

SAFETY ISSUES IN THE CONSTRUCTION WORLD

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HAZARDS

Fatal Four

- Falls
- Caught-In or –
Between
- Struck-By
- Electrocution

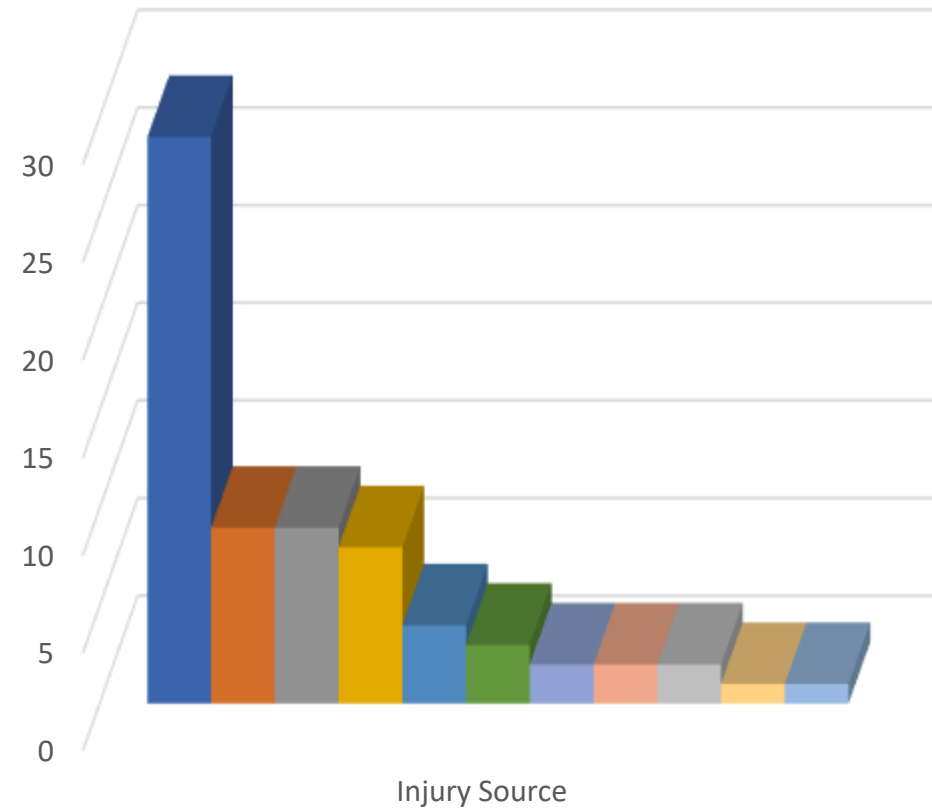
Three Threats

- Falls
- Hand Injuries
- MVA's

FALLS

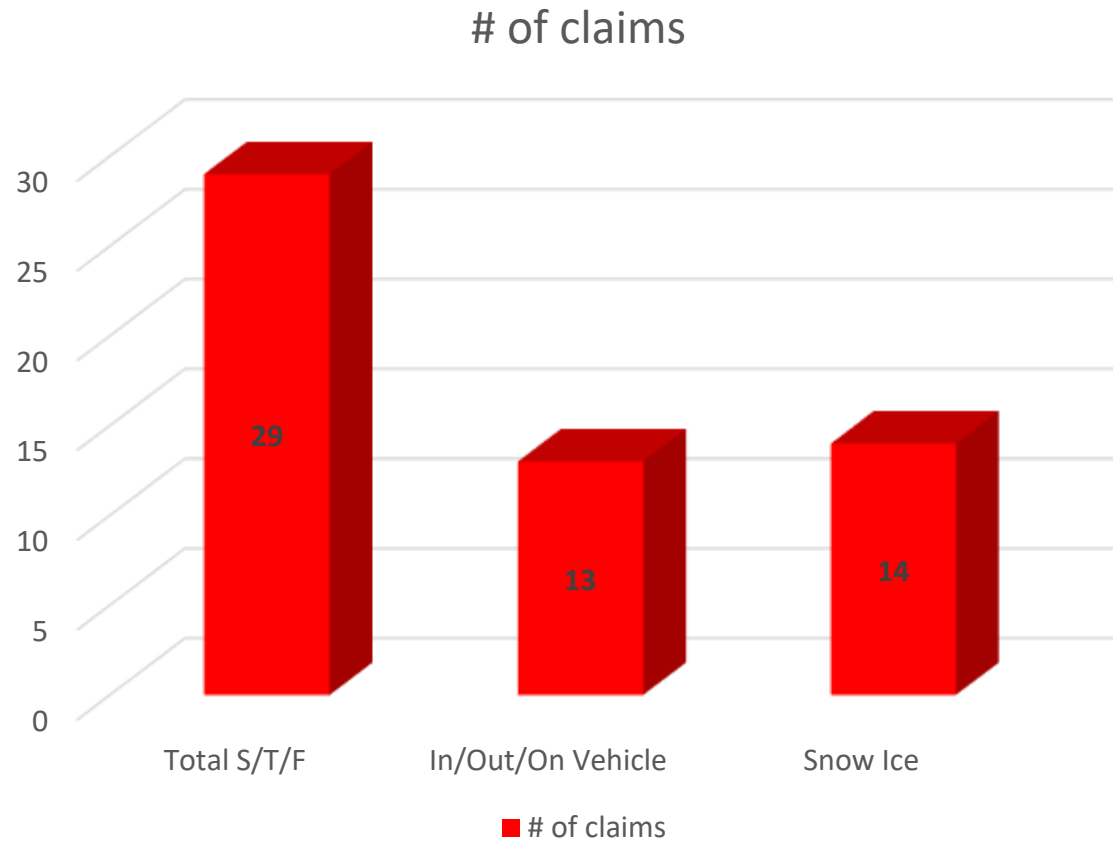
- Falling off equipment
- Slips and falls on ice and snow

How they got hurt, 2022 edition.

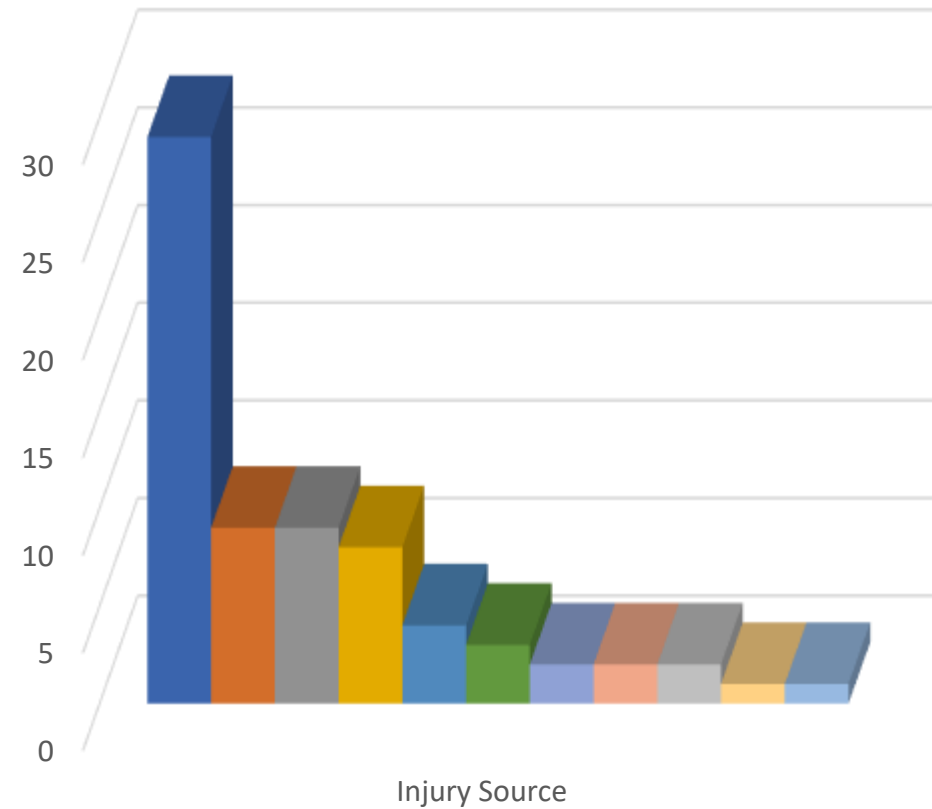


- Slip/trip/Fall
- Strain/Sprain
- Struck By
- Cut/Puncture/Scrape
- SBFO
- Insects
- Caught in or Between
- Motor Vehicle Upset
- Strike Against
- Burn/Scald
- Foreign Body

Slip, Trips, and Falls



How they got hurt, 2022 edition.



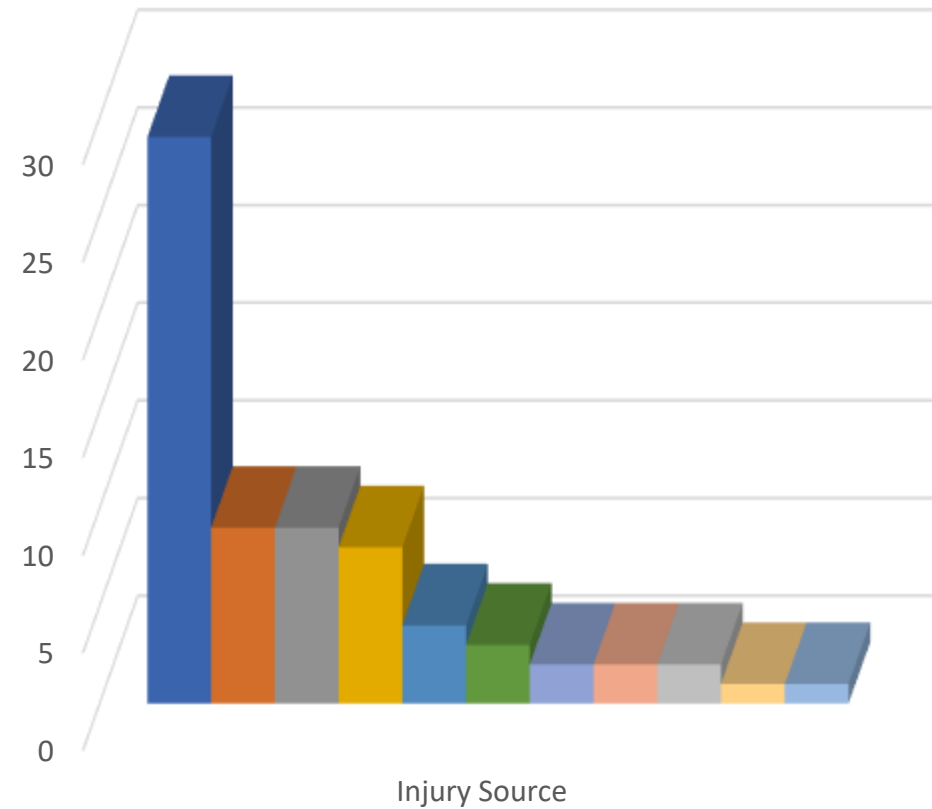
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HAND INJURIES

- 20% of all Highway Department claims involve the hands!
 - *Replacing cutting edges*
 - *Material handling*
 - *Hand and power tool usage*

How they got hurt, 2022 edition.



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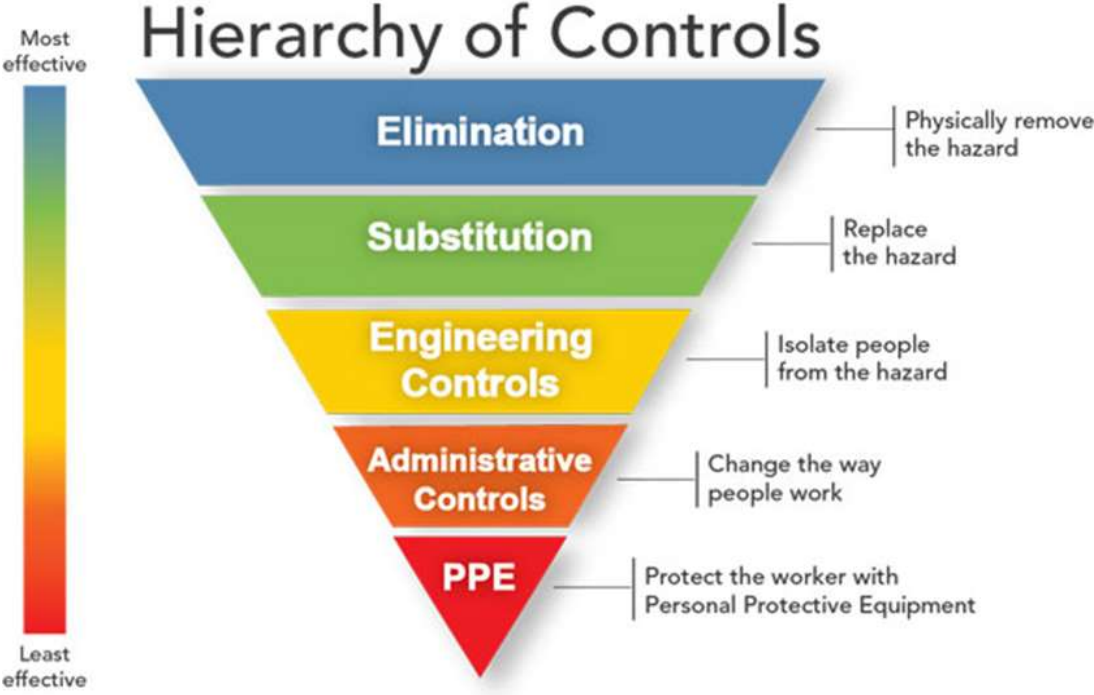
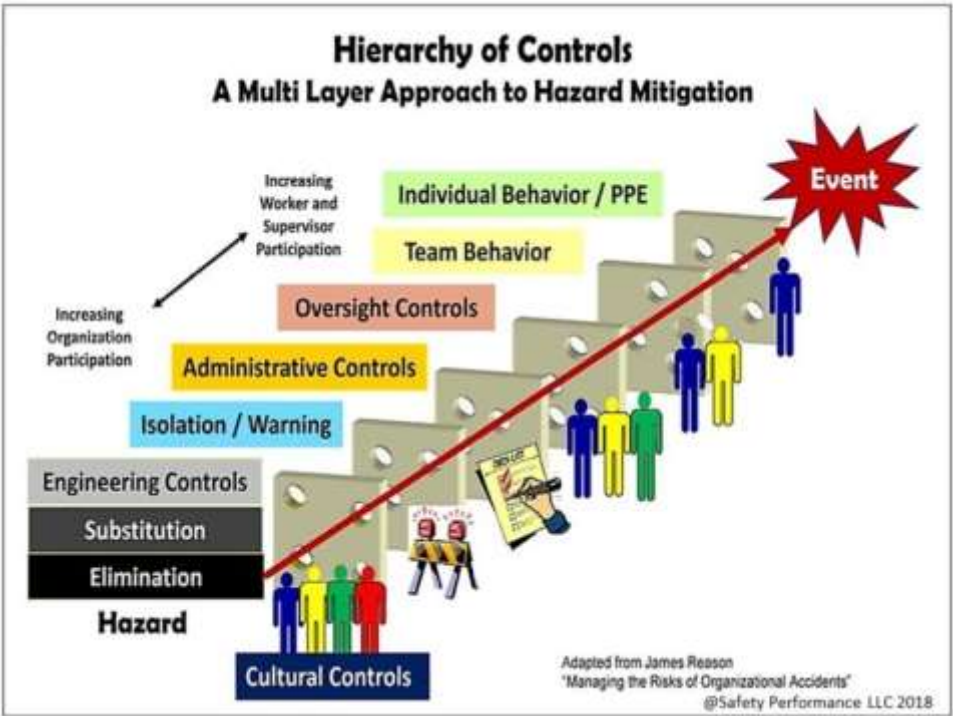


MVA's

MVA'S

- Low-frequency, High-Impact Events
- Average about 3/yr for last 3 years
- 2/3rds of incidents involve “upsets”
- 2019-2022: 9 of the 10 “worst” injuries have involved STF’s (7) or rollovers (2)
 - *Broken femurs*
 - *Destroyed shoulders*
 - *Blown-out knees*
 - *Traumatic Brain Injuries*

How do we fix it?



Preventing Hand Injuries

- Select and provide gloves that provide cut and impact protection.
 - Cut Level 3 – 5 (based on task)
 - Impact Level 1
- Make sure it fits and is comfortable.
- Eyes on task/Mind on Task

The NEW **Impact Standard**
Are you ready?



Distance from tip

| Performance Level | Mean (kN) | All Impacts (kN) |
|-------------------|-----------|------------------|
| 1 | ≤ 9 | < 11.3 |
| 2 | ≤ 6.5 | ≤ 8.1 |
| 3 | ≤ 4 | ≤ 5 |

Table 1. Classification for Impact Resistance

Test Points
Distance from tip of finger

- 25mm from tip
- 50mm from tip
- ▲ Knuckle Impact

ANSI / ISO 15713-1
ANSI / ISO 15713-2
ANSI / ISO 15713-3

MCR SAFETY

| Old ANSI Cut-Resistant Levels (Grains) | New ANSI Cut-Resistant Levels (Grains) | Applications By Cut Level |
|--|--|--|
| 1 (200) | A1 Light cut hazards (200) | Material handling, small parts assembly (sharp edges), packaging, warehouse, general purpose, forestry, construction |
| 2 (300) | A2 Light/medium cut hazards (300) | Material handling, small parts assembly (sharp edges), packaging, warehouse, general purpose, forestry, construction, pulp and paper, automotive assembly |
| 3 (1000) | A3 Light/medium cut hazards (1000) | Material handling, small parts assembly (sharp edges), packaging, warehouse, general purpose, forestry, construction, pulp and paper, automotive assembly |
| 4 (1800) | A4 Medium cut hazards (1800) | Appliance manufacturing, bottle and light glass handling, carving, dry-wall work, electrical, carpet installation, HVAC, pulp and paper, automotive assembly, metal fabrication and handling, packaging, warehouse, aerospace industry, food prep processing |
| 5 (2800) | A5 Medium/heavy cut hazards (2800) | Appliance manufacturing, bottle and light glass handling, carving, dry-wall work, electrical, carpet installation, HVAC, pulp and paper, automotive assembly, metal fabrication and handling, packaging, warehouse, aerospace industry, food prep processing |
| | A6 High cut hazards (3000) | Metal stamping, metal recycling, pulp and paper (changing roller blades), automotive assembly, metal fabrication, sharp metal stamping, glass manufacturing, window manufacturing, recycling plant/wrapping, HVAC, food prep processing, meat processing, aerospace industry |
| | A7 High cut hazards (4000) | Metal stamping, metal recycling, pulp and paper (changing roller blades), automotive assembly, metal fabrication, sharp metal stamping, glass manufacturing, window manufacturing, recycling plant/wrapping, HVAC, food prep processing, meat processing, aerospace industry |
| | A8 High cut hazards (5000) | Metal stamping, metal recycling, pulp and paper (changing roller blades), automotive assembly, metal fabrication, sharp metal stamping, glass manufacturing, window manufacturing, recycling plant/wrapping, HVAC, food prep processing, meat processing, aerospace industry |
| | A9 High cut hazards (6000) | Metal stamping, metal recycling, pulp and paper (changing roller blades), automotive assembly, metal fabrication, sharp metal stamping, glass manufacturing, window manufacturing, recycling plant/wrapping, HVAC, food prep processing, meat processing, aerospace industry |

Preventing Slip/Trips/Falls

- Ice Cleats!
- 3-points of contact climbing into/out of vehicles
- Use ladders/platforms/steppers instead of climbing on equipment.
- For the love of all that is holy:
 - Do not jump of the tailgate of the truck to the ground!
 - No jumping!
 - I mean it!



Preventing MVA's

- Eliminate distractions
- Monitor and manage fatigue
- Inspect and Maintain your equipment
- Wear Seatbelts!
 - Before the vehicle moves!
- TTCZ's
- Colors





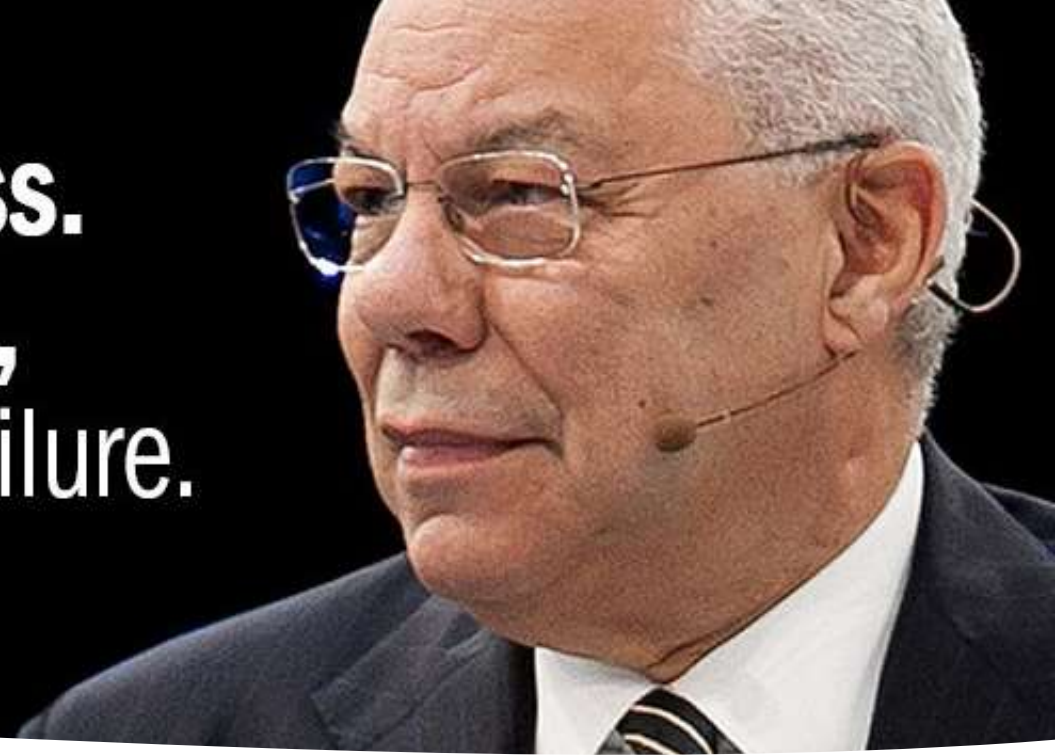
MVA's



Safety Leadership

“Leadership is the art of accomplishing more than the science of management says is possible.”

There are no **secrets to success.**
It is the result of **preparation,**
hard work, and learning from failure.



Demonstrate Safety Leadership

- **#1 thing you can do:**
 - **Talk about Safety!**
 - **Eyes on task/Eyes on Path/Mind on Task**
 - **Weekly safety meetings - Daily safety huddles/JSA's**
 - **After-action reviews when an incident happens**
 - **What went wrong?**
 - **What can we do better?**
- **#2 thing you can do:**
 - **Lead by example**



Questions/Comments

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