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

Empty Box Add Items Add Labels Retape Restack

• 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

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