Don’t Let Opportunities Slip Away – Strategies for Preventing Falls

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Impact of Slips, Trips and Falls
Occupational Injuries and Workers’ Compensation

Occupational Injuries – 35.2%

- Slip, Trip, Fall: 64.8%
- All Other: 35.2%

Occupational Injury Costs – 51.9%

- Slip, Trip, Fall: 48.1%
- All Others: 51.9%

2017 Marsh Study
Public & Private Universities
Impact of Slips, Trips and Falls
General Liability Claims

Liability Claims - 54.7%

- Slip, Trip, Fall Claims
- All Other Claims 45.3%

Liability Loss Costs – 64.8%

- Slip, Trip, Fall Loss Costs 35.2%
- All Other Liability Claim Costs 35.2%

2017 Marsh Study, Private Universities
Impact of Slips, Trips and Falls
Average Loss Occupational Injuries and Liability Claims

$86,400

Liability Claims

$26,600

Workers’ Compensation Claims
Impact of Slips, Trips and Falls
Liability Claims by Location

- Indoor: 39.50%
- Outdoor: 38.30%
- Stairs: 23.20%

2017 Marsh Study, Private Universities
Impact of Slips, Trips and Falls
Emerging Liability Trend

• Concussion Traumatic Brain injury Liability Claims
• Non-student athletes

- 2018
  - Settled - $1,750,000 (Outdoor)
  - Settled - $1,200,000 (Outdoor)
  - Settled - $1,450,000 (Outdoor)
Impact of Slips, Trips and Falls
Indoor Fall Prevention

• Entry Mats – in-floor construction with drain pit
Impact of Slips, Trips and Falls
Indoor Fall Prevention

• Entry Mats – in-floor construction with drain pit
  - Avoid door gaps

• Runs should be 20 feet
• Inspect for turned up corners
Impact of Slips, Trips and Falls
Indoor Fall Prevention
Impact of Slips, Trips and Falls
Indoor Fall Prevention

• Provide a building mop kit, a floor mop kit is even better.

• When mopping floors, swab no more than a 4’ wide swath. This will reduce stress on the shoulders and lower back.
Impact of Slips, Trips and Falls
Indoor Fall Prevention

• Use warning signs
Impact of Slips, Trips and Falls
Indoor Fall Prevention

• Invest in floor drying equipment

!!! Be mindful of power cords.
Impact of Slips, Trips and Falls
Indoor Fall Prevention

• Review floor cleaning procedures

• Employees are often required to mix cleaning solutions from concentrate.

• Misblending will waste solution.

• Inadequate mopping will leave solution on the floor which re-emulsifies creating a soapy floor.

• What is the slip resistance of the floor wax?

!!! Always work moving forward to keep the power cord behind.
Impact of Slips, Trips and Falls
Indoor Fall Prevention

- **Walking Surface Maintenance:** Static Coefficient of Friction (COF)
- Minimum Coefficient of Friction (COF)
  - OSHA - 29CFR 1920.22 recommends 0.5 COF
  - ADA Section 4.5.1, Appendix B: recommends 0.6 COF
  - ADA Section 4.5.1, Appendix B recommends 0.8 for sloped surfaces
  - ANSI A1264.2 recommends 0.5 COF
  - Target should be 0.65 COF

English XL Tribometer
Impact of Slips, Trips and Falls
Kitchen Fall Prevention

• Eliminate raised door saddles

!!! Replace broken tile.
Impact of Slips, Trips and Falls
Indoor Fall Prevention

• Rule: Clean up when it falls!

• Design with slip resistant floor tiles or epoxy coating.
Impact of Slips, Trips and Falls
Indoor Fall Prevention

• Mats at “wet” stations double as anti-fatigue mats.

• Self serve stations
  o Salad
  o Drinks
Impact of Slips, Trips and Falls
Indoor Fall Prevention

• Mats at Self serve stations.
  - Salad bar
  - Drink stations
Impact of Slips, Trips and Falls
Indoor Fall Prevention

• Slip resistant footwear

• Plug: Shoes for Crews
  https://www.shoesforcrews.com/
Impact of Slips, Trips and Falls
Outdoor Fall Prevention

• Snow and Ice Care Guideline
  o Assignment of crews to geographic areas.
    ▪ Designated contractor routes and parking lots,
    ▪ Preseason equipment maintenance plan.
    ▪ Overnight accommodations for staff.
    ▪ Prioritize campus routes and stairs by usage.
Impact of Slips, Trips and Falls
Outdoor Fall Prevention

• Snow and Ice Care Guideline
  ◦ Provide ice melt stations around campus to minimize carrying.
Impact of Slips, Trips and Falls
Outdoor Fall Prevention

• Off-Season Projects / Repairs
  o Spring Inspection:
    - Walkways “pooling” of rainwater.
Impact of Slips, Trips and Falls
Outdoor Fall Prevention

• Off-Season Projects / Repairs
  o Misaligned concrete slabs.
  o Replace or wet grind (note the silica exposure)
Impact of Slips, Trips and Falls
Outdoor Fall Prevention

• Fall Maintenance
  o Leaves blocking storm drains.
  o Wet leaves on walking surfaces.
Impact of Slips, Trips and Falls
Outdoor Fall Prevention

• Walking / Driving Intersections
  o Marked transition points
Impact of Slips, Trips and Falls

Stairs

• Center Handrails
  o 88 inches width or less
  o In good condition
Impact of Slips, Trips and Falls
Offices

• Strap up cords

• Educate employees
Impact of Slips, Trips and Falls
Offices

• Be sensible about siting waste disposal containers.
Impact of Slips, Trips and Falls
Offices

• Color contrast for changes in surface textures.
Impact of Slips, Trips and Falls
Human Factors

• Aging Workforce

  – A little heavier
  – Not as agile
  – Not as resilient when we do fall
  – Don’t see like we used to

  – “3 Points of Contact” on stairs
  – Dress code addresses footwear
  – Encourage vision care
Impact of Slips, Trips and Falls
Human Factors

• Distracted Walking
  – The problem is not just over the road.
Impact of Slips, Trips and Falls
Human Factors

- Signage
Typical Phases of Incident Investigations and How to Conduct Them
Respond to the Scene

• Verify it is ok to approach safely
• Secure the area to prevent further injuries
• Assess any injuries and get medical care, if needed
• Notify appropriate personnel of the accident
• Preserve evidence
Interview Injured Individual and Witness(es)

• The injured individual should complete an incident report

• Witnesses should complete witness reports

• Questions to ask:
  • What was the individual doing at the time of the accident?
  • Was the employee qualified to perform this operation?
  • Were procedures being followed?
  • Were proper tools and equipment being used?
  • Had the employee received proper training for the operation prior to the incident?
Interview Injured Individual and Witness(es)

• Questions to ask:
  • What was the physical condition of the area when the incident happened? (Wet, muddy, hot, cold, debris in the way or clear)
  • What were the witnesses doing at the time of the incident?
  • What immediate or temporary action could have prevented or minimized the incident?
  • What long-term or permanent action could have prevented or minimized the incident?
Analyze the Scene

- Take photos of the area
- Focus on finding causes

- Had a previous action been taken to prevent the incident? If so, why did it fail?
Develop Corrective Actions

• How do we prevent/minimize a reoccurrence?
  • Physical change
  • Safety rule or process change

• Assign someone to assure corrective actions are completed

• Follow-up to assure they were completed