



How advancements in materials and technology will drive injury reduction

Paul Harris

VP of Product Strategy and Innovations



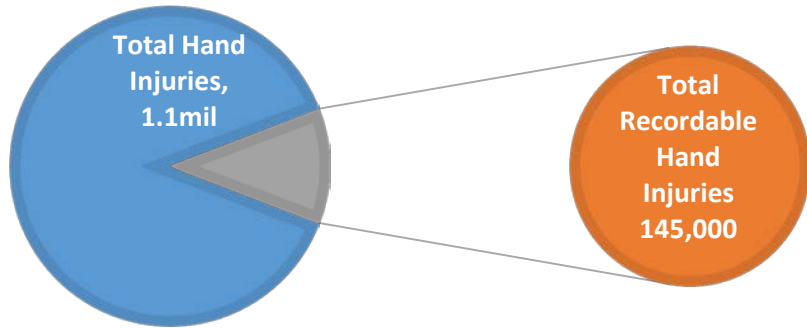
We Protect People

**For more than 45 years we have
proven to be a leader in Gloves,
Glasses and Garments.**



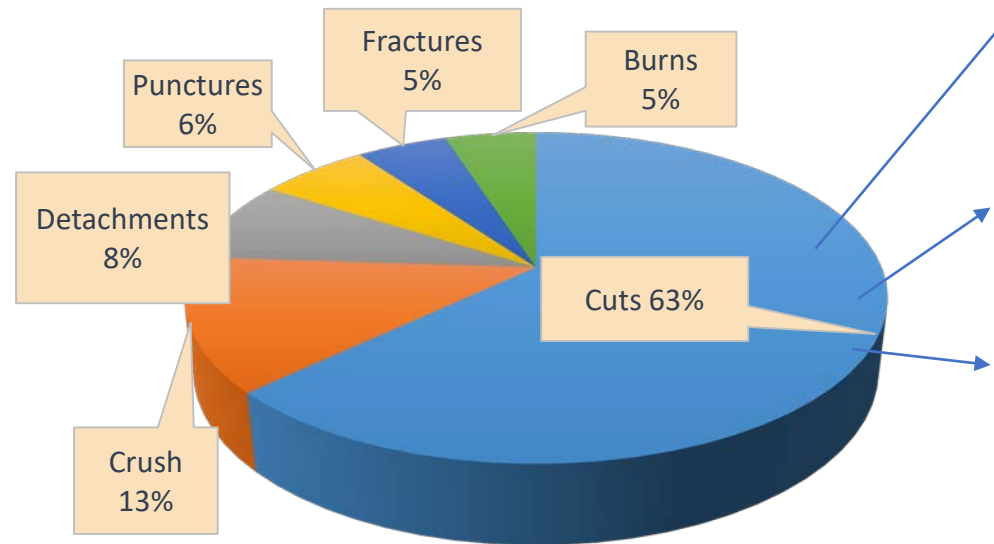
What's the need?

TOTAL HAND INJURIES ALL INDUSTRY & GOV'T



- Of the estimated 3mil+ work related injuries in the US each year, hand injuries are one-third of the total!
- 1.1mil in total hand injuries with 145,000 being recordable injuries that result in days away from the job

Total Recordable Hand Injuries Resulting in Days Away 145,000 Injuries



70% not wearing a glove when the injury occurred

30% of those wearing a glove were not wearing the appropriate glove for the application

- Biggest reasons cited for not wearing a glove:
- Glove not comfortable (#1 reason)
 - Dexterity and Flexibility issues
 - Too hot
 - Poor Grip
 - Lack of Training

Advanced Materials - Cuts



- Excellent cut protection and abrasion resistance
 - Poor comfort, grip, dexterity, heat protection, chemical resistance
 - To improve in one area means you might digress in another
 - Finding the right balance based on application being performed is key
-
- How can we get that 70% to wear gloves?
 - Thinner, lighter weight, better dexterity with higher performance and most importantly higher protection levels for workers
 - Partnered with DuPont to create a single woven layer material offering ANSI cut A9 performance



Advanced Materials - Crush

- Injury rate had plateaued in Oil and Gas
- Developed, field tested and proven with ExxonMobil
- Field tested and approved by BHP Billiton and Codelco mining, Jacob's Construction
- Patented D3O® for vibration and impact reduction
- Knuckle Impact dissipation up to 54% better than competitors while being up to 57% thinner
- Finger Impact dissipation up to 46% better than competitors while being up to 38% thinner
- ANSI / ISEA 138 Impact Level 2
- Best combination of performance and dexterity

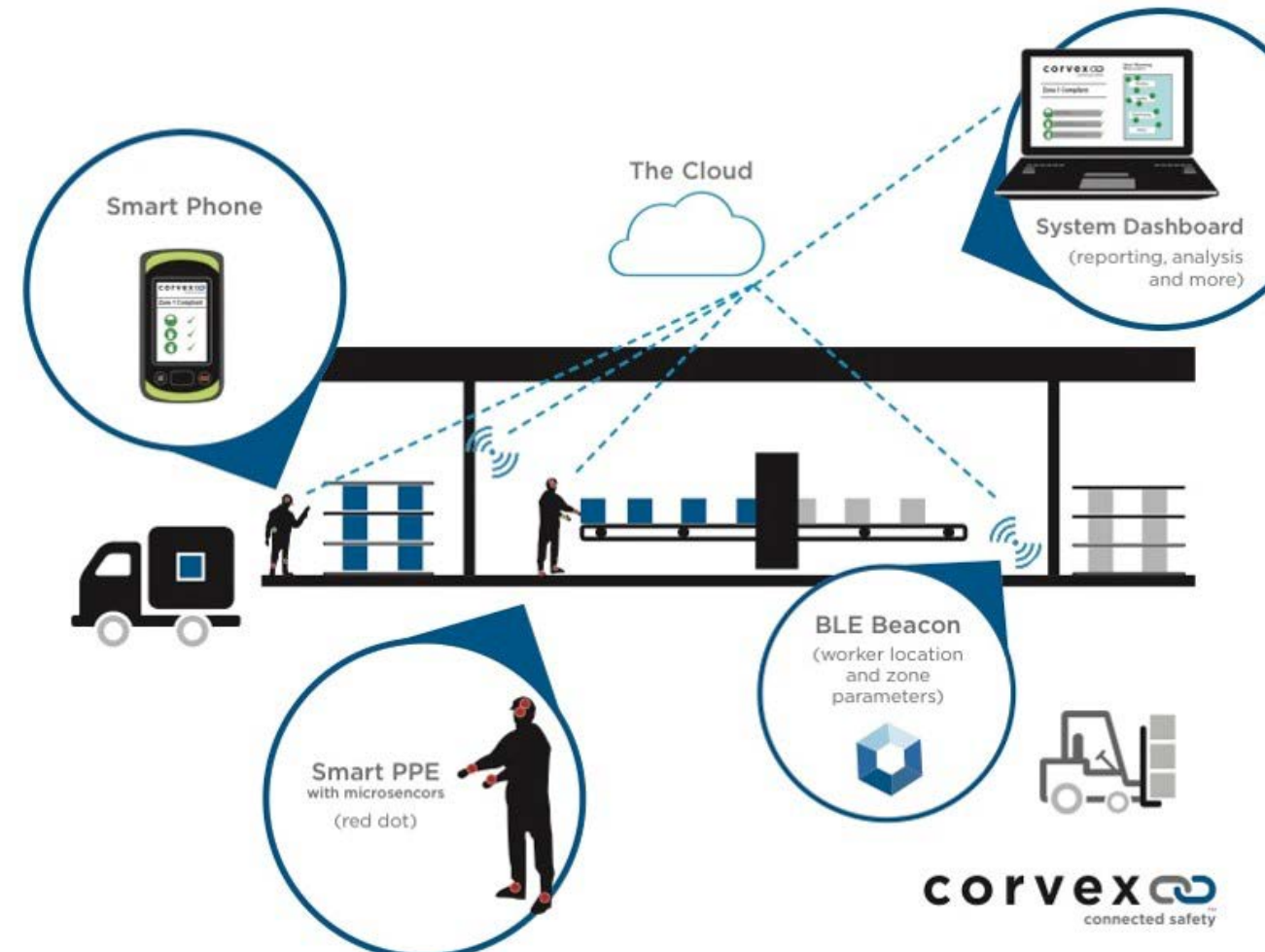


PROTECTED BY
D3O®

Technology – Injury Reduction



- Utilizing technology to gather and communicate metrics via wearable tech / Smart PPE
- RFID, NBT running on Wi-Fi or Bluetooth
- Can be sewn into gloves, garments & molded into eyewear or hardhats
- Confirm workers are wearing PPE
- Monitor location, environmental conditions, vitals
- Inform worker of potential hazards as they approach a defined zone
- Devices to communicate potential hazards / problems to management in real time (Six Sigma, Kaizen)
- Proactive versus reactive Safety Manager





**MCR
SAFETY**

Questions?