LIFEBOOSTER

Senz™ Success | Fleet Drivers

Q: Why are our drivers suffering so many injuries?

Our customer, a multi-national fleet operator, was concerned about the high rate of shoulder and back injuries amongst its drivers. These workers performed various tasks, including hours spent driving and physical activities such as servicing and moving vehicles.

Drivers varied by age and experience. The company wanted to know why the injuries were occurring, which workers were most at risk, and if there was a greater risk for the older employees.

A: Time on the job and equipment

We assessed a range of workers using motion-tracking data generated from wearable sensors. After examining the data using our predictive analytics platform, Senz™, we answered the question, and it wasn't what our customer expected!

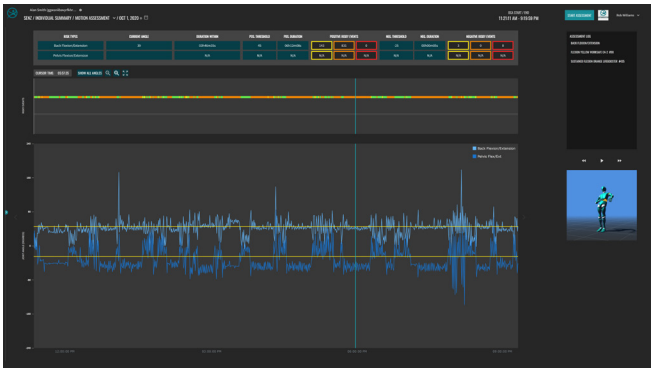
The data showed that the underlying factors had nothing to do with the employee's age and everything to do with their level of seniority and the equipment they were assigned. It turns out new hires used the oldest vehicles, and the seats in these trucks were nearing (or had reached) end-of-life. Without proper support, drivers were holding poor sustained postures over a considerable period of time. Coupled with the highly manual tasks they performed, they were at a higher risk for injury.

Outcome:

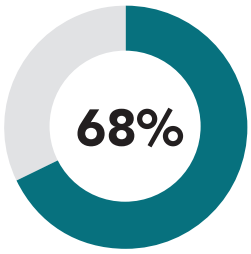
The data analytics revealed that the combination of sustained awkward postures (worn-out or improperly positioned seats) and periodic vigorous manual labor was causing shoulder and back strain. Our customer responded by developing an intervention strategy that included employee training (body mechanics, seat setup, pre-task and intermittent stretching), additional lumbar support, and in some instances, replacing worn-out truck seats to help reduce back fatigue and pain.

Subsequent Senz assessments were conducted to quantify the success of the intervention strategy.

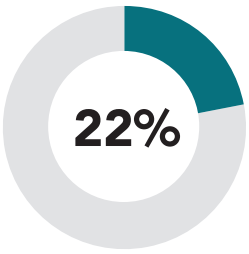
High Risk for Back Strain



- Total assessment time: 9 hours, 59 minutes
- Percent time in high risk: 73% left shoulder, 10% right shoulder



Reduction in Back Risk



Reduction in Shoulder Risk

LifeBooster is innovating wearable technology, smart apparel, data science and business methods to optimize risk reduction in the workplace.

Learn more: lifebooster.ca