A Bit of a Muddy Situation

Disclaimer: This case study was prepared by Alexandra Raskob under the supervision of Dr. Frances Tuer, DeGroote School of Business, solely for the purpose of discussion. While the injury in the case actually took place all details of person(s) and organization(s) have been disguised.

**Introduction:**

Mark Blaine was ready for another day on the job. His team was on a job site in Mississauga where they were putting up a retail plaza. Mark was nervous when he first started working as an ironworker back in February, but he was finally getting the hang of it. The weather was warm on an early Monday morning in May and it was drizzling, but the contractor on the job, Bill Evans, wanted to get it finished that day no matter the weather. If he sent the guys home, they would not get a paycheck. Mark was acting as the rigger on this job, which means that he was responsible for attaching the beam to the crane’s hook with a steel choker. The beams being used were “I-beams” that weighed about 2 tonnes. The steel was set up side by side on wood blockings far enough apart that workers were able to walk in between them, but close enough that they had to step over them when walking between the beams (see Appendix). The height of these beams reached about as high as Mark’s thigh. As he was walking in between the beams, one of the wood blockings began to sink into the soft, muddy ground and caused the beam to roll off. With no way of stopping the heavy piece of steel, it rolled onto Mark’s leg, trapping him underneath it.

**Who and Where?**

Mark was a 21-year-old apprentice, which is considered the entry-level position for this field. Ironworkers are apprentices for 5 years before they can move up to a higher level. Most of the training was on-the-job, however he was also required to complete 160 hours of in-class training per year for four years. This was his first year in the trade so unlike skilled ironworkers who work atop the steel structures, he was unable to perform any tasks at high elevations. At this point of his training, he was only qualified to be a ground man on the job, which means all of his duties were to be at ground level. Mark was a quick learner and was able to grasp new skills easily. He was really enjoying his new apprenticeship and saw himself in this occupation for the foreseeable future. Would this injury change the way he felt?

**Background on this type of injury:**

Structural steel erection is considered to be amongst the most dangerous trades in construction (Alomari & Gambatese, 2015). According to a survey conducted by Alomari and Gambatese (2015) on ironworkers’ perspectives, the respondents stated that the 3 most common causes of accidents on the job are worker’s misjudgement, unsafe work conditions, and design mistakes. In addition, respondents also believe these causes lead to 3 primary types of accidents, which are being caught in/between, struck by objects, or a fall from height. However, injuries of high severity such as those just listed are not as common for ironworkers as are low severity ones such as cuts from contact with sharp objects (Alomari & Gambatese, 2015). According to survey results from the same study, 41% of ironworkers surveyed reported that, with all levels of severity considered, they sustain between 1 and 10 injuries per year, on average. Furthermore, 25% of direct causes of workplace injuries for ironworkers are being caught in/between things, while 25% are being struck by objects. 20% of these ironworker injuries are to the legs. Workplace accidents for ironworkers can lead to injuries of high severity and even fatality (Alomari & Gambatese, 2015). This study reported that there is also potential for physical disablement, as well as long-term health effects including physiological and psychological issues.

29% of ironworkers who participated in this study reported that worksite conditions are a common cause of accidents. The combination of worker misjudgement and worksite conditions overall represents 81% of perceived accident causes, from the perspective of the ironworkers surveyed. Ironworkers believe the utilization of workforce feedback is crucial in the improvement of safety planning (Alomari & Gambatese, 2015). It was also found that a good portion of ironworkers are aware that their working conditions create a risky environment. In order to lessen the probability of workplace accidents for ironworkers, there should be more concern surrounding worker misjudgement, poor risk management, and mistakes, as reported by the respondents. It is the employer’s responsibility to ensure a safe work environment for employees and to take the required action to eliminate hazards which can cause serious physical harm or death (Alomari & Gambatese, 2015).

**What to do next?**

Bill Evans and the rest of the crew rushed over to help Mark. The beam was too heavy to lift off with their arms and they needed to act fast since he was being pinned underneath it. The beam had to be lifted off Mark’s leg with the crane and unfortunately, it broke his entire leg below the knee. Bill knew that the weather conditions were not appropriate to be working in but had ignored the fact because he wanted to rush to get the job done.

After the accident, the I-beams and wood were re-blocked; this time more sturdily to keep the beams level. Bill leveled the ground, as well, to reduce the chance of it getting too muddy due to heat and dampness and placed additional wood blockings beneath the steel. A Ministry of Labour official then arrived at the job site to investigate. Mark was unsure of what to tell him when he asked how it happened. He could tell the officer that the ground gave away by chance and it must have been a random soft spot in the ground. By doing that, he could prevent any unnecessary further investigation and could also prevent Bill from being charged with a fine. If he did decide to continue his apprenticeship following his recovery, there would be no bad blood between him and Bill. The other option is for Mark to tell the truth and let the officer know that Bill ignored poor ground conditions to get the job done. He didn’t want to let this kind of thing to happen to someone else.