

New Zealand Construction Co.

- ▼ 44% Back Injuries
- ▼ 12% Overexertion

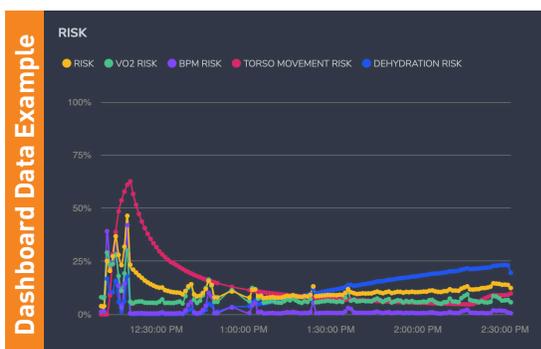
SITUATION

Overexertion and Bad Form

Government data shows that older workers in the construction industry had higher rates of strains in their limbs. Chronic musculoskeletal conditions are from the repetitive movement and positions working under constrained conditions such as on a roof. Most common injuries were lower back and exertion injuries.

Over 36-year-old workers were outfitted with the Boost watch and trunk pod. The results were typical of what we find in the construction sector:

- › 38% of lifts were “bad lifts”
- › Average Heart Rate was 110 bpm (amber)
- › Combined risk of dehydration, fatigue, and overexertion was 38, which is amber
- › Average VO2 was 12 ml/min/kg (fatigue)



INTERDICTION

Decrease Exertion and Improve Form

Training and education based on measured data to improve form. Instituted micro breaks based on heart rate warnings. Watch provided haptic cues and displayed warnings. Supervisors tracked real-time risks on their smart phones and took corrective actions.

GoX Labs Boost:

- › Samsung Galaxy watch measured over 20 form, force, fatigue, fitness, performance and environmental factors
- › Haptic feedback and display warnings on the watch to drink water, use good form, etc.
- › GoX Labs motion pod measured 3D movement of selected body part such as trunk or arm
- › Dashboard providing real-time status risks of groups and workers

— RESULTS —

44% Decrease in Back Injury & 12% Overexertion

The results were significant and sustained. Micro breaks based on exertion data was highly effective and did not reduce productivity. Risks dropped while productivity remained even. Perception of effort decreased. Training and data driven accountability improved lifting form reducing back injuries.

Our client realized:

- 44% reduction in “bad lifts” to 21%
- 5 bpm decrease in average heart rate to 105
- 12% reduction in combined risk of dehydration, fatigue, & overexertion to 27, which is green
- Average VO2 was 11 ml/min/kg (fatigue)

How it Works



1 User puts on watch at the beginning of the day.



2 Critical physiological & biomechanical data collected measures risk shown in green, amber, & red. If risk is too high haptic feedback alerts the worker.



3 Data is continuously collected on the watch and uploaded to the cloud when connectivity is established via wifi or cellular.



4 At this time, managers, executives, and workers can view the data from the dashboard on their computer or phone.

Learn how your company can benefit from Boost wearable today.
Visit us at goxlabs.com or contact us at info@goxlabs.com