properly, however, they can be one of the most dangerous hazards that a construction worker encounters. This OSHA standard was put in place to ensure that ladders are set-up and used properly in order to minimize injuries. Some highlights of the standard include the requirement that portable ladders extend at least 3 feet above the upper landing level for which they are being used to gain access or be secured at the top and used with a grab rail to assist users in mounting and dismounting the ladder (1926.1053(b)(1)). In addition, the bottom of non-self supporting ladders (such as extension ladders) needs to be 1 foot away from the wall for every 4 feet of length in the ladder (1926.1053(b)(5)(i)).



Head Protection – 29 CFR 1926.100

Injuries to the head can be extremely debilitating and there are many hazards present on construction sites that can lead to these types of injuries. In more serious cases, workers being struck on the head by falling objects can suffer from concussions, traumatic brain injuries, and even death. However, even superficial head injuries, such as cuts and abrasions, can lead to lost work time for employees. This OSHA standard is



intended to protect construction workers from head injuries by requiring that employees working in areas where there is a possible danger of head injury from impact, from falling or flying objects, or from electrical shock and burns, need to wear protective helmets that meet American National Standards Institute (ANSI) requirements for industrial head protection.

Stairways – 29 CFR 1926.1052

The purpose of this OSHA standard is to provide guidelines for the proper construction of non-permanent stairways that are used during building construction. As mentioned earlier, falls are a major component of the overall burden of occupational injuries on construction sites. Improperly constructed temporary stairways can be a significant contributor to fall injuries affecting construction workers. Some highlights of this OSHA standard include: appropriate landings (at least 22" x 30") must be constructed at every 12 feet or less of vertical rise (1926.1052(a)(1)), all parts of stairways must be free of hazardous projections, such as protruding nails (1926.1052(a)(6)), and stairways having 4 or more risers or rising more than 30 inches shall be equipped with a handrail (1926.1052(c)(1)).



Information abstracted in part from the US Department of Labor's Bureau of Labor Statistics and OSHA websites.

BEWARE OF LEAD EXPOSURES: A WARNING FOR HOME RENOVATORS

Lead poisoning is a common cause of workplace illness, and anyone renovating or repainting older homes should be aware of the hazards of exposure to lead. Lead-based paint was used in many homes built before 1978, and extensively in homes built prior to 1960. If your work on a home includes disturbing old paint by sanding, scraping, using heat guns, or replacing windows there is a chance you will be creating lead dust, fumes, or chips which can be hazardous to your health and the health of other workers and building occupants.



Lead dust is the most common source of lead exposure during construction activities. From 1995-2004, the Connecticut Department of Public Health has received an average of 300 reports per year of lead poisoned workers, many of whom are construction workers engaged in renovation activities on older homes. When lead dust is inhaled or ingested, it can cause lead poisoning which can damage the brain and nervous system, red blood cells, kidneys and the reproductive systems of men and women. Symptoms of lead poisoning include headaches, dizziness, sleep disturbances, memory loss, depression, fatigue, irritability, joint and/or muscle pain, miscarriage, and other serious health problems. However, a blood lead test is necessary to determine whether a person is lead poisoned or not, because many lead poisoned individuals never experience any of these symptoms.

To avoid lead poisoning when performing renovation work on older homes, remember these simple rules:

- 1. ASSUME – Paint in Homes Built Before 1978 Contains Lead** (unless testing of the paint in the home shows it doesn't contain lead).

2. **CHECK** – Federal, State, and Local Regulations



- OSHA has specific rules for construction work that includes lead exposures
- EPA and your local community have rules for lead waste disposal

3. **AVOID** – Creating or Spreading Dust



- Use low-dust work practices (for example, mist surfaces with water before sanding or scraping)
- Cover the work area with durable protective plastic sheeting
- Keep dust contained to the immediate work area

4. **PROTECT** – Occupants (Workers, Tenants, and Children)



- Workers must wear proper respiratory protection for lead dust
- Clean up the work site before occupants return
- Don't take dust home on your clothes or shoes

5. **CLEAN UP** – After Work is Completed



- Clean up is particularly important if painted surfaces were broken or wall cavities were opened
- Take lead dust wipe samples to make sure that it is safe for children to return

6. **MAINTAIN** – A Dry Building



- Moisture problems can cause paint failure, building deterioration, and encourage pests
- Well-maintained paint generally does not pose a health risk
- Keep floors and painted surfaces smooth and damp mop them often

For more information contact Deborah Pease at (860) 509-7744 or refer to the websites listed below:

Lead-Safe Work Practices

<http://www.nsc.org/issues/lead/leadsafework.htm>

Safety and Health Topics: Lead

<http://www.osha.gov/SLTC/lead/index.html>

CPSC Warns About Hazards of "Do It Yourself" Removal of Lead Based Paint: Safety Alert

<http://www.cpsc.gov/cpsc/pub/pubs/5055.html>

Impact of Lead-Safe Training Program on Workers Conducting Renovation, Painting, and Maintenance Activities http://www.publichealthreports.org/userfiles/120_1/120025.pdf

DPH's Lead Poisoning Prevention Program

http://www.dph.state.ct.us/BRS/Lead/lead_program.htm

Get on DPH's list of Lead-Safe Contractors

<http://www.dph.state.ct.us/BRS/Lead/Lead-Safe/contractors.htm>

Lead-Safe Training Providers

<http://www.dph.state.ct.us/BRS/Lead/Lead-Safe/trainers.htm>

Information abstracted in part from the U.S. Department of Housing and Urban Development and the resources listed above.

CONNECTICUT OCCUPATIONAL ILLNESS AND INJURY SURVEILLANCE SYSTEM: ANALYSIS OF CONSTRUCTION INDUSTRY DATA

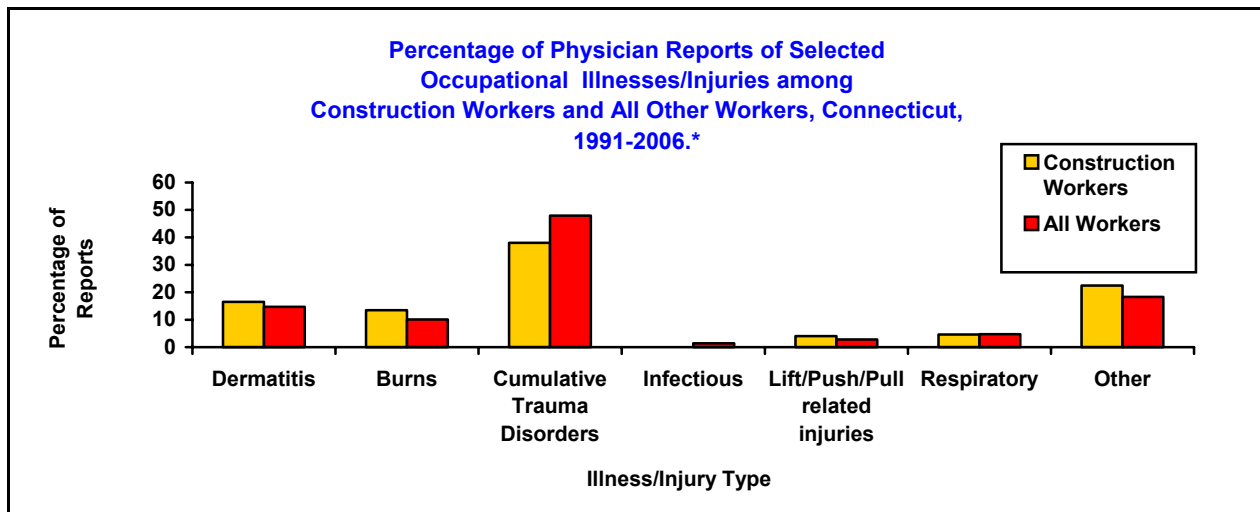
Connecticut State Law requires any physician diagnosing a case of work-related illness or injury to report that case to the Connecticut Departments of Labor and Public Health within 48 hours of diagnosis. The primary source of data utilized by the Connecticut Department of Public Health for tracking occupational illnesses and injuries (excluding elevated blood lead levels) is the Occupational Illness and Injury Surveillance System (OISS). The OISS serves as a computerized database for physician reports of occupational illness and injury received by DPH.

TABLE- 1: Occupational Illness/Injuries among Construction Workers, Connecticut, 1991-2006*

Illness/Injury Type	Construction Workers		All Workers	
	N	%	N	%
Allergic/Irritant Dermatitis	122	16.5	4179	14.7
Burns	100	13.5	2853	10.1
Cancer	-	-	36	<1
Cumulative Trauma Disorders (CTD)	281	38.0	13,585	47.9
Infectious Diseases	2	<1	394	1.4
Lift/Push/Pull related injuries (LPP)	30	4.0	784	2.8
Respiratory diseases	34	4.6	1333	4.7
All other diseases	166	22.5	5180	18.3
Total	739	100.0	28,344	100.0

*OISS Data as of February 28, 2006, excludes workers with elevated blood levels

A total of 739 Construction workers were reported to the OISS between January 1991 and February 2006. Cumulative trauma disorders (CTDs) have been the most frequently reported conditions (38.0%), followed by allergic/irritant dermatitis (16.5%), and burns (13.5%). The percentage of construction worker illnesses attributable to allergic/irritant dermatitis, burns, and lift/push/pull related injuries was higher than the percentage for all workers combined. Examples of other diseases affecting construction workers reported to the OISS included bruises and contusions (7.4%), cuts and lacerations (5.2%), and electric shocks/electrocutions (3.5%), as well as various other conditions.



*ODSS Data as of February 28, 2006, excludes elevated blood lead levels

For more information about the Connecticut Occupational Illness and Injury Surveillance System, please contact the Connecticut Department of Public Health's Occupational Health Program at (860) 509-7744.

