Stanford HEALTH CARE

Safety & the Patient Experience: Case Studies for Injury Reduction

Dr. Minal Moharir
Michele Blazek
Derek Garcia
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Stanford | MEDICINE

Background

- In 2014, Stanford Health Care embarked on a 5 year program to reduce injury/illness rates to below the statewide average.

- Strategy
  - Focus placed on integrating worker safety as part of the culture – worker safety is a precursor to patient safety
  - Reducing the most frequent/most serious injuries
  - Use of LEAN tools

Safety Culture – Applies to Patients and Workers

Individual	Supervisor
Mindfulness – • Awareness of surroundings • Clarity on task • Safety absolutes	Act as role model – • Individual mindfulness
Care for one another • Encourage peers • Report unsafe conditions	Culture of safety for the team • Foster teamwork • Round on 3 absolutes • Report unsafe conditions • Respond and prevent • Recognize safety champions
Ready to keep patients safe	Ready to keep patients & staff safe

LEADERSHIP

Leadership

- Senior Leadership Engagement
  - Chief Operating Officer in 2015 included Safety as enterprise wide goal and linked the Total Case Incident Rate (TCIR) reduction as part of bonuses for leaders
  - SHC Employee Safety Council reported on an A3 for the SHC Committee on Management Controls and Compliance (CMCC) for first three (3) years
  - Daily management included reporting of injuries during all huddles, all shifts

STANFORD OPERATING SYSTEM

Stanford Operating System

- A3
- 4 Block problem-solving
- Gemba!
- Visual Management
- Huddles
- Kaizen
  - Clinical Lab
  - Linens
- Injury Review Panels with Occupational Health and Supervisors

- Reinforcing expectations by using Behavioral Safety –The Risk Authority (TRA) Observer mobile application is used to track behavior observations on Absolutes

PRIORITIZATION AND PREVENTION STRATEGIES

FY 2017 Prioritization of Safety Programs

	Low	Severity*	High
Frequency* High	Blood and Body Fluid Exposure (BBF)		Repetitive Motion Injuries (RMI) Push, Pull, Lift
Frequency* Low	All other causes		Safe Patient Handling Slip, Trip, Falls

* Based on SHC HR Analytics and Pareto Analyses

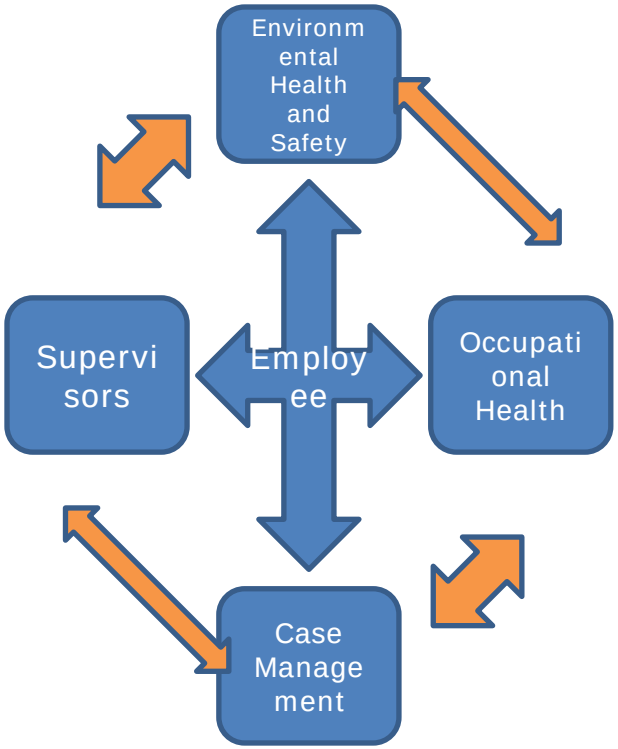
Prevention Strategy/Countermeasures

Causation	Prevention Strategy / Countermeasures
Blood and Body Fluid Exposure (BBF)	New policy, awareness campaign, sharps doodle, doodle for splash reduction, changes of kits
Repetitive Motion Injuries (RMI)	Office Ergonomics Software
Push, Pull, Lift	Kaizen, re-engineering of system (ATV, linen bags and containers), absolutes with rounding
Safe Patient Handling	BMAP, Training, Champions
Slip, Trip, Falls	Reporting of hazards, EVS pre-planning, absolutes with rounding

INJURY REVIEW PANELS

Injury Review Panels

- **Full picture of injury is uncovered** – Employees communicate with EHS, Supervisors and safety leads what may be contributing to the injury
- **Better identification of corrective actions –** Each group has input on how to prevent injury from re-occurring
- **Supervisors feel supported** – Supervisors are given resources to help their employee get back to work
- **Injuries are tracked with better consistency and accuracy** – Weekly (bi-weekly) IRPs allow for regular injury and corrective action tracking



INCIDENT INVESTIGATION OVERVIEW

What is an incident investigation?

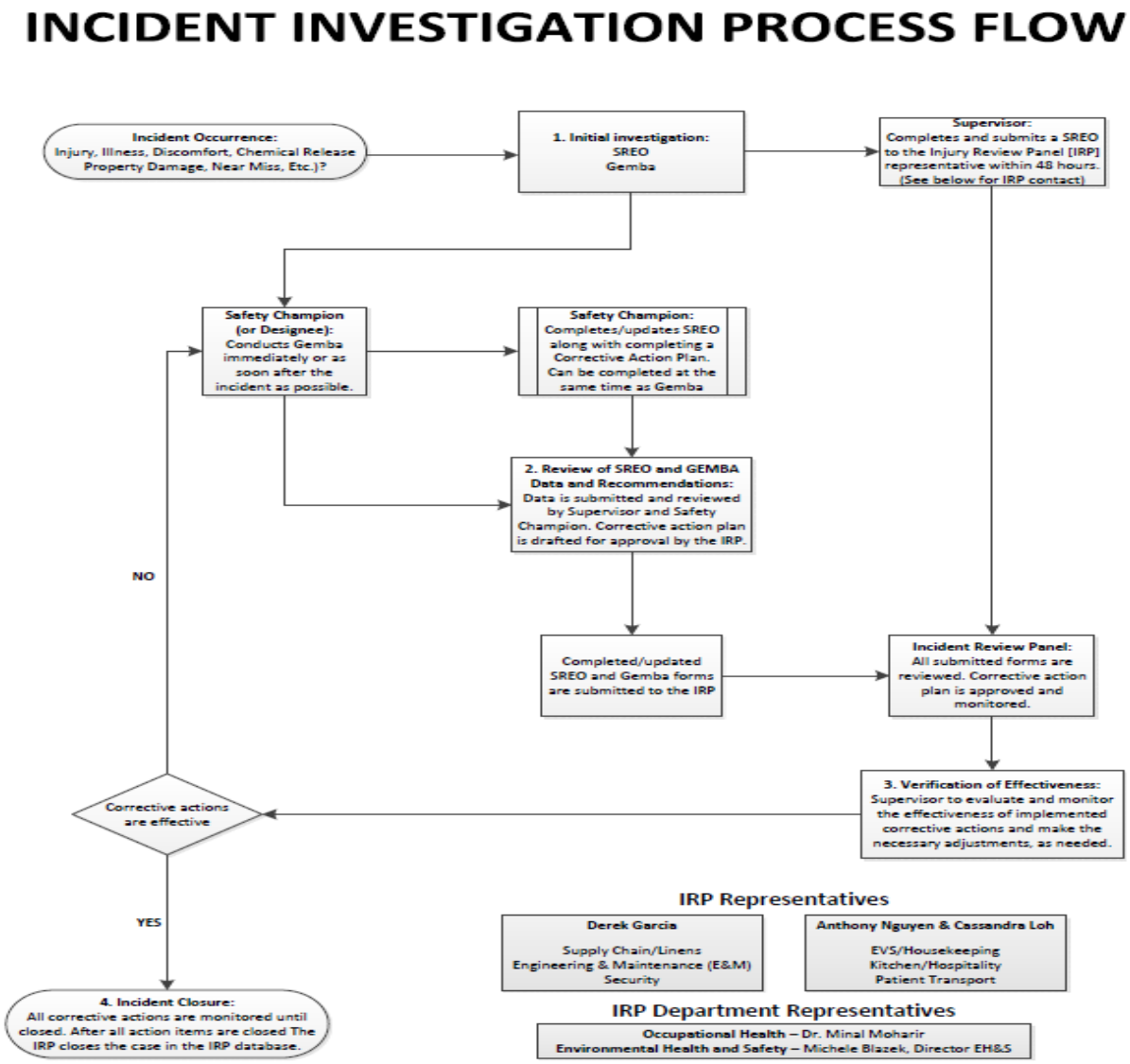
A process by which information and data is collected in order to determine direct causes and identify contributing factors to establish countermeasures.

- **Countermeasures:** Corrective actions that are implemented in order to prevent similar incidents in the future.

Why is it Important?

1. We are required by law!
2. Employee Safety = Patient Safety
3. Productivity

THE INCIDENT INVESTIGATION PROCESS FLOW



THE INCIDENT INVESTIGATION PROCESS FLOW

INCIDENT INVESTIGATION CHECKLIST

Incident Occurrence: Injury, Illness, Discomfort, Chemical Release Property Damage, Near Miss, Etc.)?

1. **Initial Investigation**

   ☐ SREO completed and submitted to Risk Authority within 48 hours.

   ☐ Gemba completed and submitted to your Department Injury Review Panel [IRP] Representative

2. **Review of Data and Recommendations**

   ☐ Supervisor and Safety Champion drafts/reviews corrective action plan.

   ☐ SREO, Gemba, and Incident Review Forms are submitted/received by the Injury Review Panel [IRP] for review.

   ☐ Corrective action plan finalized (Individual corrective actions are monitored by the IRP until closed).

3. **Verification of Effectiveness**

   ☐ Supervisor to evaluate the effectiveness of implemented corrective action(s) prior to closure.

   ☐ IRP validates effectiveness of implemented corrective action(s) and determines whether corrective actions are "effective" or "need adjustment." Corrective actions are classified as the following:

   A. ☐ All corrective actions are effective = Incident case is closed. Move to step 4.

   B. ☐ Gemba and/or incident review form is updated to establish new corrective actions. Redo step 2.

4. **Incident closure**

   ☐ STATEMENT: All corrective actions have been monitored and are now closed. (After all action items are closed The IRP closes the case in the IRP database).

Signature of Manager/Supervisor: _____

IRP representative: _____

Date of Closure: _____

Linen Supply Room Gemba Rounds

Location: SHC/SCH Linen Room

Address: 300 Pasteur Dr. Main Hospital

Surveyor: Derek Garcia

Walkthrough Date: 03.01.17

Background: Gemba of the linen room was conducted during the linen room "Blitz" which occurs at 8:30 AM. During the blitz, linens from the delivery are brought from the hallway into the main linen room where up to 12 separate linen carts are used to transfer linens onto a single cart which are used for both SHC and SCH hospitals. The Blitz takes up to ½ hour depending on the number of employees available and the number of carts needed for replenishment of linens. A sign on the outside of each cart designates what supplies are designated for that particular cart. Linen deliveries from Angelica, our hospital linen supplier, occur twice per day at 12AM and 12PM.

# of Pages: 5

	Location	Finding		Action Item	Assigned to	Date Due
1	Linen Room Corridor 000C26	**Fire/Life Safety** – A minimum of 44" egress down the main exit corridor must be maintained to allow for adequate egress down the hallway in the event of an evacuation. Linens cannot be stored for more than 30 minutes per Palo Alto Fire Department.		Remove linens from hallway to maintian adequate egress. Find an alternative location. **Actions Taken:** Redefined par levels. Shipment with new par levels were delivered on 03.14.17. All linens are now stored in the linen rooms and not in the hallways. Safe egress is also being maintained in the linen rooms with access to fire safety equipment and adequate egress.	Raul Alvarez and Linsey Black Kaiser Ashrath	**Completed on** 03.14.17

4 Block - Case Study Linen Room

Problem: Ergonomic Risk Factors: excessive weight, bending, contact stress, and awkward postures.
Additional Risk Factors:
Fire and Life Safety

Future State: Elimination of ergonomic risks. Improved linen flows and egress within the linen room.

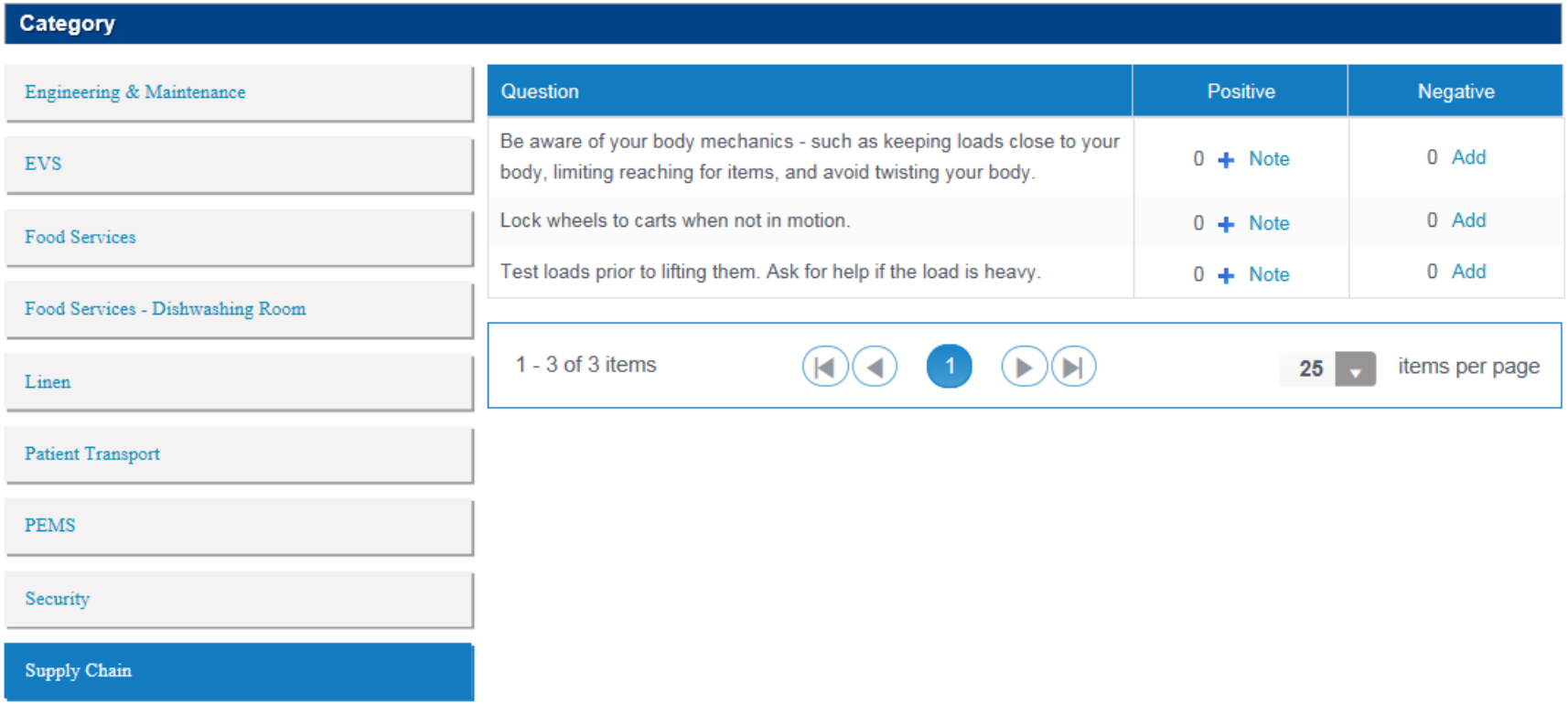
Countermeasures:

1. Adjust linen par levels to "Just in Time Delivery."
2. Linen bundling and reorganization of how linens are provided.
3. Ergo training and 1 on 1 evaluations for all linen handling employees
4. Training additional staff to perform linen handling activities.
5. Implementation of Safety Champion Program.

Results:

- **Linen related incidents:**
  - Before improvements: 3 (Q1 & Q2)
  - After Improvements: 2 (Q3 & Q4) **33.33%**
  - FY18 TYD: 0 **100%**
- **Shift in culture from "Reactive" to "Proactive"**
- **More efficient operation**
- **Improved Employee Morale**
- **Happy Employees = Less Injuries**

Absolutes – FS&P 3 Absolutes



BEHAVIORAL SAFETY

Absolutes – FS&P 3 Absolutes for Facilities, Security & Planning

FS&P 3 Absolutes Inspection Report - 300 Pasteur Drive

Summary

Total Findings:	3	Positive Findings:	3
Negative Findings:	0	% of Positive Findings:	100.0 %

RISK LEVEL

Percentage of Positive vs. Negative Findings

Project-to-Date

Inspection Details

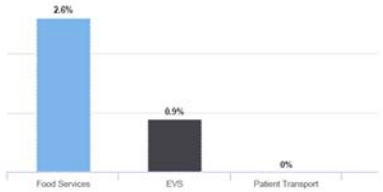
Building	300 Pasteur Drive	Inspector	Vijayanti Prasad
Date	10/24/2017	Reviewed With	
Time	01:20 PM	Zone	D-Pod
Department	Housekeeping	Floor/Level	Floor 01

Negative Findings per Month

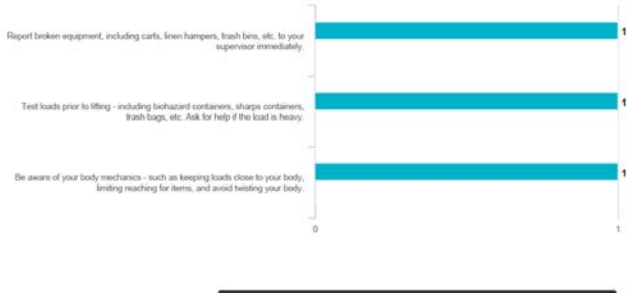
Project-to-Date

Percentage of Negative Findings per Category

Top 5 At-Risk Categories
All Inspections



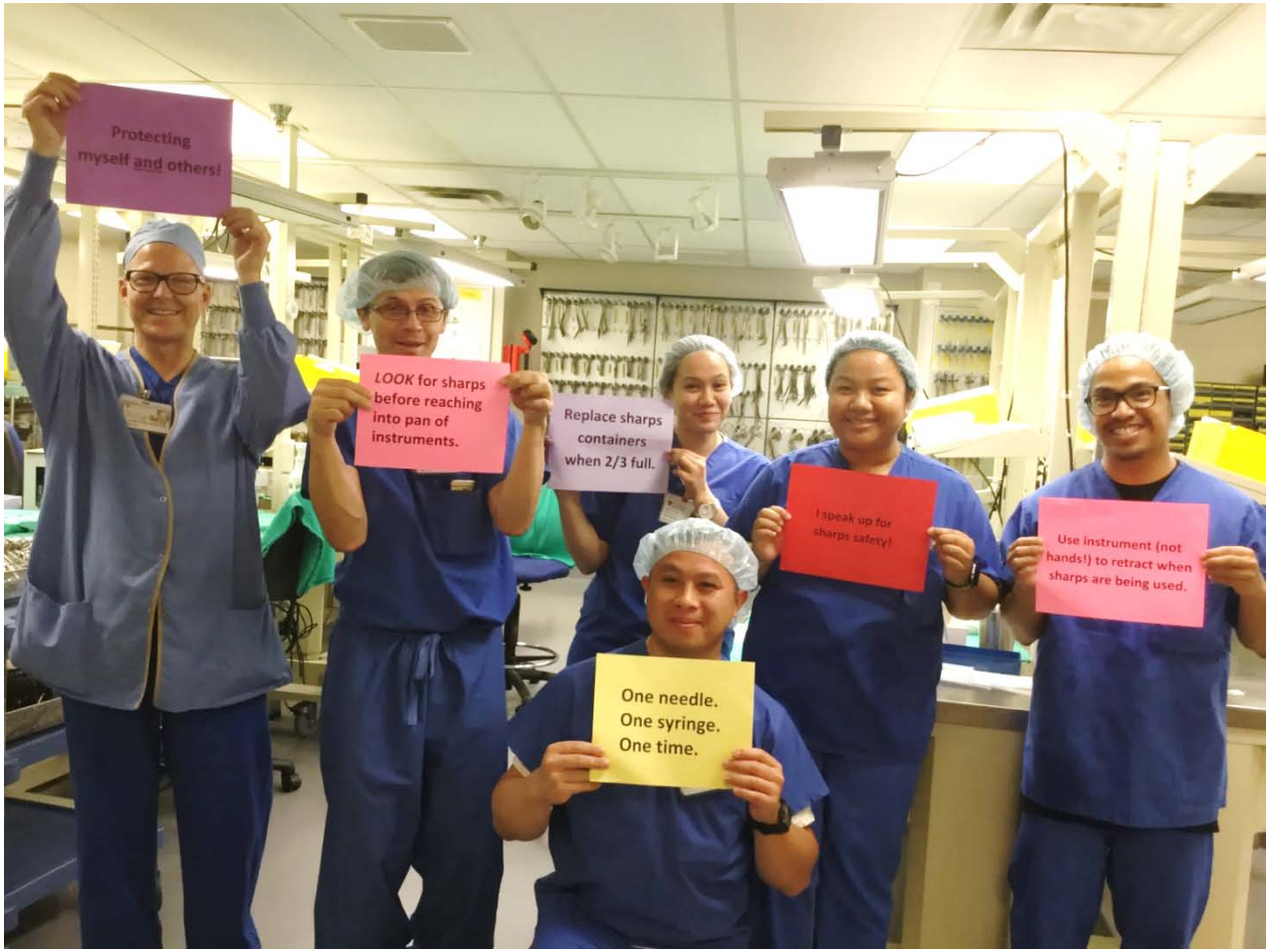
Summary of Findings



Questions (Hide)

Name	Findings	Negative	Positive	Low	Med	High
Category: EVS	**3**	**0**	**3**	**0**	**0**	**0**
Report broken equipment, including carts, linen hampers, trash bins, etc. to your supervisor immediately.	1	0	1	0	0	0
Test loads prior to lifting - including biohazard containers, sharps containers, trash bags, etc. Ask for help if the load is heavy.	1	0	1	0	0	0
Be aware of your body mechanics - such as keeping loads close to your body, limiting reaching for items, and avoid twisting your body.	1	0	1	0	0	0

Safety Absolutes: Safety starts with YOU!



Safety Absolutes: And me….

4 Blocks - Case Study Clinical Labs

Problem: Repetitive motion injuries	**Future State:** No repetitive motion injuries.
Countermeasures: 1. Incident review, Gemba 2. Leadership engagement and Gemba 3. Supervisor training IRP process 4. Ergo evaluation and training biweekly 5. Job rotation	**Results:** **Reduction of Injuries: 26%** **Reduction of Incurred Workers Compensation: 58%**

Year over Year(YoY) Reduction of Cases by Causation Factor

(FY 2016 and FY 2017)

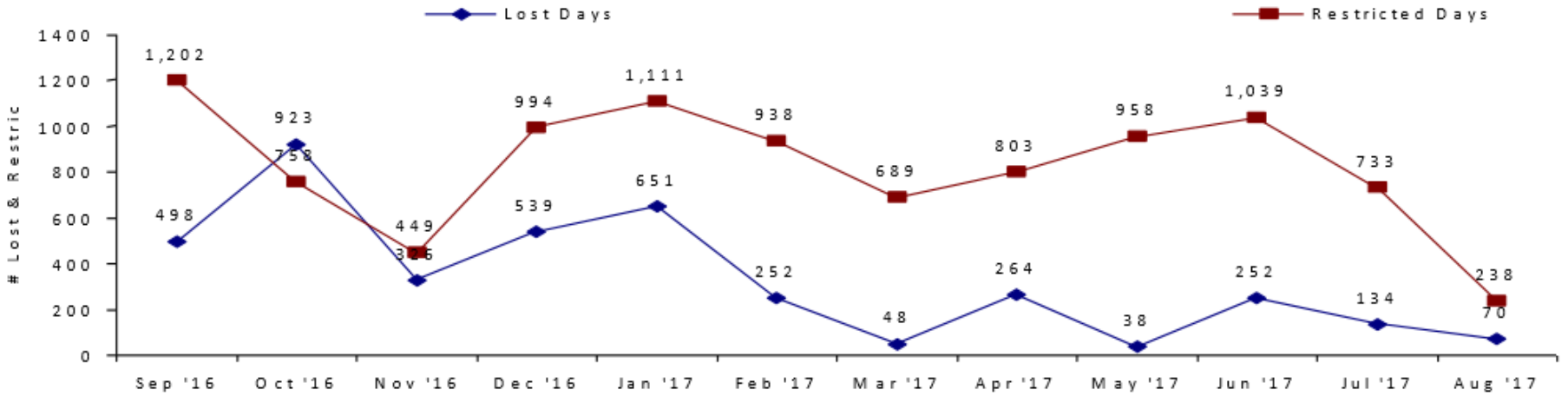
- Continued 5 year trend in workplace injuries and worker's compensation costs across all areas and causal factors

Causation Factor	Reduction of Cases (FY 2017 compared to FY 2016)
Blood and Body Fluid Exposure (BBF)	10%
Repetitive Motion Injuries (RMI)	29%
Push Pull Lift	26%
Patient Handling	29%

FY 2017 STANFORD OSHA Injury Statistics

Report Month August 2017

LOST RESTRICTED WORK DAYS

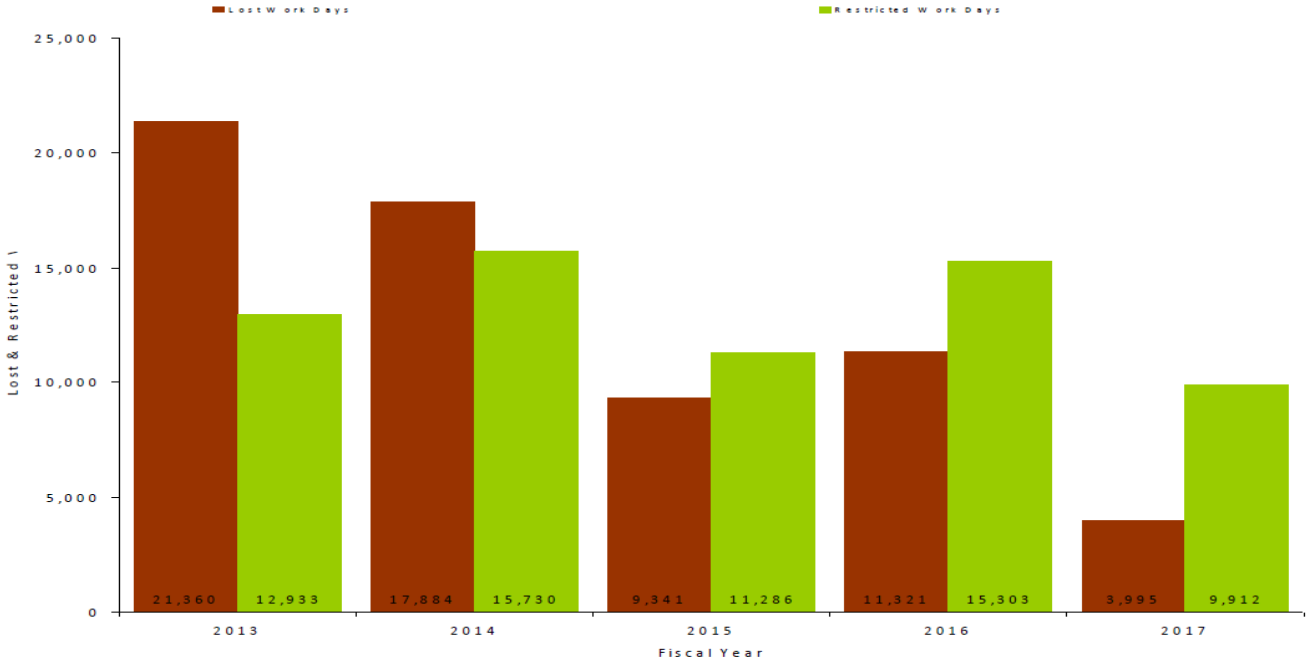


Stanford HEALTH CARE

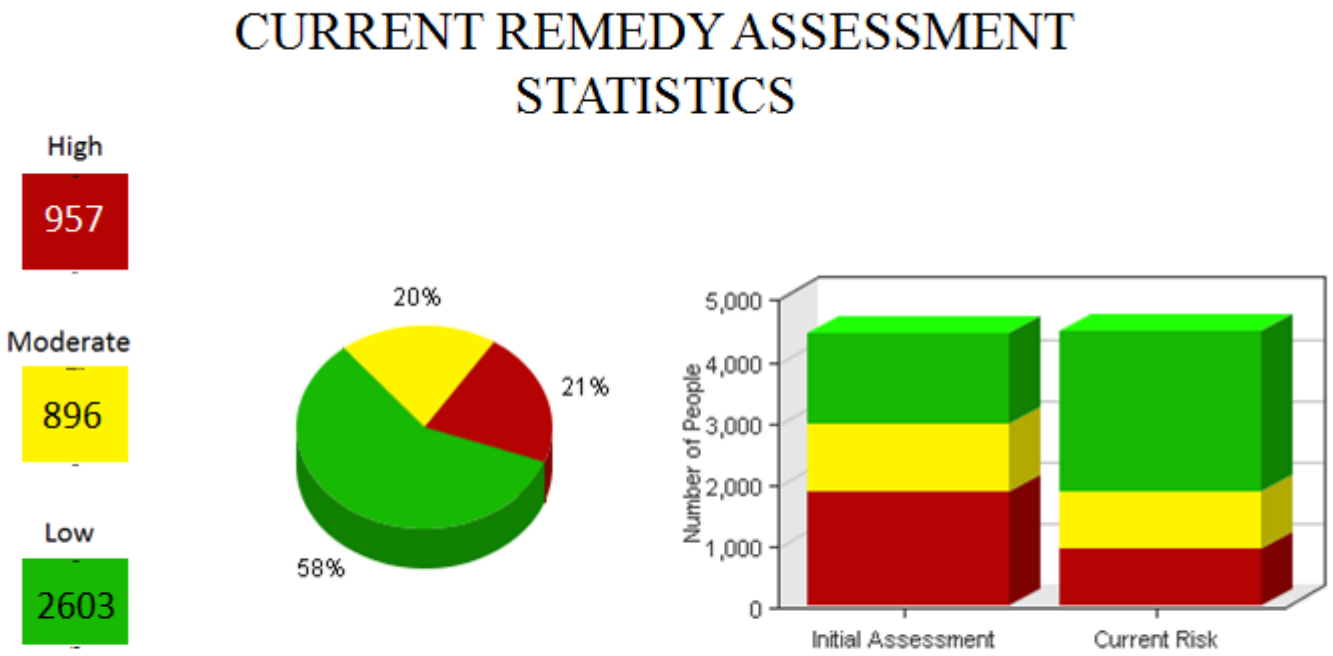
Lost Restricted Work Days

5 YEAR TREND

FY 2013 - FY2017 (date ending 8/31/2017)



Ergonomics


CURRENT REMEDY ASSESSMENT STATISTICS
High
957
Moderate
896
Low
2603
20%
21%
58%
5,000
4,000
3,000
2,000
1,000
0
Number of People
Initial Assessment
Current Risk

Conclusions and Next Steps

- Workplace Violence
- Safe Patient Handling and Patient Fall reduction synergy
- Safety Culture

Many thanks -

- SHC Employee Safety Council
- All SHC members of Safety Huddles – FSP and Clinical Labs
- SHC EH&S
- SHC Perioperative Services
- BSI EH&S Services