NSC Webinars

Preventing Slips, Trips & Falls

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making our world safer®

Agenda

Introduction

- Compliance
- Assessments
- Human factors
- Conclusion

Did You Know?

- Did you know that slips, trips and falls are responsible

being done to reduce slips, trips and falls these type of injuries remain at or near the top of the injury and severity numbers each year.

Statistics

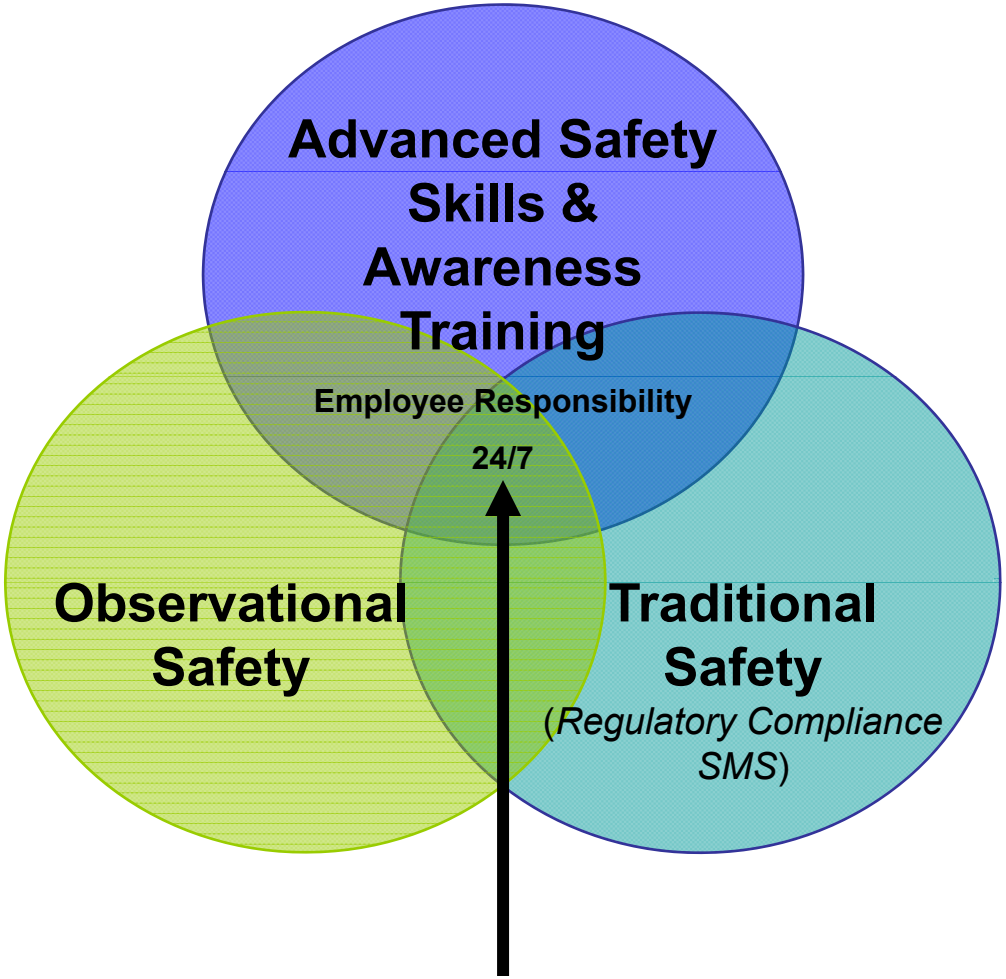
265,000 nonfatal injuries from slips, trips, and falls annually result in one or more days away from work per incident

– Slips, trips, and falls result in 17% of all nonfatal workplace injuries per year, the highest injury rate of any regulated activity

- Discusses the root cause of most slips, trips and falls and review some current tools being used such as risk assessment, engineering design and human factor analysis.

- The goal of this webinar is to provide supervisors, employees, safety team members and safety professionals the tools to recognize and reduce the risk factor of these types of injuries.

3 Attributes to World Class Safety ©



Optimum Integration Into The Process

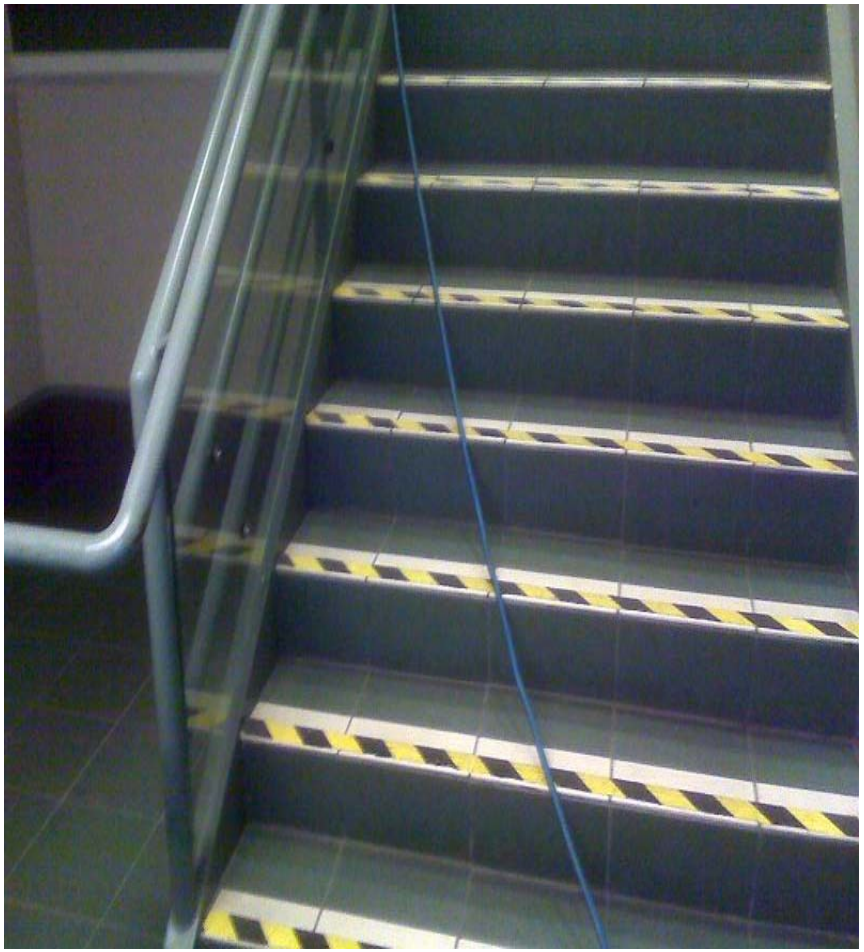
What's New in Compliance

- Well not much!
- Compliance is often based on the individuals choice and my not be a deterrent to at risk activity
  - Driving speed is a choice
  - Seldom an issue of not knowing
    - Required, process, equipment etc.
- Positive Reinforcement of a Negative Act

Slip, Trip, and Fall Hazards

Tripping Hazards

- Power cords, ropes, hoses across floors and walkways
- Intentional



Common Issues

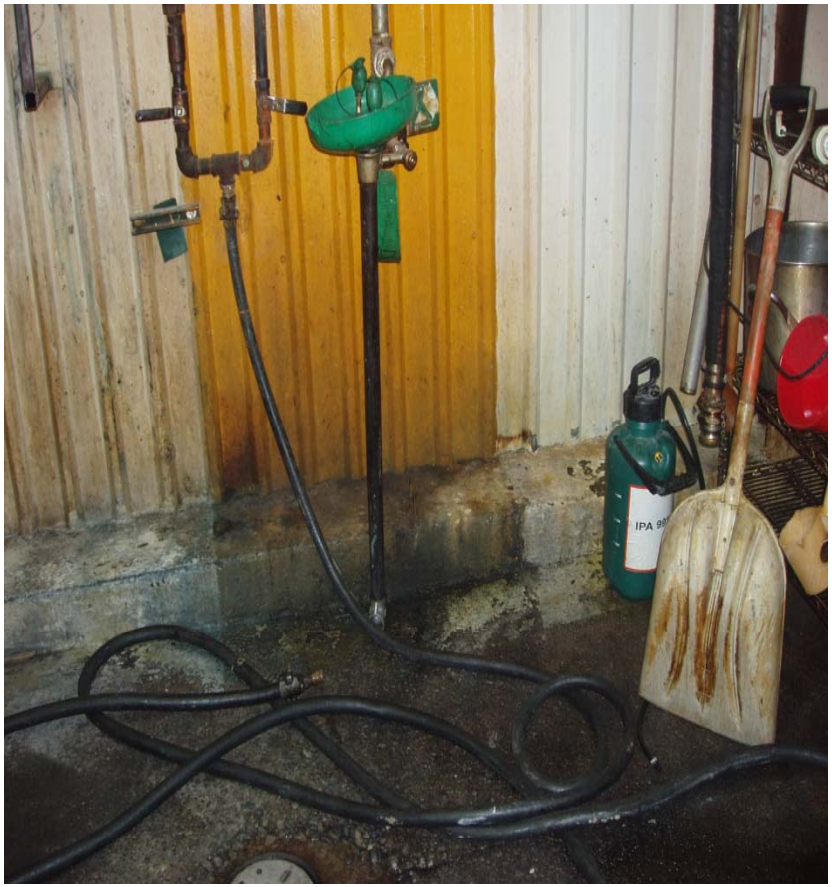
Guardrails

- Top rail—42 inches
- Midrail—21 inches
- Toeboard—4 inches high
- Must withstand reasonable force to prevent worker from falling

Slip, Trip, and Fall Hazards

Tripping Hazards

- Power cords, ropes, hoses across floors and walkways
- Intentional
- Poor housekeeping



Guarding Holes and Openings

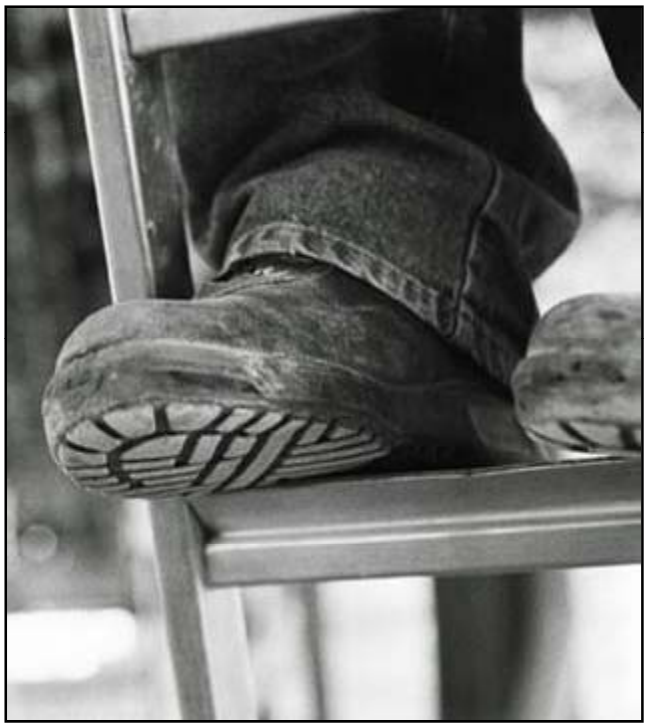
- Hole—measures 1 to 12 inches wide
- Opening—greater than 12 inches wide
- Guard with standard railing
- Cover the hole or opening
- Attend the hole or protect with toeboard

Engineering

- Guardrails
- Portable Ladders
- Portable Anchor Points
- Elevated Controls
- Standard Working Surface
- Standard Work Shoes
- Fencing
- Fixed Ladders
- Fixed Anchor Points
- Floor Level Controls
- Non-Slip Working Surfaces
- Specially Designed Work Shoes

Wear Slip-Resistant Shoes

- Street shoes not intended for slip resistance
- Soft rubber sole for slip resistance
- Sole tread with channels
- Still need to walk carefully
- Testing available



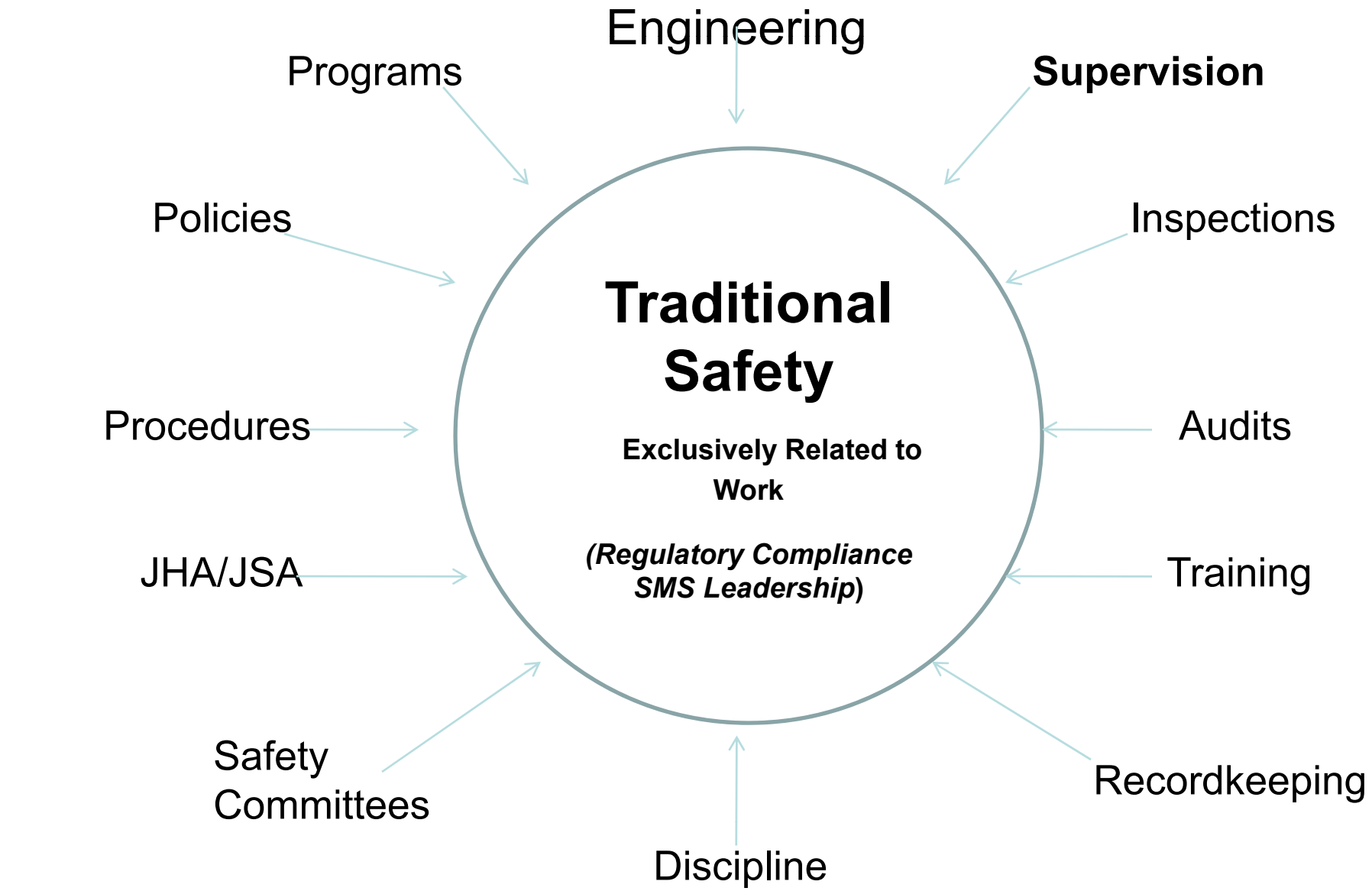
Engineering

- Guardrails
- Portable Ladders
- Portable Anchor Points
- Elevated Controls
- Standard Working Surface
- Standard Work Shoes
- Technology
- Fencing
- Fixed Ladders
- Fixed Anchor Points
- Floor Level Controls
- Non-Slip Working Surfaces
- Specially Designed Work Shoes
- Specific Systems to address the risk

Engineering?

Be Alert, Use Common Sense

- Be aware of the hazards
- Pay attention to where you are going
- Adjust your stride according to the walking surface
- Make wide turns at corners
- Don’t block your vision when carrying items


Engineering
Programs
Supervision
Policies
Inspections
Traditional Safety
Exclusively Related to Work
(Regulatory Compliance SMS Leadership)
Procedures
Audits
JHA/JSA
Training
Safety Committees
Recordkeeping
Discipline

Legal Help

- Injury Analysis & Causation
- Code Compliance & Standards
- Biomechanics
- Construction Defects
- Flooring Defects & Analysis
- Mis-steps

Risk Assessment

- ST & F Audit
- Training to conduct a risk assessment
- Certification for risk assessment
  - g.higbee@mchsi.com
  - Contact Information
  - Sample checklist
- Review accident history
- Evaluate by task
  - Elevated tasks
  - Multi level tasks
  - Requires travel
  - Carry & move tasks
  - Insure OSHA compliance
    - Administrative
    - Facility
  - Insure compliance with building codes

Area / Location		General Surface Condition - Check floors in aisles and work areas for slip and trip hazards.		Are floor openings properly guarded (railings, mid-rails and toe boards or covers)?		Are elevated work platforms 48" or higher (including top of machines) properly guarded?		Check the overall condition of platform access ladders.		Are elevated wall openings, doors, gates, etc. properly guarded?	
		OK	Not OK	OK	Not OK	OK	Not OK	OK	Not OK	OK	Not OK
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
Totals:											

NOTES: _____

_____

FACILITY: _____ **OK =** _____ **Not OK * =** _____ **Score:** _____

General Surface Condition - Check floors in aisles and work areas for slip and trip hazards.	Are floor openings properly guarded (railings, mid-rails and toe boards or covers)?	Are elevated work platforms 48" or higher (including top of machines) properly guarded?	Check the overall condition of platform access ladders.	Are elevated wall openings, doors, gates, etc. properly guarded?

17 **FLOORS AND ELEVATED WORK PLATFORMS (MINIMUM 5 SCORING OBSERVATIONS)**

A **General Surface Condition - Check aisles and work areas for slip and trip hazards. Are there and holes, surface damage/defects, etc.?**

B **Verify that floor openings are guarded by standard railings (including mid-rails and toe boards) or pit covers.**

C **Are elevated work platforms 48" or higher (including top of machines except presses), equipped with standard guardrails (42” top rail, mid-rail, and toe board where required)?**

D **Check the overall condition of platform access ladders. Rung width minimum 16" with 7" clearance behind rung. Fall protection or safety cage is required on fixed ladders over 20' in height. Cage must start at a height of 7' to 8' from floor. Maximum 9.5" spaced opening between cage banding. Cage 27"-28" from center line of rung and flared no less than 4" at bottom.**

E **Are elevated wall openings, doors, gates, etc. properly guarded? Should not swing out without properly guarded platform extension, should have barriers when open and not in use, toe boards where applicable, grab handles, etc.**

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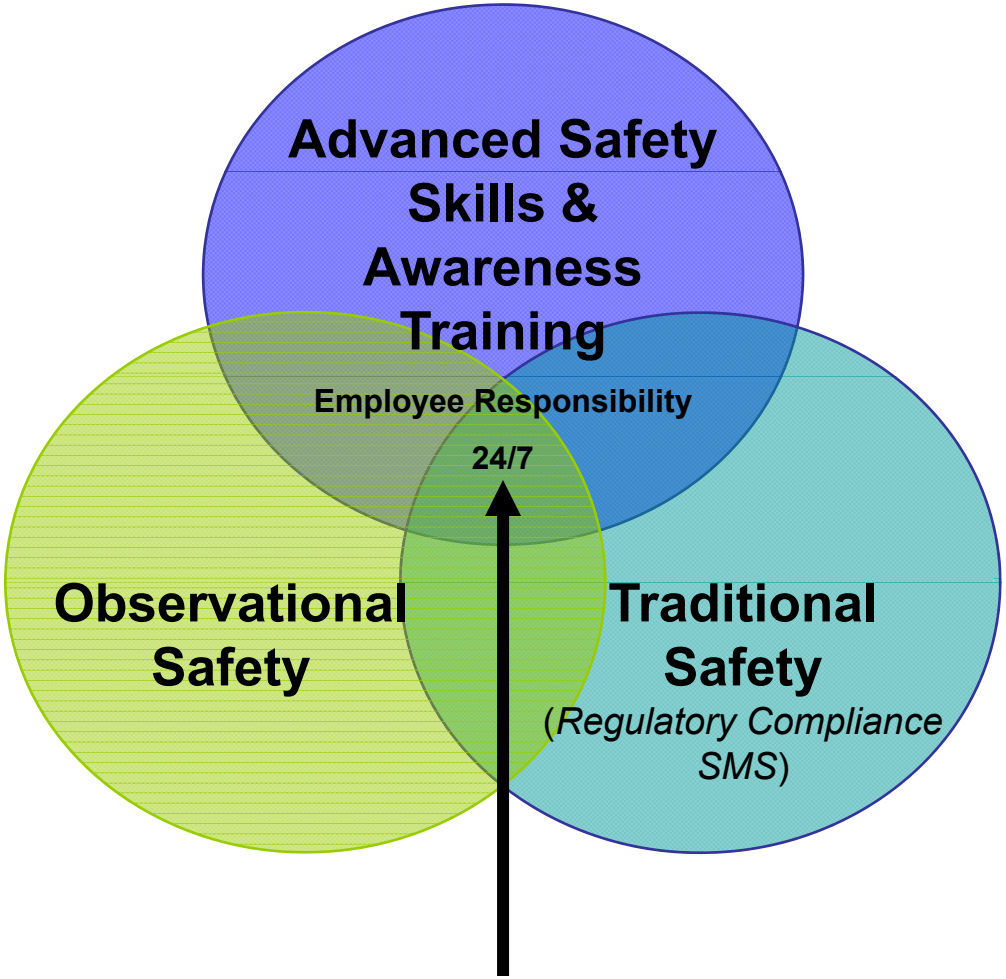
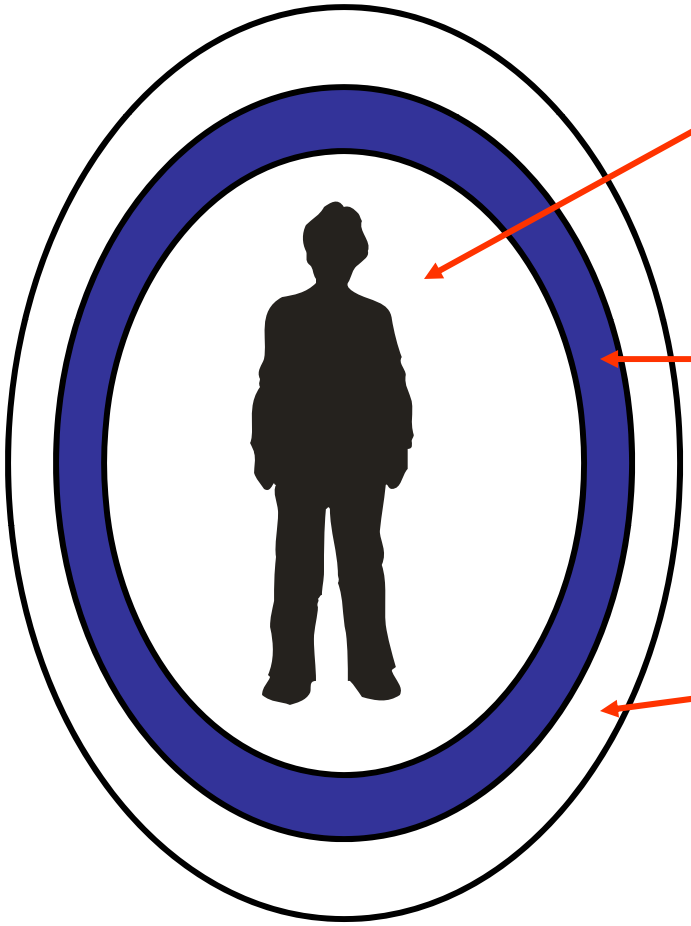


Optimum Integration Into The Process

Frustration With Slips, Trips & Falls

Event	Result
• Fall Protection Harness & Lanyard – if we make an error like loosing our balance	• The harness limits the result it does not prevent the error
• Handrail on steps – if we misstep and trip	• The handrail gives us something to help us regain our balance
• Just trip walking	• Nothing helps us here

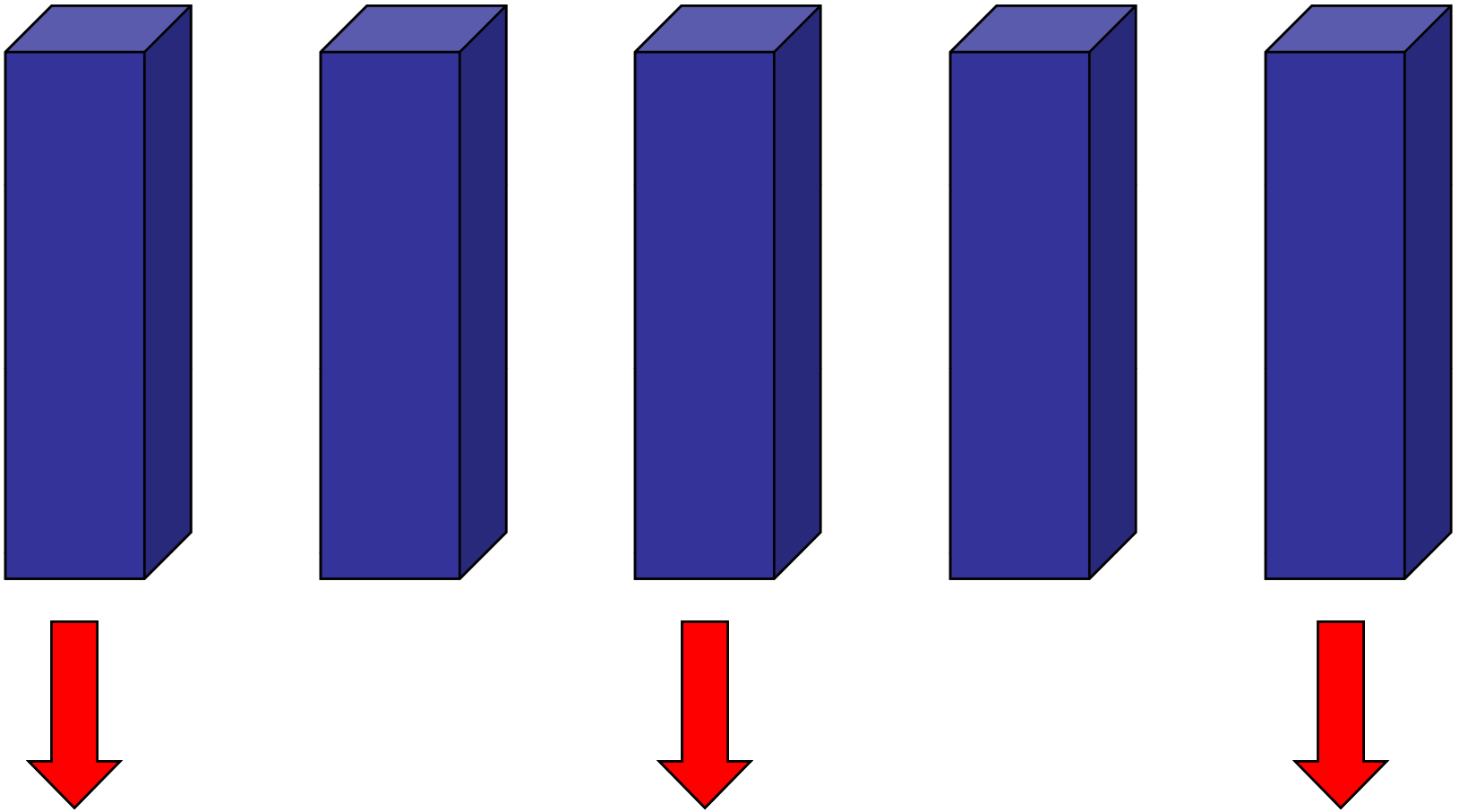
Sources of Unexpected



Self - own actions cause or contribute to incident/injury

Other People - someone else's behavior causes or contributes to incident/injury.

Equipment - something unexpected happens without you or someone else involved (e.g. wire rope breaks, traffic lights start working incorrectly, coupling fails, hose bursts, etc.)

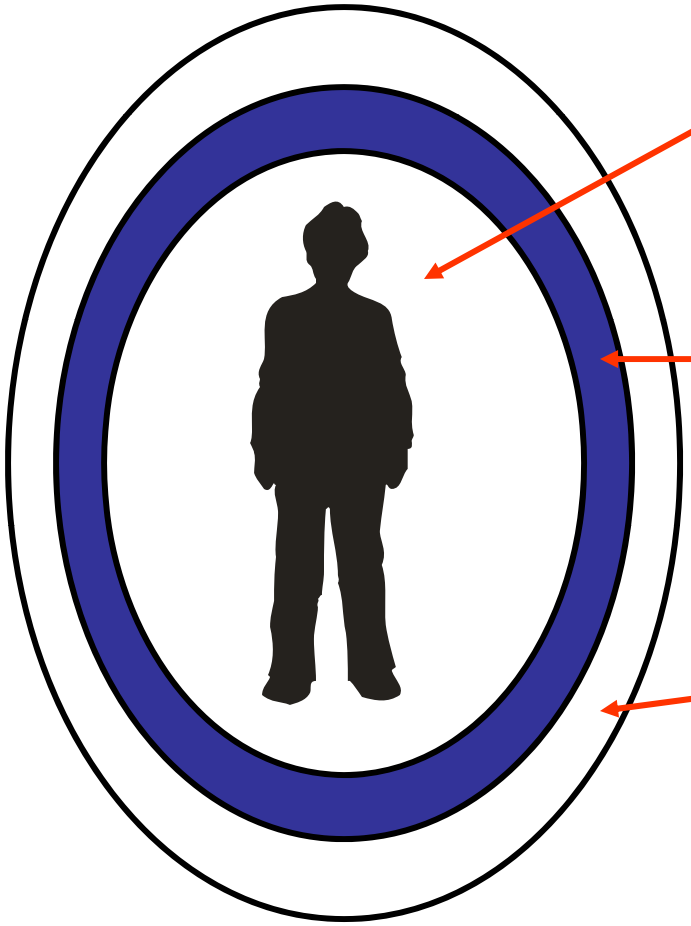


Hazardous Energy

Person

Unexpected

Sources of Unexpected



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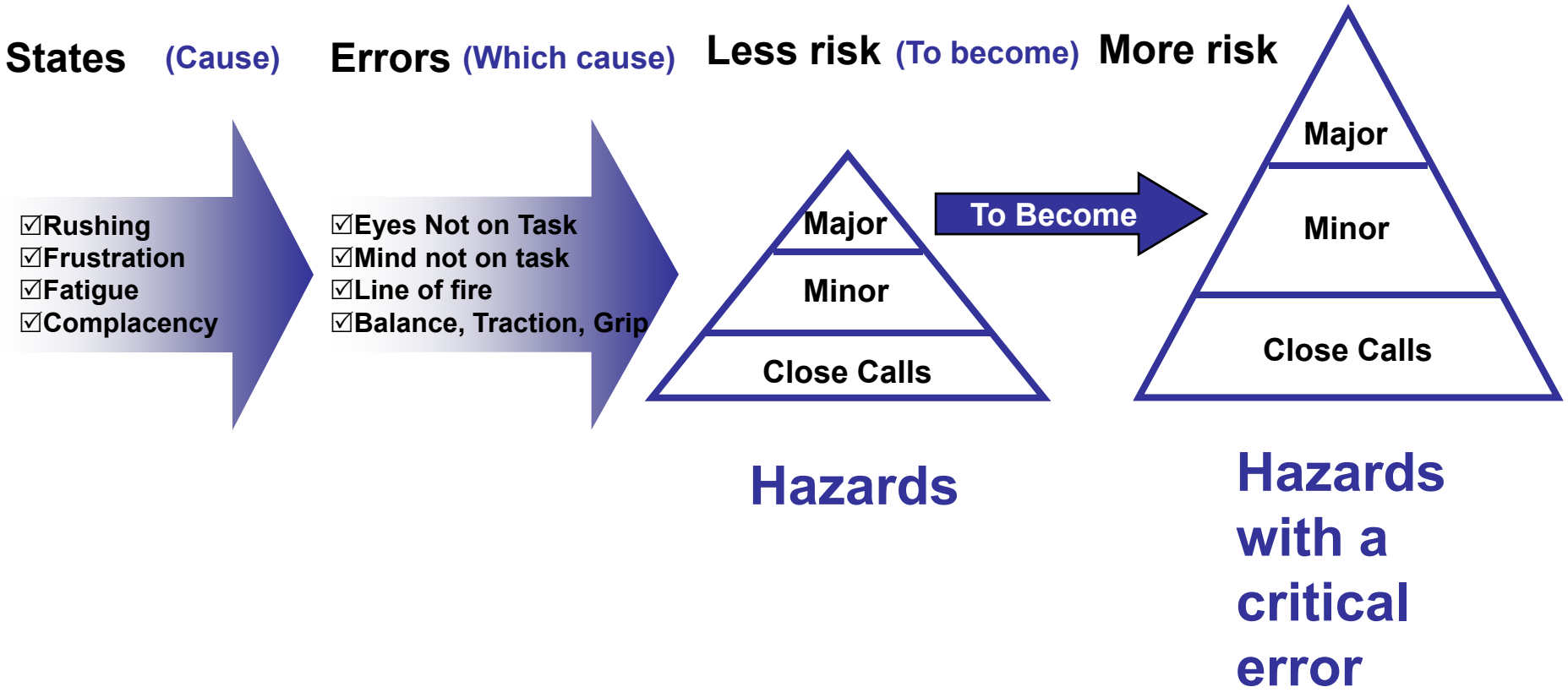
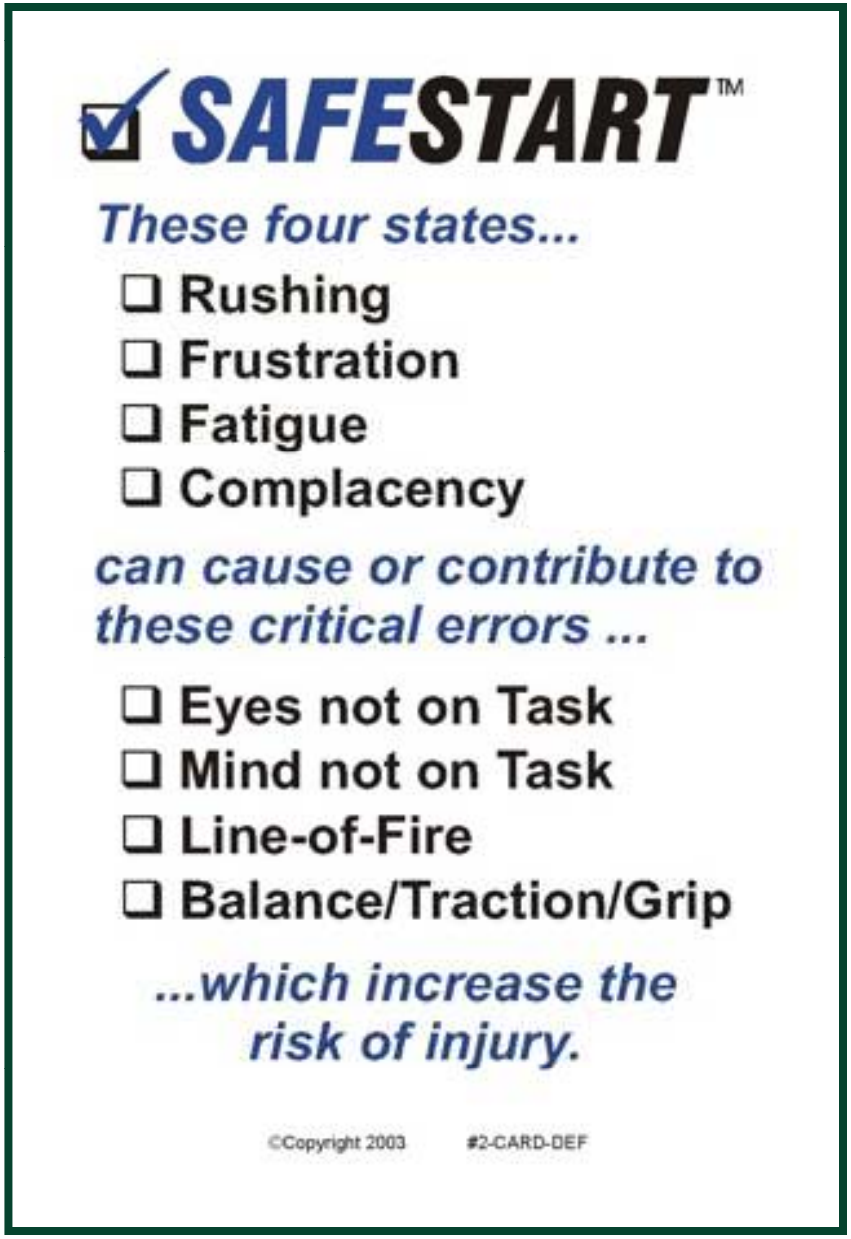
Knowing About the SafeStart Injury Risk Pattern is Only the Beginning




SAFESTART™
These four states...
Rushing
Frustration
Fatigue
Complacency
can cause or contribute to these critical errors ...
Eyes not on Task
Mind not on Task
Line-of-Fire
Balance/Traction/Grip
...which increase the risk of injury.
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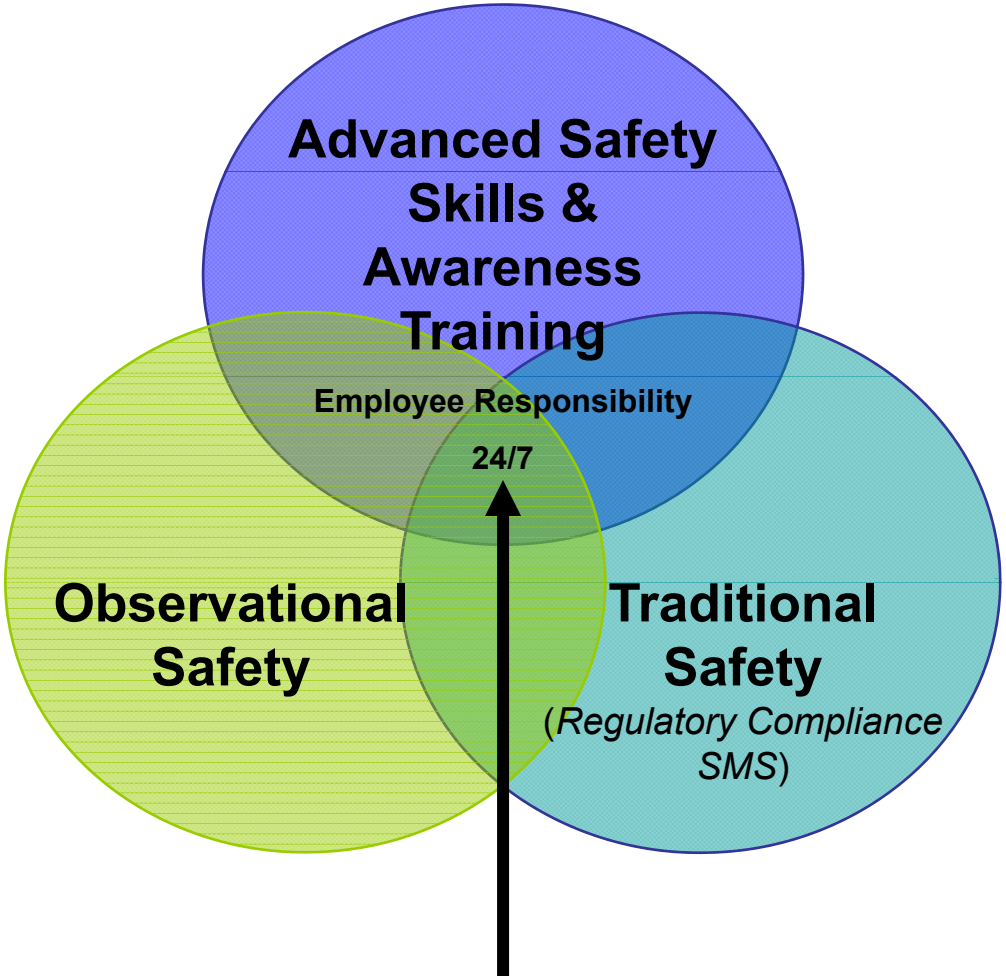
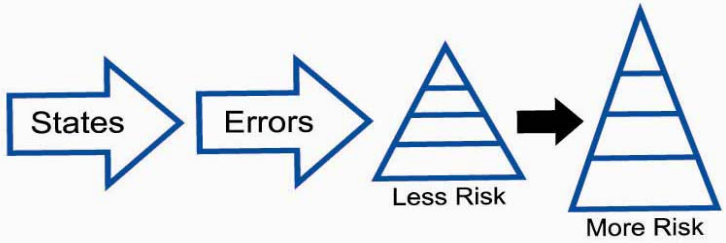


Optimum Integration Into The Process

SAFESTART™

Critical Error Reduction Techniques *(CERT)*

1. *Self-trigger on the state (or amount of hazardous energy) so you don't make a critical error*
2. *Analyze close calls and small errors (to prevent agonizing over big ones)*
3. *Look at others for the patterns that increase the risk of injury*
4. *Work on habits*



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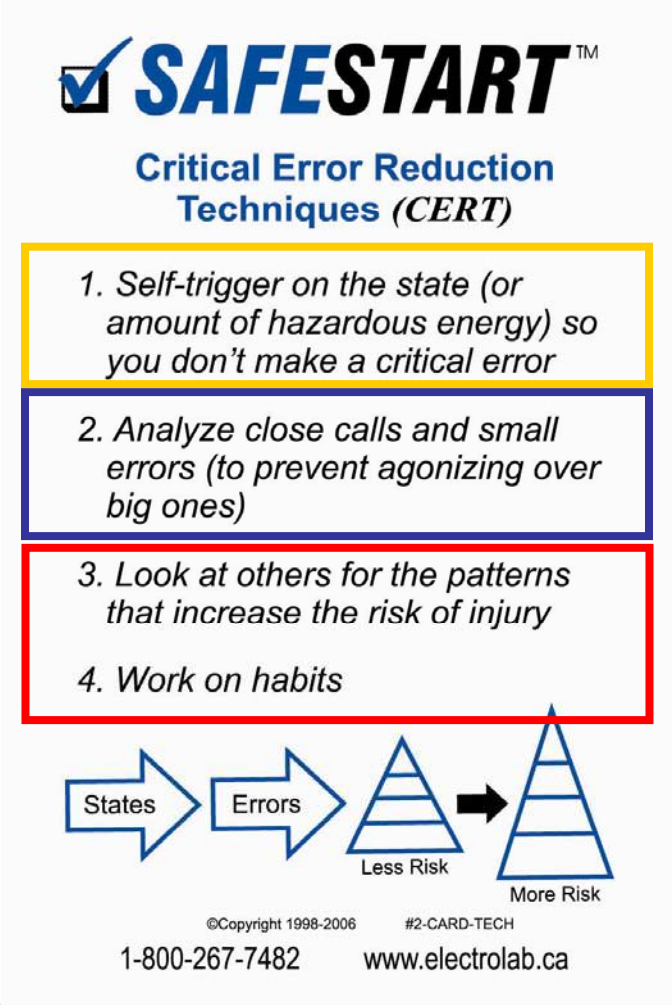
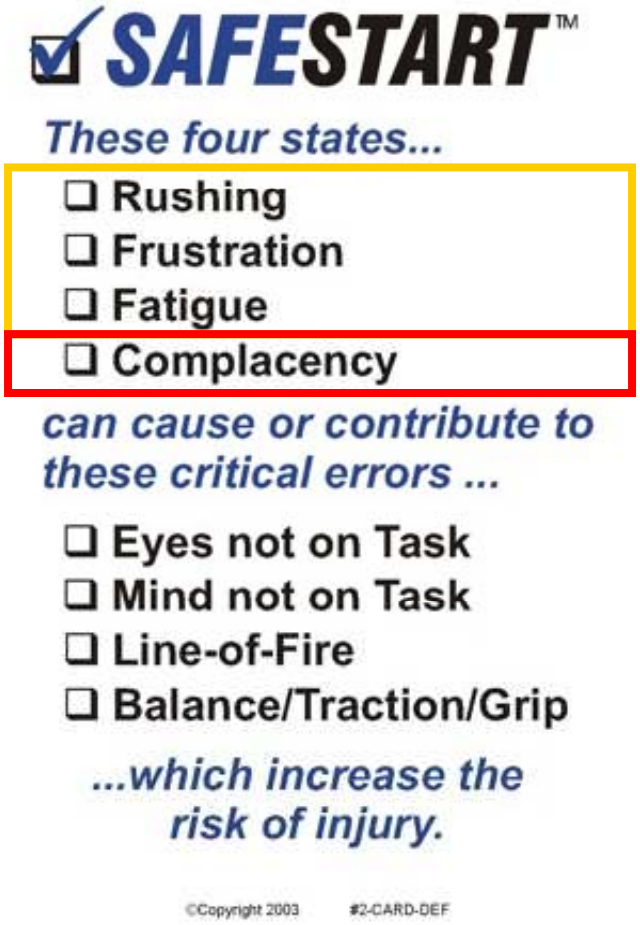
Analyzing Close Calls & Errors





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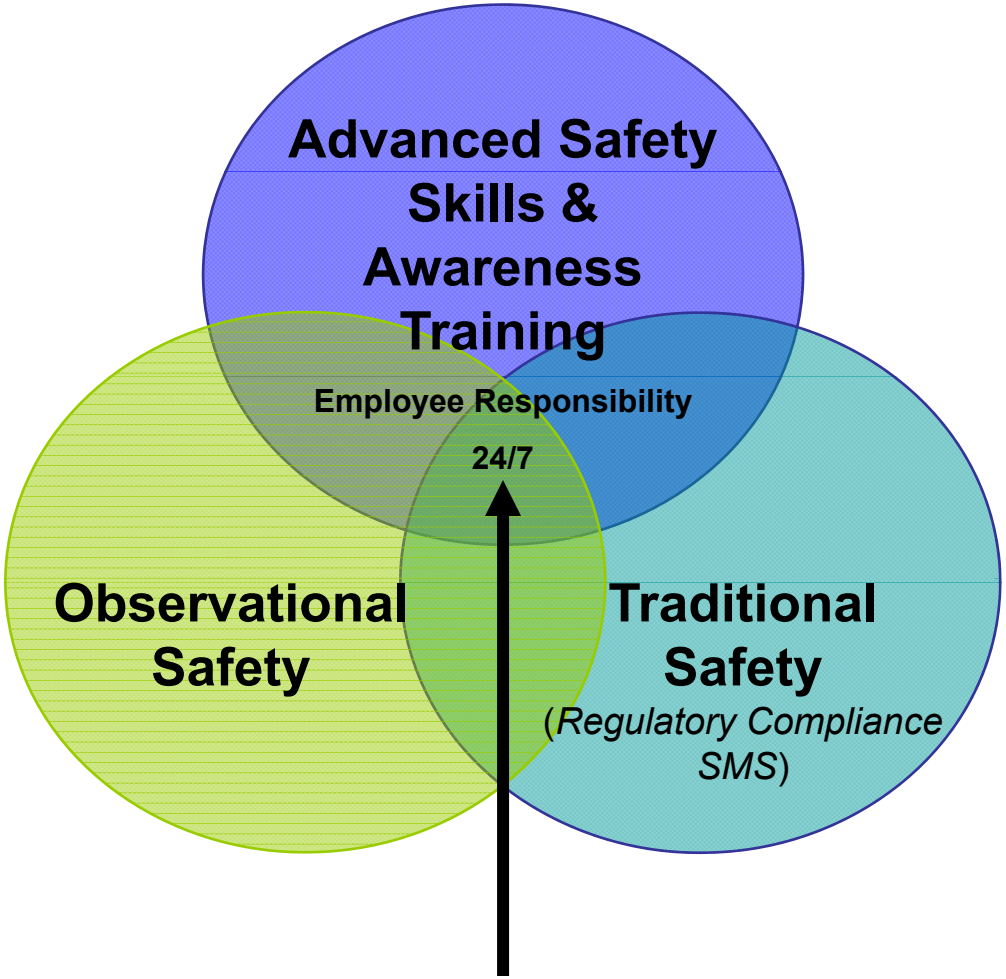

Optimum Integration Into The Process

Review

- Slips, Trips & Falls need to be dealt with
- Compliance is necessary and help full but we need to do more
- Do a risk assessment
- Human factors can not be ignored
- There is a way to improve individual

- Never give up

Questions

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