Dunwright Auto Repair

Disclaimer: This case study was prepared by Sarah George 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.

**The Injury/Illness:**

Alex Smith was the shop foreman at a busy car repair shop called Dunwright Auto Repair in Cambridge, ON. She had just arrived at the shop for the morning and she headed over to the coffee machine to get her usual coffee before the day started. She sat at her desk, sipping her coffee and going through the day’s work orders- a few routine brake services, a warranty audio system replacement, a couple oil changes, and a few tire pressure checks. It seemed like a straight-forward day ahead. Alex handed out the first appointments’ work orders to the mechanics. She assigned the audio system replacement to one of the more senior mechanics and the first of the tire pressure checks to the shop apprentice, Mason.

Mason accepted the work order from Alex and she went back into her office. Mason began going through the steps to check the customer’s tires as he crouched on the shop floor. Working his way from tire to tire on the customer’s vehicle, he came across one that was low on air. In school, he had been taught to look for any damage or wear before filling the tire, and that tires older than 6 years should be replaced. Mason remembered that in school, technicians were made to wear safety glasses when checking tires, but none of the techs around the shop ever did, so he didn’t put them on. He realized this customer’s tires were visibly worn and over 6 years old, so he went out to the front to talk to the customer about replacing the tires. The customer was not happy to hear Mason suggest he buy new tires, as he exclaimed “You people are always trying to rip me off! I’m not buying new tires. Mine are perfectly fine. If you won’t fill them here, I’ll find somewhere else that will!”. Mason went back into the garage. He heard the voice of Alex in his head; “the customer is always right”. “Fine,” he thought to himself, “I’ll fill them this time, but I’ll make a note on the customer’s file. I don’t want to cost the shop his business and I’d really like to be employee of the month this time”.

Unfortunately for Mason, he didn’t notice that there was damage to the bead of the tire when he started to fill it with air. He watched the tire pressure gauge go up; “20psi…30 psi…”. All of a sudden, the tire burst and a piece of jagged rubber came flying at Mason’s face as the rush of air pressure shot him back. He didn’t have time to shield himself from it, and he was hit just above his eyebrow. He lay on his back with the breath temporarily knocked out of him, clutching the gash on his face, as the other technicians and Alex all came running over unaware of what had just happened.

**Who and What:**

Mason Johnson had been working full-time as an apprentice for Dunwright Auto Repair for 4 months while he was in his first year of school to become a certified technician. He had done many tire pressure checks before alongside the other shop technicians. In fact, just yesterday in class they had gone over the steps to checking and filling or deflating a tire.

Mason had recently moved back home while trying to save up for a nicer apartment with his best friend. He spent his days working in the shop and at nights he took classes to speed up his degree since he didn’t want to be in school any longer than he needed to be. The thought of missing class or work stressed him out, because he didn’t want to lose the money or have to retake the courses.

**Background on this type of injury:**

Although recent exact statistics are unavailable, many workers are killed and injured every year in Ontario while working with tires and wheels due to projectiles causing tissue damage, and energy exerted from explosions or combustions (Ontario Ministry of Labour, 2016). In 2014, the Health and Safety Authority issued a safe alert due to a series of accidents resulting in fatalities due to tire inflation.

Incidents and injuries are most likely to occur during the inflation process of the tire, when wheels and tires are overheated, when damaged components of wheels and/or tires are repaired or used, and when flammable substances are involved to seat the beading of the tire (Ontario Ministry of Labour, 2016). Occupations that require work with wheels and tires include auto mechanics, truck technicians, and workers who service vehicles of any kind.

Workers who work on wheels and tires are required to be trained in the recognition of hazards and damages to the wheels or equipment used, and know the correct procedures for using the equipment (Ontario Ministry of Labour, 2016). These requirements apply to all functions of work on wheels and tires, including inflation and deflation, inspecting and repairing, and handling (Ontario Ministry of Labour, 2016). In best safety practice, workers should inspect tires thoroughly to assess them for damage and stand in a safe location, possibly using a remote air valve when inflating tires, ensuring that the face is out of the direct path of potential trajectory (Ontario Ministry of Labour, 2016).

During inflation, the tire should be slowly inflated while being inspected, and workers should not inflate damaged tires, or tires that are below a certain pressure threshold (Ontario Ministry of Labour, 2016). Workers are encouraged to wear personal protective equipment consisting of protective eyewear and safety shoes (Health and Safety Authority, 2015).

**What to do next?**

Alex sprinted out of her office and saw Mason on the ground, clutching his face. She stood in the doorway in shock, seeing the blood on his face but didn’t know how serious the injury was. Alex asked him if he was alright, but Mason was unable to respond at the time since he had just had the breath knocked out of him. She stood there looking at the pieces of broken tire on the shop floor. Alex panicked as she wondered what she should do as the supervisor on duty, but whatever it was, she knew action had to be taken immediately.