

Panel Member



Michael Tupy
Safety Manager
Hennepin County

Safety Organizational Structure:

- (1) Manager, (8) EHS Specialists, (1) Admin Support
- Reports to Property Services Director then to County Administration
- Workers Comp (County Attorney's Office)
- Financial Risk Management (Budget and Finance)

Fast Facts:

- 27 Departments; large ones include Community Corrections, Public Works, Sheriff's Office, Human Services and Public Health, Library, etc.
- 80+ owned facilities, 50+ leased sites
- Close to 8,000 employees
- 1.7 billion dollar budget



working for you

Back Story – Slips, Trips and Falls

- \$1.7 million spent over the past four years on incurred WC costs.
- Traditionally makes up 25% of our injuries.
- Recent unique issues created more focus on prevention.



Case 1 – Fall from Roof



Situation:

Maintenance worker was accessing the roof to look for a water leak.

Using a portable ladder at the site, employee went up on first tier of roof to access the second tier. When they went to access the second tier, the ladder gave way and the employee fell.

Injury: Contusions, scrapes, sore lower back/tailbone.

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Case 1 – Fall from Roof



Situation:

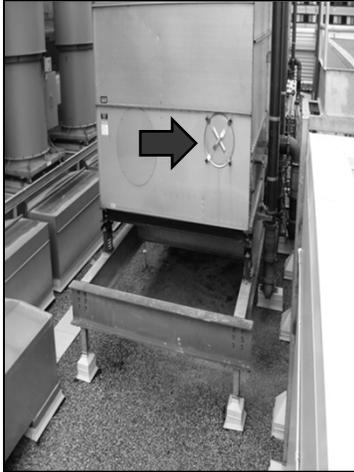
Employee uses a 10 foot ladder to access first tier and 6 foot ladder to access second tier.

Employee carries 6 foot ladder up with him to second tier.

Rather than blame the employee, how could this situation be improved?

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Case 2 – Chiller Issue



Situation:

Maintenance workers need to periodically clean a chiller for a large HC facility.

Small access portal is provided.

Potential for Injury: permit required confined space, entrapment, fall hazards as well



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What did we do?

Conducted a risk assessment for fall protection concerns across all our facilities.

Key questions:

1. What form of roof access do you have?
2. What is the fall distance?
3. What type of fall protection is at the point of access?
4. What is the purpose/reason for being on the roof?
5. If so, is it within 10' of roof edge or > 4' above the roof elevation?

Results:

Tiered Roof Systems:

Many different ones with differing heights and means of accessing different levels

Roof Hatches:

Many types and styles with different fixed and ships ladders of varying levels of compliance

Protective Systems:

Guarding and railings are adequate on some sites and not on others

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What did we do?

Conducted a risk assessment for ladders and lifts across all our facilities.

Key questions:

1. What types of portable ladders do you have?
2. What is the rated load capacity, length and material?
3. What extension ladders do you have?
4. What platforms and lifts do you have and how are they being used?

Results:

Portable Ladders –

497 of them!!

Extension Ladders –

87 of them!!

Lifts–

30 of them – have extensive training requirements and inspections/certifications

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Next Steps



Refocus our efforts - comprehensive inspection program (with updated policies) regarding portable ladders. Reinvigorate our training program. Build in an inspection program/purchasing of new ladders.



Establish a risk ranking for other fall protection issues identified for facilities.

Key parts:

1. Prioritize list based on frequency of access, hazards present and potential for injury.
2. Inform senior leadership that we will need to invest capital dollars to remedy situations. Already addressed a few sites with significant concerns.
3. Communicate with staff and keep them apprised of schedule and timeline of when things will be addressed.

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Next Steps

Insist on designing safe access

Safe Design Essentials

The following design elements shall be included in the project unless 1) they are not applicable, or 2) the Project Services Design & Construction Manager and EHS Manager provide a written exemption.

Access to Equipment

Access to equipment means efficient, economical access to equipment where there is a routine inspection or maintenance requirement. Specifications in this section include accessibility sufficient to readily enter and perform work; protection from falls - four feet; fixed stairs or ladders rather than portable ladders, steps or ladders or drop changes in elevation greater than 19 inches; and work platforms for equipment that must be serviced at height.

- Location of equipment shall be determined by its service need, so it can be easily maintained. When the equipment service points are located 6 feet or higher above the ground, a service platform shall be provided that complies with OSHA equipment fall safety and access criteria. The A/E shall include written drawings throughout mechanical rooms. The mechanical engineer shall meet with site personnel to discuss and ensure adequate accessibility early in the design phase.
- The A/E shall coordinate the mechanical design with other disciplines to provide adequately sized and properly located access points.
- Where equipment is elevated for maintenance, doors and ladders shall be sufficient to allow ease of passage of a large male worker (Anthropometric 5'5, 170" portable male).
- Roof access shall be by permanent stairs (preferred), ship's ladders, or vertical ladders.
- Equipment shall be located at least 10' from an abrupt change in elevation - 4'.
- Specify ladders, catwalks, mezzanines, etc., as necessary to allow safe maintenance of equipment.
- Design access points to unobstructed spaces as large as possible and when feasible, provide unimpeded egress of devices located inside the space.

Fall Protection

OSHA requires maintenance worker protection from falls - four feet. To protect this requires the use of guardrails. Guardrails can be avoided in some cases by keeping equipment 10 feet directly from fall hazards. Where permanent fall protection is desired, appropriate, dedicated, rated, labeled anchors must be provided. Additionally, where using steps use non-slip, rated, labeled anchors shall be provided.

- Walkways shall be protected from falls where elevation to lower level - 4'. When it will typically be used more effectively to use guardrails. When guardrails are not used on an end bracket and walk is 4' or less off anchors for permanent fall protection shall be provided. Guardrails on mezzanines, walkways and platforms are preferred to single point anchors for most applications. Anchors shall be rated, labeled and certified - with paperwork being retained over the County as part of O&M.
- Equipment shall be located 10' from the supported edges.
- For access doors through floors, use doors which immediately provide guarded entry around the opening when the door is open.
- For tower type structures, specify a permanent vertical fall protection system.

“Roof access shall be by permanent stairs (preferred), ship’s ladders, or vertical ladders.”

“Specify systems and equipment that eliminate fall hazards. Where a fall hazard cannot be eliminated, specify the installation of fall protection anchors.”

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Case 3 – Fall from Vehicle - FYI



Situation:

Employee was exiting vehicle at one of our truck shops. Instead of going out the driver’s side, reached into glove box on passenger side and then proceeded to exit the vehicle.

Employee missed step and fell from cab.

Injury: Compression fracture of L5 vertebrae

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Case 3 – Fall from Vehicle

Hennepin County Public Works Safety Office
Tool Box Talk

THREE-POINT CONTACT

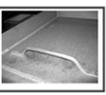
INJURY PREVENTION: USE THREE-POINT CONTACT

30% of Public Works Injuries Are Footing and/or Slip, Trip and Fall Related

New equipment and reminder tools installed on all Public Works heavy equipment



Use Three-Point Contact

Use Grab Bars when sitting and exiting bus. Always maintain three points of contact.

Use "Use Three-Point Contact" decal to serve as a reminder.

DISCUSSION POINTS:

- Be methodical and use caution when working on elevated uneven surfaces. NEVER JUMP! Use three-point contact when available.
- Maintain high-kneecapping standards. Keep work areas free of debris, clutter and spills.
- Replace shoes that are not slip resistant or have worn soles.

FAST FACT: In 2004, 1,224 construction workers were injured on the job. 1,000 workers were killed from falls.

Response:

Accident investigation was conducted.

Tool box talk was provided to supervisors and employees reminding them about three point contact.

Currently assessing adequacy of grab bars and stairs on passenger side.

SIGNIFICANT WC COSTS for something that was easily preventable!

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Panel Member



Bob Zak
Occupational
Safety & Health
Administrator
Ramsey County

Safety Organizational Structure:

- (1) Safety Administrator, (1) Safety Coordinator, (1) Admin Support, (3.5) Workers' Compensation, (20) Dept. Safety Liaison
- Departments accountable for safety and health
- County-wide committee

Fast Facts:

- 26 Departments
- 60 + owned and leased facilities
- 4,300 employees
- 1.2 billion dollar budget (2014/2015)

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Managing Slips, Trips and Falls – The Process



The Issue – Incident Review – Goals?



2013 Incident Review:

- **Total – 163 Recordable Incidents**
- **Slips, Trips, & Falls – 105 (65%)**
- **\$6250 average cost per STF incident - \$656,250**
- **Snow and Ice – 36 (22%)**

Note: Recordable Incidents Only

Prevention Strategies – Initial Focus on Snow and Ice Slip and Fall Prevention



Property Management:

- **Snow Removal Strategic Plans – Facility specific**

MN Safe Poster Campaign:



- **Series of Posters with Prevention Tips**

Implementation



Property Management:

- **Distributed flyer of facility specific process**
- **Communicated with administration**

MN Safe Poster Campaign:

- **Biweekly distribution – Change in message**
(Dept Safety Committees, Ramsey News and Common Area Postings)

Evaluation – Are We There Yet?



Incident Review 2012:

- Quarter 4 – 8 incidents

Incident Review 2013:

- Quarter 1 – 27 incidents
- Quarter 2 – 2 incidents

Slip, Trip & Fall Campaign Implementation

- Quarter 4 – 7 incidents

Incident Review 2014:

- Quarter 1 – 14 incidents
- Quarter 2 – 1 incidents
- Quarter 4 – ?

Collaboration



Coordinate Effort

- MN Safe, Hennepin County, Minneapolis & Ramsey County
- Experiencing similar issues



Final Thoughts – Continuous Improvement



Prevention:

- Where are we now?
- Where do we want to go?
- How do we get there?
- Never stop the improvement process

Collaboration:

- Power in numbers

Panel Member



Curt Fernandez,
Loss Control Coordinator,
City of Minneapolis

Safety Organizational Structure:

- Reports to Risk management and Claims Director
- Risk management and safety Committee
(A Cross functional team)
- Accountable to Department Heads

Fast Facts:

- Total assets - \$ 3.1 Billion
- 19 Departments;
- 144 facilities
- 5400 Employees
- 1.2 Billion dollar budget

Total Slips, Trips and Falls - 88



Slip

A slip occurs when there is too little traction or friction between the shoe and walking surface.



Falls

A fall occurs when you are too far off balance.



Trips

A trip occurs when a person's foot contacts an object in their way or drops to a lower level unexpectedly causing them to be thrown off-balance.

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Main reasons ...

- Wet floors
- An open drawer
- Slippery floors/shoes
- An icy walkway
- Carpets
- Shiny floors
- Missing steps
- Ladders
- Turning in chair in the office
- Stepped in to pot hole



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Costs of STFs

To the employer:

- ▶ Loss of Productivity & business
- ▶ Increased insurance premiums
- ▶ Costs associated with training replacement worker



To the worker:

- ▶ Lost wages & out-of-pocket expenses
- ▶ Temporary or permanent disability
- ▶ Reduced quality of life
- ▶ Depression

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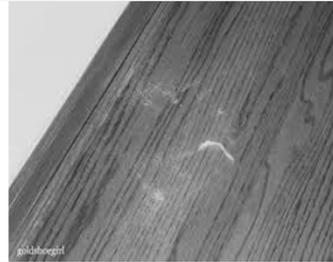
Our approach to minimize the STF incidents....

- Getting help from employees and supervisors to identify the challenges/hazards
- Developed a vision of long-term goal
- Developed a cross functional team
- Building trust among members
- Open communication

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Our approach to minimize the STF incidents....

- Developed a walk through check list
- Reporting near misses
 - Document them and investigate
 - Developed a process
- Invited OSHA to visit our work place
- Employees participation in the process
- Developing a web based program
- Ergonomic training
- Partnership (Posters)



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In your organization

_____ % Of slip, trip and fall are a result of hazards (i.e.:) equipment related , electrical, safety violations and unsafe conditions.

_____ % Of slip, trip and fall are a result of unsafe act and or poor decisions on the part of the customer/employee.

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More reasons....

- Lack of Safety knowledge and awareness
- Unsafe Conditions
- Unsafe Behaviors
- Work place culture
- Not feeling well and distractions
- Attitude

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Partnerships

- Local, State and federal agencies
- Mn Safety Council
- OSHA
- Public Risk Management Association – PRIMA
- U of MN



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Success factors.....

- Strong leadership and Management
- Acknowledgement /Commitment / Support
- Compliance with OSHA regulations
- Employee Involvement
- Open communication
- Accident/Injury Reporting /Case Management
- Training & education
- Data integrity, Systems in place and Planning

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Safety of others are in your hands!

- Most slips. Trips and falls are Preventable!
- Use good judgment before you act.
- You are in charge!
- You can make a difference!
- Nothing is so urgent we can't take the time to do it safely.

Thanks!



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Panel Member



Todd Christenson,
Program Manager
Safety & Loss Control, Property & Casualty
State of Minnesota

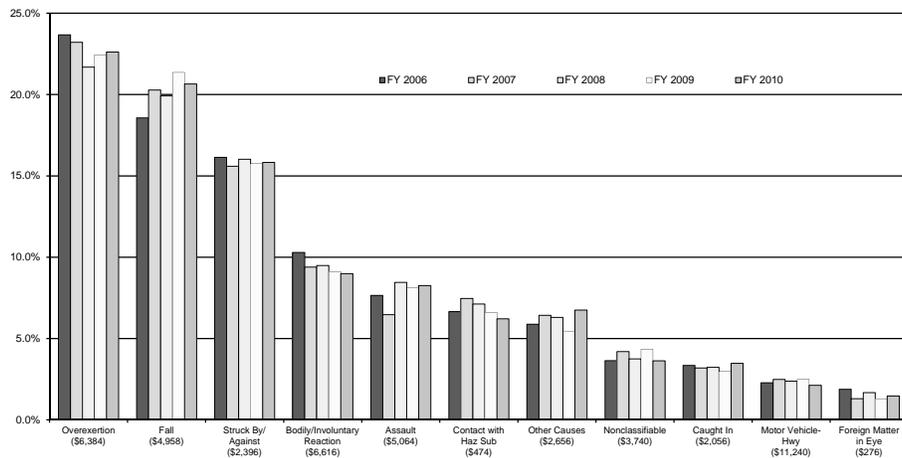
Safety Organizational Structure:

- Agency and Risk Management Division staff
- Self insured workers compensation program
- Self insured general liability program

Fast Facts:

- 95 agencies, boards, and commissions Departments;
- 60,000 Employees
- Over \$22 million in work comp benefits

The back story – FY2010 WC Annual Report



Efforts to turn the curve

STF poster campaign

- Concept and poster development winter 2010
 - Not complete until spring 2011
 - Nearly \$0 budget
- First posters published winter 2011
- Posters recognized on MPR blog
- New STF poster concepts introduced winter 2012
 - MnSAFE coordination – color scheme and logo

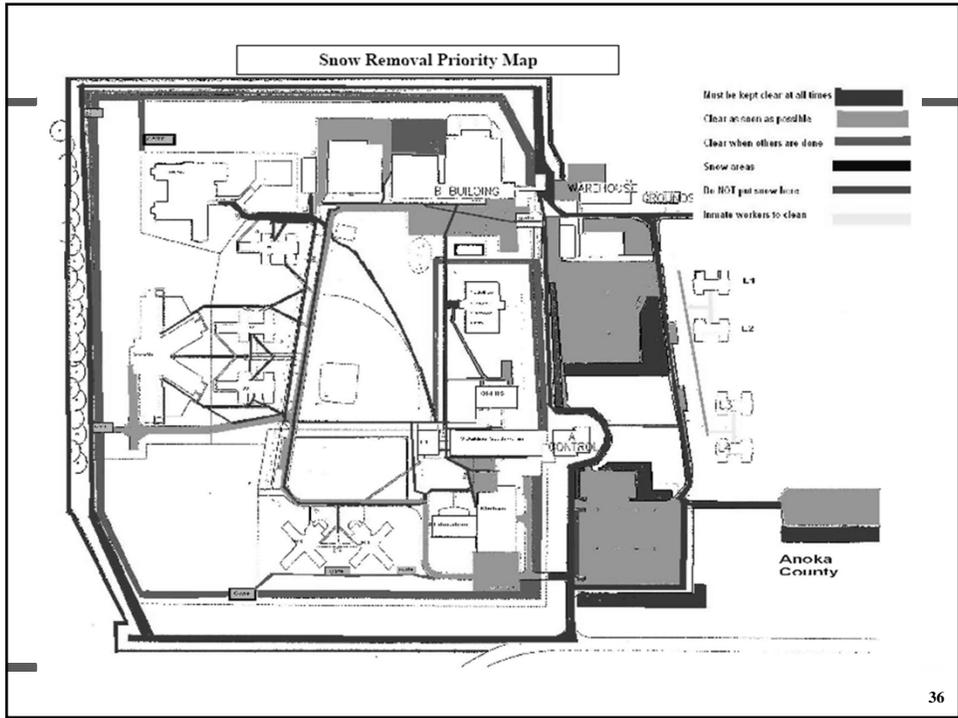
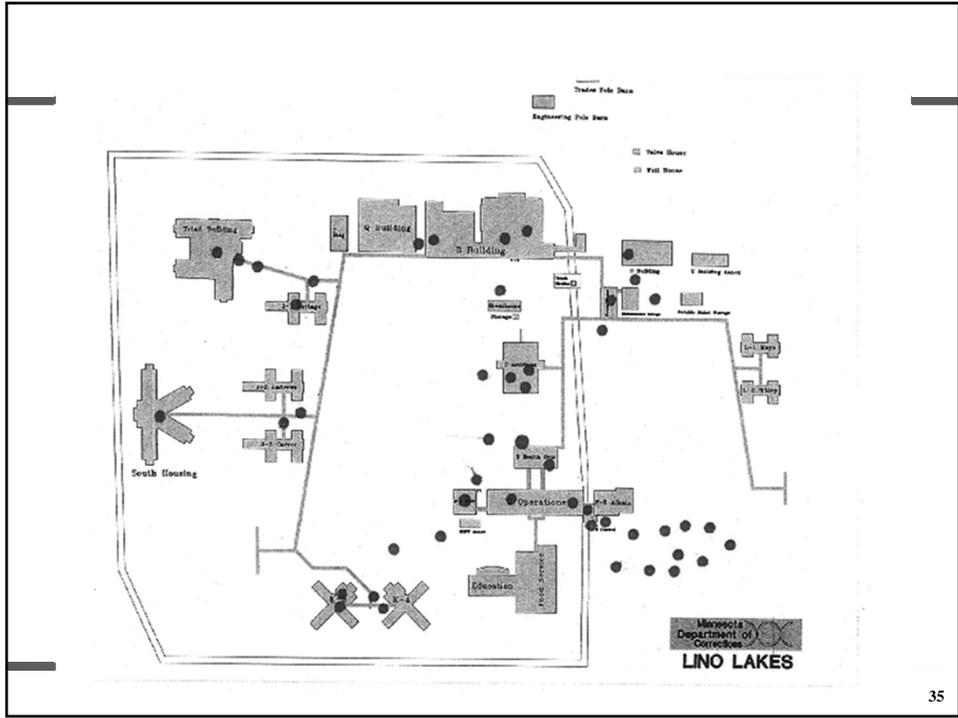
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Efforts to turn the curve

STF Kaizen - MN Correctional Facility - Lino Lakes

- 3 day Kaizen event
 - Team included facilities, security, safety, work comp, RMD
 - Facility mapping of incident/injuries
- Improvement focus on winter STF and mopping
- Large initial role out and training of all staff

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Efforts to turn the curve

Success

- Reduced STFs

Challenges

- 24 hr operation – people coming and going at all hours
- Frequent staff turnover – need for continuous education
- “Safety” became the go-to for ice and snow issues
- Labor intensive – must “role-out” program each year

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Efforts to turn the curve

Capitol Complex

- Stats
 - 11 miles of sidewalks
 - 18 buildings with multiple entrances
 - 21 surface lots,
 - 6 parking ramps
- Communication to Capitol Complex Agencies
- Salt barrels at all building and ramp exits
- Grounds crew schedule adjustments based on forecast

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Efforts to turn the curve

Entering and exiting vehicles

- Three point contact



Maintain 3-Point Contact to Avoid Injuries



You are the only person who can prevent a fall!

The Basics of 3-Point Contact

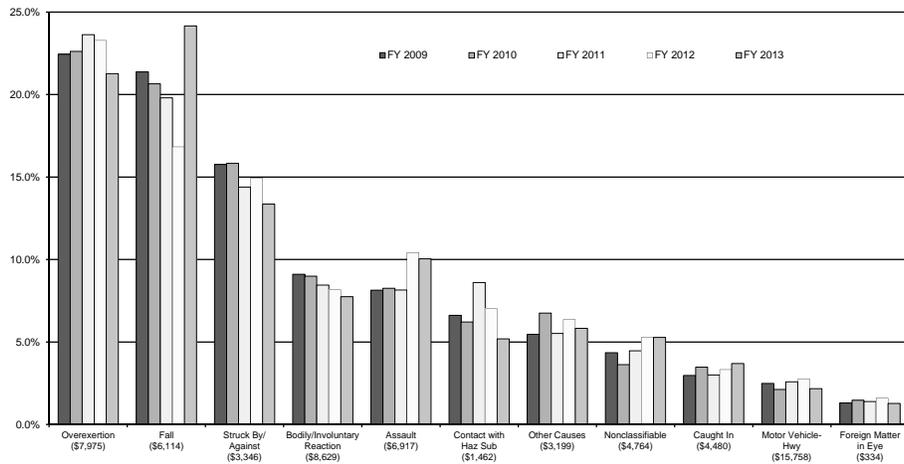
Getting in and out of a vehicle, equipment or boat requires 3-point contact. That means **one hand and both feet**, or both hands and one foot are in contact with the vehicle or equipment at all times. The same applies to climbing a ladder or stairs.

This strategy ensure you maintain maximum stability and support.



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The current story – FY2013 WC Annual Report



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Efforts to turn the curve

Next "Steps"

- Its about behavior!
 - Ongoing awareness (messaging and posters)
 - Observation and feedback
 - Foot wear choices
 - Walking paths
 - Attentiveness
 - Other?

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Managing Slip, Trip, Falls -
A Public Sector Panel Discussion

Questions for the panel?