Applying Lean Six Sigma tools to reduce the rate of slips, trips, and falls for Joint Commission field staff

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**Problem Statement**
- Workers’ Comp Claims involving slips, trips, and falls (STFs) among field staff were occurring with high frequency, and with such significant costs, that the CFO and HR voiced concern
- Green Belt team assembled in 2009 to implement a strategy to reduce workplace falls

**Objectives/Define Phase**
- Anonymous web-based survey tool sent to 453 TJC field staff regarding STF circumstances
- Capability analysis conducted

**Methods/Measure Phase**
- U Chart of Falls by time period
  - 19.44% of months were above the USL
  - 2.376 sigma level
- FMEA conducted to discuss Root Cause Analysis and examine breakdowns in process
- STFs prevention literature from other industries was reviewed and provided a strategy for reducing rate

**Results/Analyze Phase**
- Survey results identified 17 factors as potentially impacting STFs
- FMEA narrowed 17 factors down to the following root causes:
  1. Unsafe walking surfaces
  2. Weather
  3. Field staff characteristics (e.g. gender, program type)
- Graphical charts were used to further drill down

**Intervention/Improve Phase**
- Applying accident pyramid model illustrates that by preventing small STFs, the rate of severe STFs could be reduced

**Control Phase**
- Begin June 2010 and still continues
- Project officially handed off to Human Resources process owner
  - Process Owner Responsibilities:
    - Ongoing review of STF data, including claims data
    - Executing solutions identified for control plan

**Conclusions**
- Unsafe walking surfaces were associated with STFs. The highest rate of STFs occurred in surface transitions
- Winter season accounted for the highest rate of STFs
- Multiple risk factors were associated with most field staff STFs
- Field staff characteristics were not statistically associated with the rate of STFs

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