



Three Part Safety Improvement Program for BD GDC

Team Members: Robert Fain, Andrew Headley, Chris Northrup, Roberto Paz, Kevin Zheng
Faculty Advisor: Dr. Jorge Rodriguez

Background

Becton Dickinson (BD) is a leading global medical technology company that does \$20 billion in revenue a year. BD is advancing the world of health by improving medical discovery, diagnostics and the delivery of care.

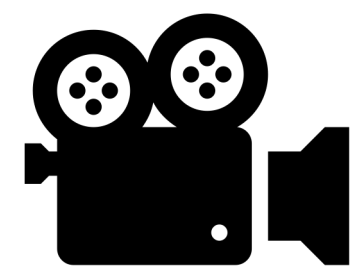
Opportunity

Within the Global Distribution Center (GDC), there are numerous opportunities to implement new safety features to reduce risk factors and create a safer working environment.

Requirements

- Improve Overall Site Safety
- Provide a solution that is easily "repeatable" to minimize the effect of a high turnover rate
- Make safety harder to ignore

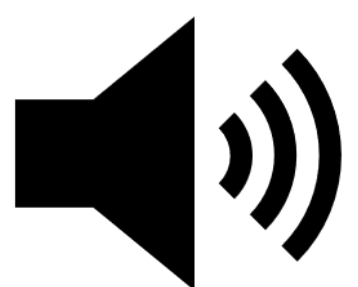
Deliverables



Safety videos informing about routine habits, ergonomics, and the kitting process



Improved signage and barriers to entry placed in critical areas



Method to automate audio reminders in specific areas

Safety Videos and Signage Example

Purpose and Execution

The purpose of the videos is to educate BD employees on how to create and operate within an efficient and safe environment. Videos will be shown during orientation as well as monthly safety meetings



Routine Habits

- Priority of health is neglected throughout the day, whether during or post work hours
- Possible solutions were proposed: meal prepping for a healthier diet, exercise and stretch with a partner



Ergonomics



- Improper ergonomics and repetitive motion are some of the leading reason for pain, arthritis, and carpal tunnel
- Proper lifting techniques and standardized stretches are some efficient methods to combat bodily injuries



Kitting Process

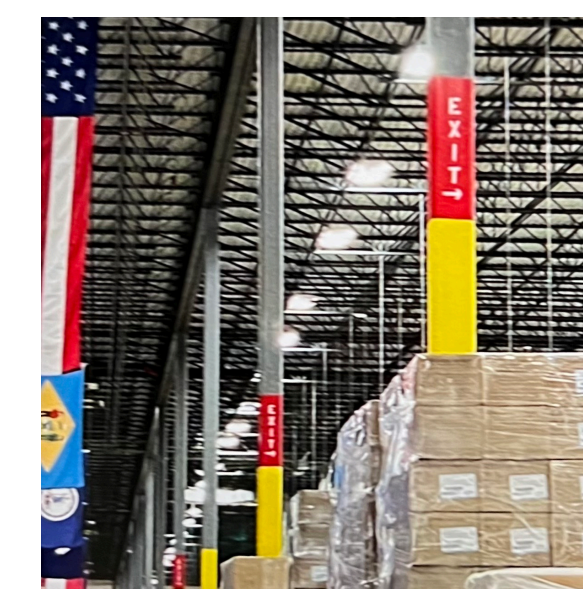


- Two videos focusing on the what the process is and how to improve the overall efficiency
- Recommendations to improve the ergonomic process

Signage Recommendations



Manual Gates



Painted Column Exit Sign

Impact



Prioritize importance and education of safety in a workplace



Decrease employee turnover rate



Minimize accidental injuries

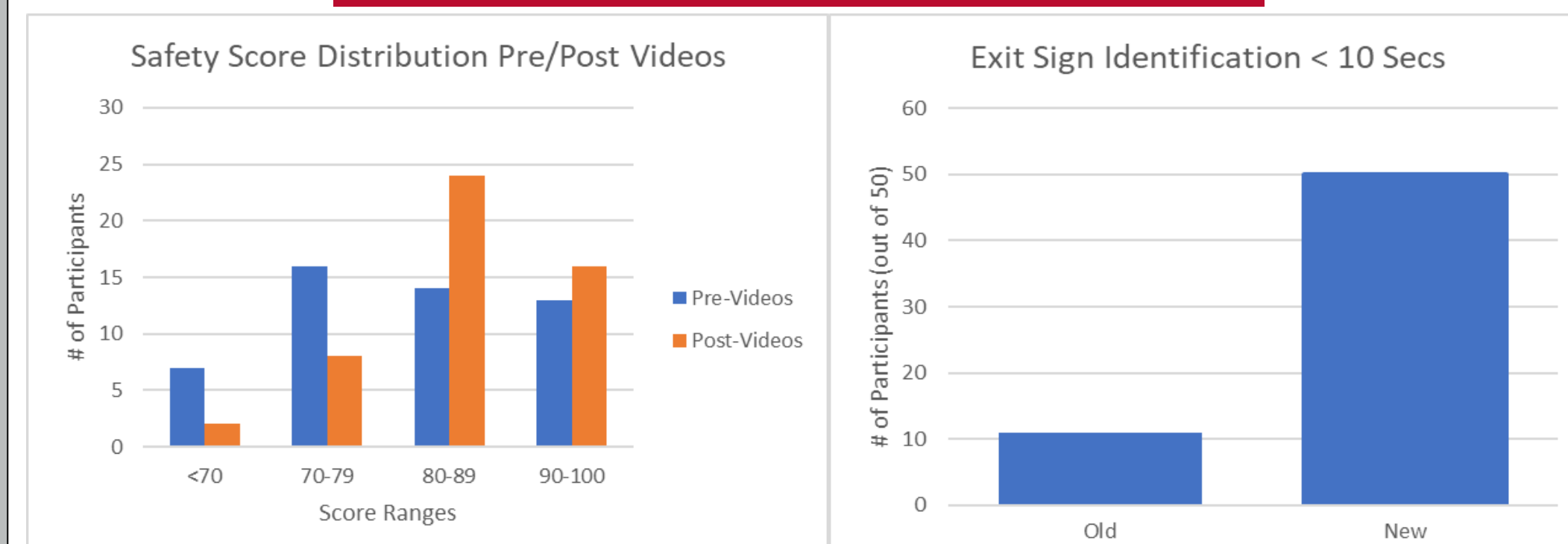


Reduce expenditures on workplace liability coverage



Allowing medical device supply chain to run smoothly across 90 BD sites

Results



A survey was used to test reaction times and knowledge.

- The average score on safety knowledge survey increased drastically after viewing safety videos
- All participants were able to clearly identify exits
- Participants felt overall satisfaction with safety recommendations from team



College of Engineering
UNIVERSITY OF GEORGIA



Sponsor/Client: Becton Dickinson (Boone Brothers, Brian DiPaula, Lucas Guimaraes)