Construction Safety Professional Career Path Exploration

Dr. David Stumbo

Eastern Kentucky University

David.Stumbo@eku.edu

Abstract

Construction is a leading industry in terms of economics but is one of the most dangerous for its employees. The construction safety professional plays an important role in helping protect employees from work-related injuries and fatalities. This article considers key aspects of the construction safety professional career: typical job responsibilities, how to become one, pay and benefits, and job outlook. Additionally, interviews with two current construction safety professionals are included to help provide real-world details on the career such as daily routines, technology used, and challenges.

Keywords: safety professional, construction safety, occupational safety, occupational safety and health professional

Introduction

There are a variety of job titles used in this field of construction safety such as *safety director*, *safety manager*, *occupational health and safety specialist*, *safety consultant*, and others. For simplicity, this article uses the term *construction safety professional*. The purpose of this article is to introduce the reader to the construction safety professional career. Key aspects of the career of construction safety professional (typical job responsibilities, how to become one, pay and benefits, and job outlook) are discussed below.

The job responsibilities of the construction safety professional are similar to other safety professionals who work in industries like manufacturing and mining. However, construction work presents special circumstances in that workplace conditions change dramatically over the course of a project, the work requires a group of subcontractors working in the same location, and often involves the use of heavy equipment. To help illustrate the career of construction safety professional, questions and answers produced by interviews with two construction safety professionals are provided. It is possible that the information given here will help the reader make an informed career choice.

Responsibilities of Construction Safety Professional

The construction industry is one of the largest industrial sectors in the United States, with about 680,000 employers and over 7 million employees (Association of General Contractors, 2021). Construction projects range from simple home repair jobs to very complex high-rise buildings and include infrastructure projects like highways, dams, and bridges. Unfortunately, construction work can be very hazardous and involve accidents leading to serious injuries and fatalities among employees. Such accidents are not only tragic but can be very expensive to a

construction company due to the medical expenses, lost productivity, lawsuits, government fines, and other costs that occur as a result. The total costs of injuries and fatalities in the construction industry in 2002 were estimated at \$11.5 billion (Waehrer et al., 2007). Many construction companies have found it cost effective to employ one or more construction safety professionals tasked with preventing workplace accidents.

The construction safety professional's job duties fall into four main categories: conducting safety audits, providing training to employees, conducting accident investigations, administering the employer's safety program. These duties will be discussed in detail next.

1. Conducting safety audits

Construction safety professionals conduct safety audits (also called *inspections*) of the construction projects that their company is working on. Safety audits involve walking the entire construction site to make sure that hazardous conditions are not present and that employees are following the company's safety rules. If hazards are discovered (such as unguarded live electrical equipment) the construction safety professional will make sure that the problems are corrected so that no one gets hurt. There may also be disciplinary action taken against employees who are found to have broken the safety rules. Safety audits are usually documented by taking photos, interviewing employees, and collecting other key information. The findings of the safety audit will then be reported to the company's upper management officers (Roughton & Crutchfield, 2008).

2. Training employees

The construction safety professional will provide training over safety issues to the company's construction workers and managers (Haight, 2012). In some cases, this training may also be provided to the subcontractors hired by the company. Classroom-style training commonly covers the safety regulations required by the Occupational Safety and Health Administration (OSHA) as well as the employer's own safety rules. Hands-on safety training typically involves instructing employees on practical safety tasks like how to use fire extinguishers and personal protective equipment. Training is a form of communications and public speaking, both which are mentioned in further in the two interviews with construction safety professionals below.

3. Conducting accident investigations

Construction safety professionals investigate work-related accidents to determine what happened and prevent it from reoccurring. Investigations are conducted when employees get hurt or killed and when company-owned equipment like trucks, backhoes, and cranes get damaged. These investigations involve collecting information about the accident by interviewing witness, taking photographs of the accident scene, inspecting equipment that was involved, etc. The information gathered during the investigation will be organized by the construction safety professional into a report for upper management. The accident report may also be used for filling insurance claims for medical bills and equipment repairs (Crittenden, 2009).

4. Administering the company's safety program

The construction safety professional is responsible for keeping the company's safety program up to date. The program includes all the documentation produced by the activities mentioned above: safety audits, employee training, accident investigations, and other records. Some documents may be in writing, but many are digital, so construction safety professionals must also be comfortable with using computers. Handheld computers are used in in for field work, while report writing using word processing programs, recordkeeping using spreadsheets, and internet research into technical safety issues is accomplished using a desktop or laptop computer.

Becoming a Construction Safety Professional

Education

Many construction companies prefer that construction safety professionals have a safety-related bachelor's degree. There are approximately 27 universities in the United States which offer degree programs related to occupational safety. Many of these are offered completely online (BCSP, 2021a). Some of the most prestigious safety degree programs are accredited through the American Board for Engineering and Technology (ABET, 2021).

Ongoing training

Construction safety professionals will continue their own training and education because construction safety involves a range of complex and constantly changing issues. Construction safety professionals may take courses on topics such as fall protection, heavy equipment use, electricity, and hazardous chemicals to keep their knowledge of these and other issues current and learn about new safety issues.

Safety training courses are available through providers like the OSHA Outreach Training Institute Education Centers (OSHA, 2021). The OSHA 10- and 30-hour Outreach Training courses are widely recognized in the construction industry and may be required by some employers.

Professional certifications

Professional certifications such as the Certified Safety Professional (CSP) designation are prestigious and can lead to higher wages for construction safety professionals. To qualify, the construction safety professional must have been in the career for several years and pass a challenging certification test. Other safety-related certifications include the Construction Safety and Health Technician (CHST) and the Occupational Hygiene and Safety Technician (OHST). The CSP, OHST, and CHST designations are administered by the Board of Certified Safety Professionals (BCSP, 2021b).

Pay and Benefits for the Construction Safety Professional

The U.S. Department of Labor (2019) reported that the median annual wage for the *occupational health and safety specialist* (which includes construction safety professional) was \$74,100. Similarly, the Board of Certified Safety Professionals and National Safety Council (2020), found that the median salary for safety professionals in the construction industry was \$72,000 per year.

This salary was specific to persons working for 5 or fewer years in a safety-related position, and included all possible job titles (i.e., *director/manager/etc., branch/division/area/regional mgr./supervisor, professional, consultant, other*). Salary information can be substantially different according to location, type of company, education, and other factors.

Job Outlook for Construction Safety Professional

Overall, the job outlook for construction safety professionals should be considered as equal to or better than all other jobs. The projected growth of jobs for *occupational health and safety specialists* (a group that includes construction safety professionals) is between is 4% per year from 2019-2029, which is the same growth projected for all other jobs (U.S. Department of Labor, 2019). Safety and Health magazine found that its readers considered the job outlook as being "better" (54%), "the same" (40%), and only 6% "worse" (Vargas, n.p., 2019). Overall, this indicates a good job outlook for construction safety professionals.

Interview with Construction Safety Professional: Derrick Pittman

Background: Derrick Pittman works for a successful general contractor engaged in construction projects in the southern United States. Derrick Pittman's title is *Safety Manager*. He is currently pursuing a Bachelor of Science degree in Occupational Safety. Derrick Pittman was interviewed by Dr. David Stumbo on February 12, 2021. You can read the questions that Derrick Pittman was asked about his career in the following sections.

1. What do you like most about your job?

"I like getting out and going to jobs. Visiting the site, not just spending time in the office. (See Figure 1.) And I like making my company better by making sure employees stay safe."

Figure 1Derrick Pittman conducting a safety audit of a construction worksite.



2. What is your daily routine like at this job?

"I usually start off in my office. I check on email and then see what jobs are going on. That determines where I'm where headed that day and maybe the day after. I usually visit one or two job sites each week. On safety audits, I will probably spend about four hours just walking the jobsite. On average, my travel time for site visits ranges from 30 minutes up to $2\frac{1}{2}$ hours each way."

3. What would you say to someone who was looking to get into this type of career?

"I recommend it. I really like it because it's not limited to just office work or working outdoors the whole time. Working outdoors every day is rough in the cold and heat. This job is the best of both worlds, both office and outside."

4. What do many people not understand about this field?

"They probably don't understand just how much work goes into construction safety. People might also not understand how important training is. Safety training is an ongoing part of our work and it take a lot of time. There are a lot of OSHA regulations and a whole new bunch of requirements came with COVID-19. I do short weekly meetings (called 'toolbox talks') that help train employees about safety issues. I also have a monthly safety meeting. I have to keep up my own training, too. I just finished an OSHA 30-hour class where I learned quite a bit. I'm also working on a bachelor's in occupational safety. I take it online because I'm working this job full-time. It seems like my CEO wants me to go on a start on a master's in safety after that.

5. What kind of technology do you get to work with in this career?

"I use computers a lot in the office. I use MS Teams for virtual meetings, track all the employee training using an Excel spreadsheet, and use PowerPoint to present information to my executive directors. My company uses specialized project management software that lets me know which construction projects I need do safety audits on. Also, I have a safety management software package that I use for site audits that runs on my iPad. It allows me to document hazards that I find with photos attached (See Figure 2) and puts everything in a report that I send to the project managers and subcontractors."

Figure 2
An empty fire extinguisher discovered by Mr. Pittman during a construction safety audit



6. What are some of your biggest challenges in your career?

"There is a pretty big learning curve coming in. I had to learn a lot about safety. I'm still going to training and taking college classes. The other thing is that I have to do a lot of speaking in front of people, training employees and giving presentation to my

supervisors. I'm still getting used to that." (D. Pittman, personal communication, February 12, 2021.)

Interview with Construction Safety Professional: Devan Hale, GSP

Background: Devan Hale has been working as a construction safety professional since earning bachelor's degree in occupational safety in 2016. He works for a construction company located in the southern United States and his job title is *Site Safety & Health Officer*. Devan Hale was interviewed by Dr. David Stumbo on February 12, 2021. You can read the questions that Devan Hale was asked about his career in the following sections.

1. What do you like most about your job?

"In the construction industry it is something new every day; not the same facility and faces. Lots of subcontractors. Different faces. And I really care about keeping people safe. Part of the reason I chose safety was because of a tragedy involving a cousin of mine."

2. What is your daily routine like at this job?

"Generally, I start early and, in some locations, at daybreak to beat traffic. It will be at least an 8-hour day, regardless of start time. The exact work hours are kind of random, longer or shorter, depending on what's going on at that time with the project. When there is a lot of work, really busy, it might require a 10-hour day or longer. It took me a while, but I learned to anticipate about how long the day would be, based on what was planned for the jobsite.

When I get to the site there is a job trailer and then I'll have a mix of office and field time. How much time you spend on each is up to you. For some jobs, the owner or general contractor may require that will be a morning meeting every day where we review the job and safety issues with subcontractors. On some projects there may be a bunch of subcontractors. A company for concrete, company for crane operations, another for electrical, another for plumbing, dry wall, paint, and maybe more. We more or less have to keep up with what they're doing in terms of safety.

Traveling is part of the job. With construction some jobs can last a long time and you may get moved around without much notice. For over two years, I lived in the same city where my company had multiple projects going. I traveled in a 150-mile radius during that time. My company was pretty nice about it and provided extra pay to offset some of my living expenses."

3. What would you say to someone who was looking to get into this type of career?

"Make sure that you have some passion about safety...don't pick this one just to get done deciding on your career. I would say that you should make sure to get an internship as soon as you can. Absorb as much as you can. My safety internship got me my first job. It didn't come easy; I got turned down for 5 internships at first."

4. What do many people not understand about this field?

"You have to be able to enjoy folks. It's a people-type job. Some may think it's based on regulations & rules. But with those, there's a lot of grey area. What's really big is connecting with people; being able to communicate. If you can talk and build a relationship, then you can get their buy-in for safety. Then you can create a good safety culture...and get folks to protect themselves even when the safety manager is not around."

5. What kind of technology do you get to work with in this career?

"One company I worked for had me do jobsite visits where I would take photos/record all the good safety practices going on and the safety problems. We would then compile all the observations and analyze the data. What was the costliest incident? Is it ladders? Or some other issue? Whatever the main issues were, we'd then set up our training programs to address them.

For safety I use an air meter, what we call a 'breather.' It carries a monitor that checks for 10 different gasses...CO, CO2, explosive gasses...for confined space entry operations. That makes sure the air in the space is safe for workers. I use a computer in the office with MS Word for reports and Excel for tracking training and budgets."

6. What are some of your biggest challenges in your career?

"Getting adjusted to construction life, in terms of not knowing where you're going to be sometimes. There's quite a bit of uncertainty. That's more about construction overall, not safety. Also, not being able to speak Spanish! I have struggled with that. There are so many Spanish-speaking construction workers. I've taken some college classes, but honestly I think I have learned more from a language app on my phone that I use a lot." (D. Hale, personal communication, February 12, 2021.)

Conclusion

The career of construction safety professional provides a variety of job responsibilities, as well as the underly purpose of protecting employees, that students may find appealing. Although a degree in safety is not universally required, it is likely to help those seeking a position. Completing a bachelor's degree is likely to be worthwhile because the salary and job growth outlook are good for construction safety professionals. Each person will need to consider their circumstances and personal preferences when selecting a career. Discussing these issues with a career counselor or construction safety professional can help make the best decision.

References

American Board of Engineering and Technology. (2021). Why ABET accreditation matters. https://www.abet.org/accreditation/what-is-accreditation/why-abet-accreditation-matters/ Association of General Contractors. (2021). Construction data.

https://www.agc.org/learn/construction-data

- Board of Certified Safety Professionals. (2021a). *BCSP credentials at-a-glance*. https://www.bcsp.org/safety-certifications/at-a-glance
- Board of Certified Safety Professionals. (2021b). *Academic program directory*. https://www.bcsp.org/resources/academic-database
- Board of Certified Safety Professionals & National Safety Council (2020). *The 2020 SH&E Industry Salary Survey and Calculator*. https://www.bcsp.org/resources/salary-survey
- Crittenden, P., (2009). *Supervisors' safety manual* (10th ed.). National Safety Council. ISBN-13: 978-0879122881.
- Haight, J., (2012). *Hazard prevention through effective safety and health training*. American Society of Safety Engineers, Park Ridge, Ill.
- Occupational Safety and Health Administration (2021). *OSHA training institute education centers*. https://www.osha.gov/otiec/
- Roughton, J., & Crutchfield, N. (2008). *Job hazard analysis: A guide for voluntary compliance and beyond.* Burlington, MA: Elsevier.
- U.S. Department of Labor. (2019). *Occupational outlook handbook*. https://www.bls.gov/ooh/healthcare/occupational-health-and-safety-specialists-and-technicians.htm
- Vargas, S. (2019). 2019 Job outlook: 'Selling' the safety profession.

 https://www.safetyandhealthmagazine.com/articles/18254-job-outlook-2019
- Waehre, G.M.; Dong, X.S., Miller, T., Haile, E., Men, Y. (2007). Costs of occupational injuries in construction in the United States. *Accident Analysis & Prevention*. Nov; 39(6):1258-66. doi: 10.1016/j.aap.2007.03.012.