Safety Educational Webinar Series – Preventing Slips, Trips and Falls

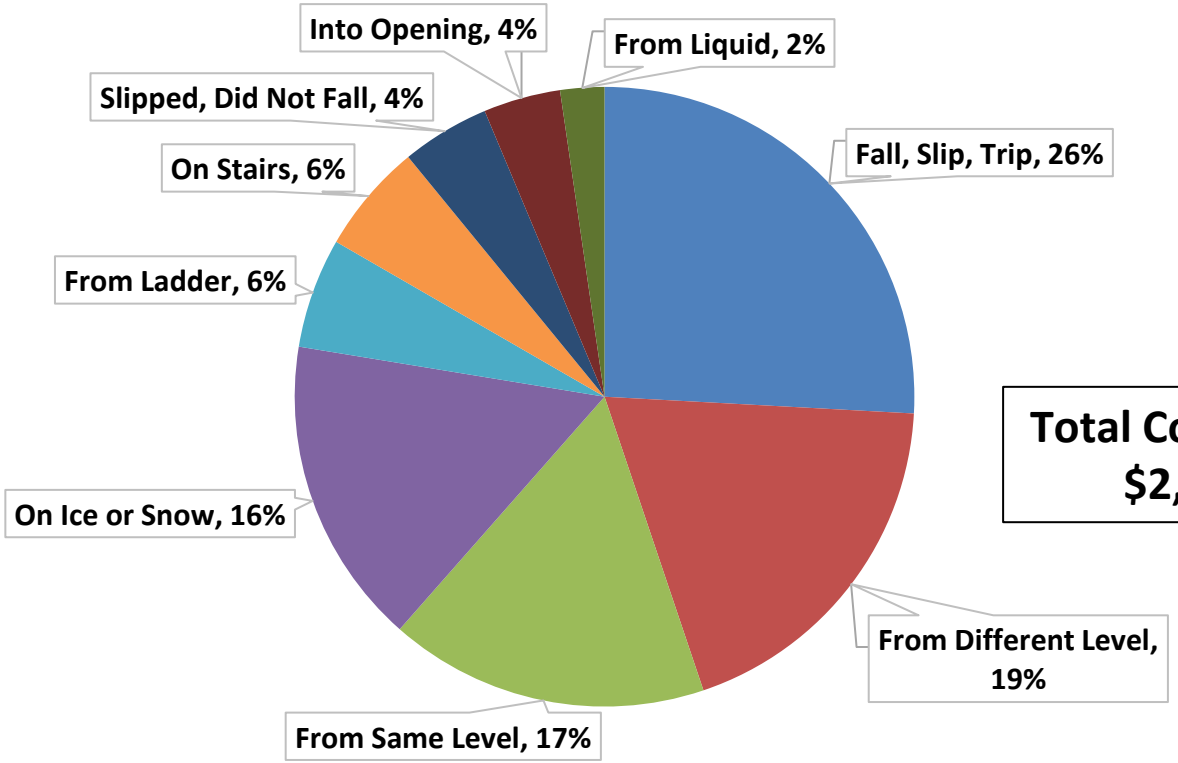
Have you ever lost your balance while confidently walking somewhere and for a split second you aren't quite sure if you will stay upright or go tumbling to the ground?

Public Enemy #1

- With the exception of motor vehicle accidents, falls are the single biggest cause of occupational death and injury in the United States.

- Falls from as little as 4 to 6 feet can cause serious lost-time accidents and sometimes death.

Fall or Slip Claims by Percentage: 2019-2022



Total Cost of Claims: $2,345,079

Data current as of 5.31.2023

Slips

- Slips are primarily caused by a loss in the traction between the shoe and the walking surface.

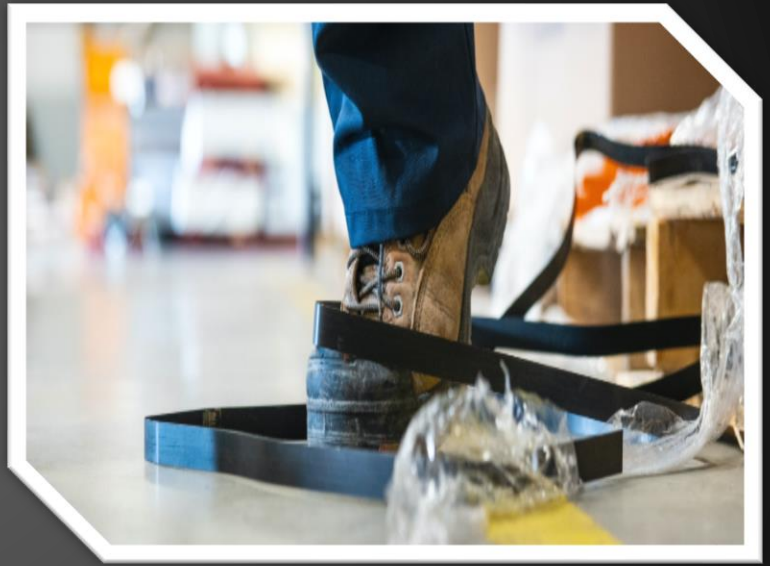
- Slips and falls occur when:
  - The front foot slips forward
  - The rear foot slips backward

- **This is often compounded by wearing the wrong footwear.**

Trips

- Trips and falls occur when the front foot strikes an object and suddenly stops.

- The upper body is thrown forward and a fall occurs.
  - 1/2” rise can cause a person to “stub” their toe resulting in a trip and fall.



Falls

- Motion that happens whenever you move too far off your center of balance.
- Typically happen as a result of a slip or trip.
- Two basic types: elevated and same-level.

Same Level Falls

- Statistics show that the majority (66%) of falls happen on the same level resulting from slips and trips.

- What are some common hazards that could cause a same level fall?

Elevated Falls

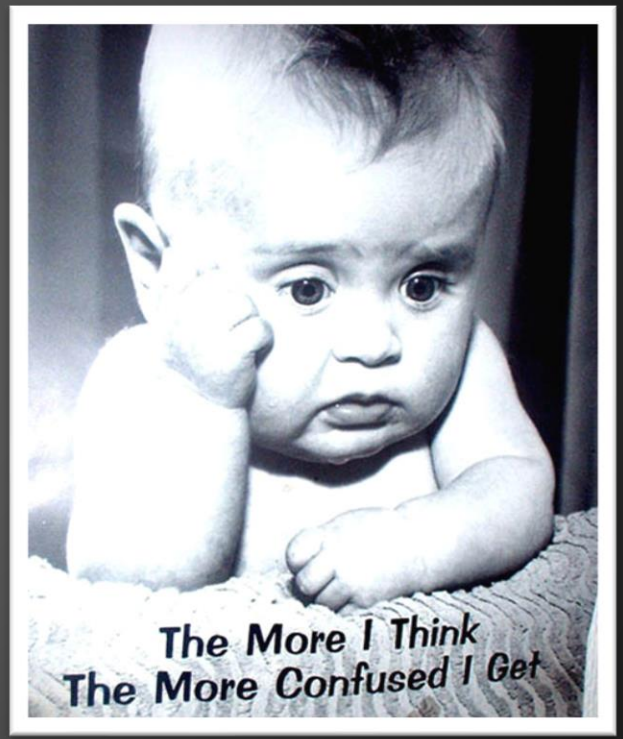
- Elevated falls do not occur as frequently as same level falls (34%).
- The resulting injuries and costs are however, usually greater.

Elevated Falls

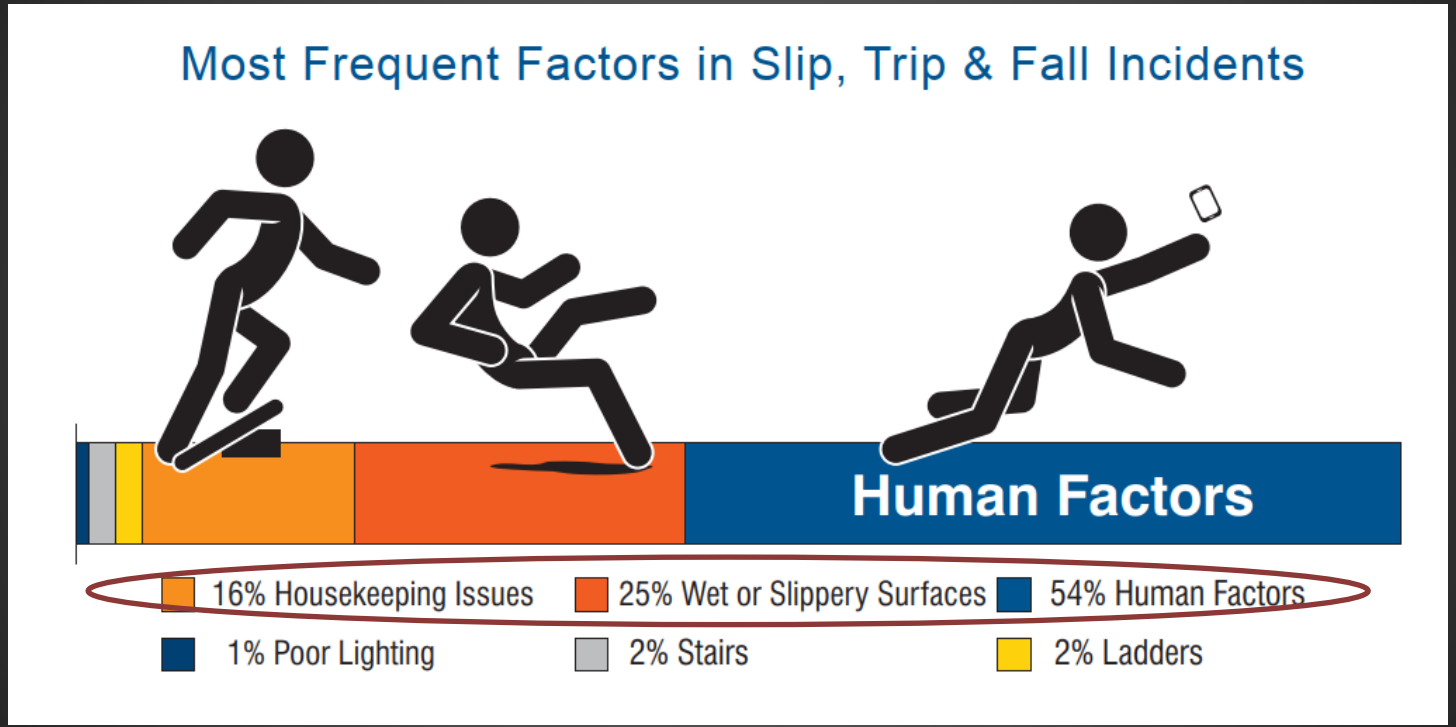
- Common elevated falls in the workplace include:
  - Falls from vehicles and equipment
  - Falls from docks and elevated work platforms
  - Falls on stairs
  - Falls from ladders

New Approach To Preventing STF?

- Sometimes we need to let go of that old way of thinking.
- **Physical Factors & Mental Factors**
- Need a reliable way to avoid distractions.

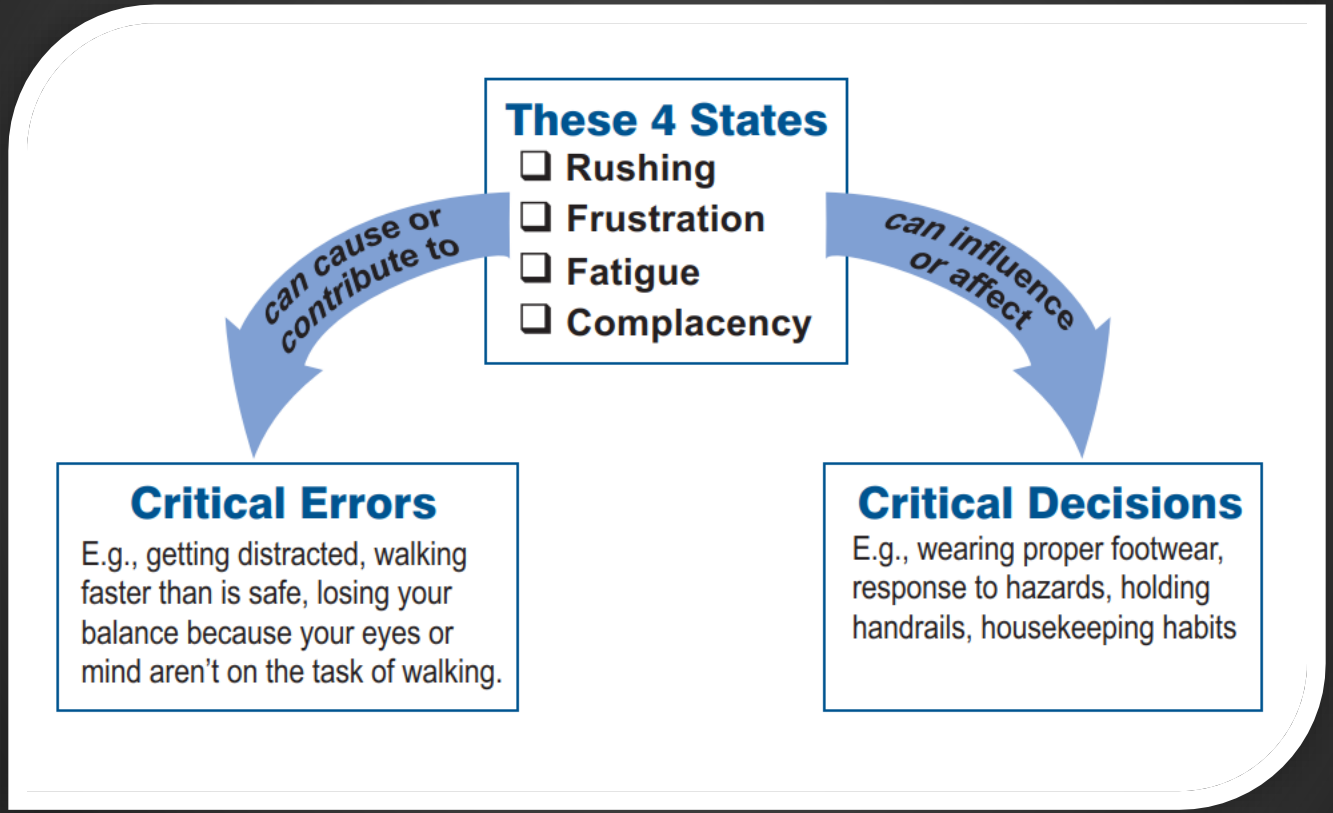


The Big 3 Causes Of STF

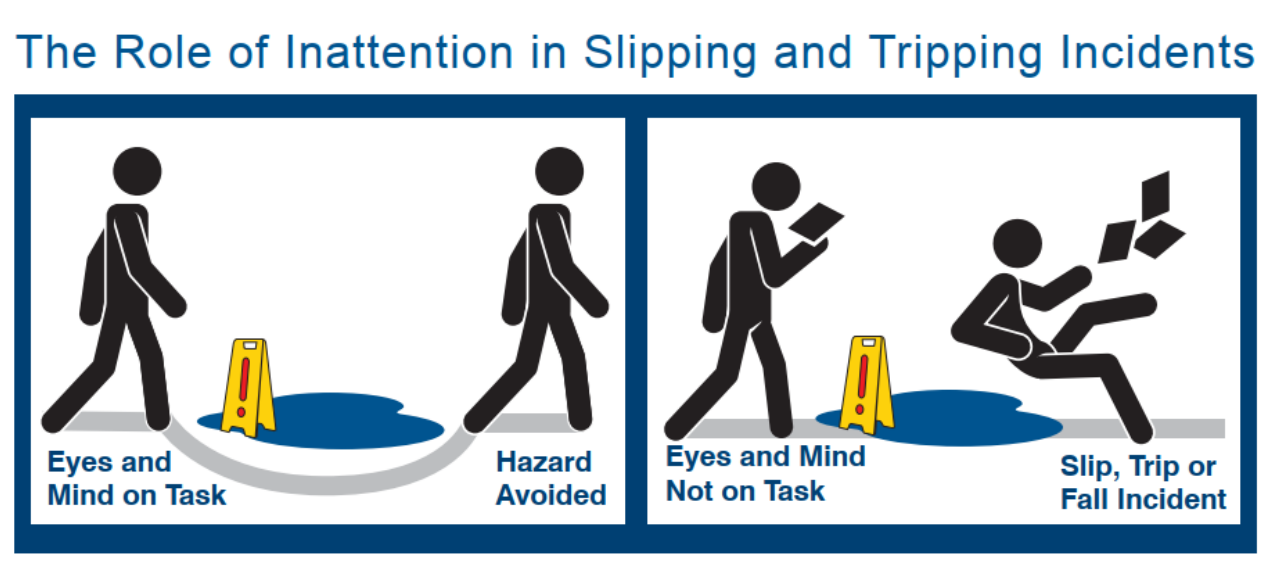


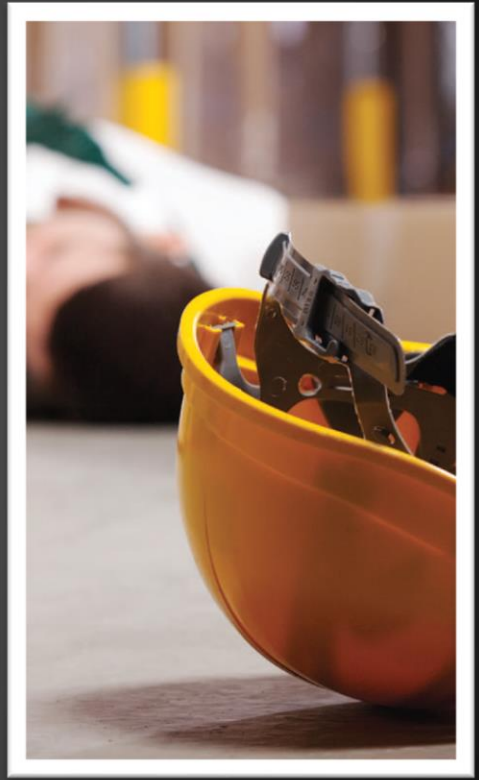
* From Safety Daily Advisor's Survey

4 States That Affect STF



The Danger of Human Error





Balancing Responsibility

Who Is Responsible for Preventing Slips, Trips and Falls?

Human factors training encourages employees to take personal responsibility and build safety habits that, combined with a company's responsibilities, can drastically reduce the frequency of slip, trip and fall incidents.

Company Responsibility	Personal Responsibility
Provide training	Actively participate in training
Properly maintain work sites	Report maintenance issues
Develop policies/procedures	Follow policies/procedures
Invest in quality housekeeping products	Follow housekeeping requirements
Develop company safety culture	Participate in safety culture
Provide regular reminders on safe walking habits	Analyze and improve walking habits
Improve off-the-job safety with human factors training	Apply lessons from human factors training when off the job

Solving STF's

- STF are a complex problem.
- Safety programs provide rules and procedures.
- Need to address ALL factors that contribute to STF.

Physical Factors – Regular Maintenance

- Maintenance is about eliminating hazards that are created over the course of work.
- Replace cracked, worn or aged surfaces.
- Anti-slip cleaning products.
- Winter plan for entranceways and parking lots.

Physical Factors – Winter Weather

- Sudden snowfalls are the cause of many STF's.
- Constantly changing, inconsistent working surfaces.
- Recognition and adjusting to hazards is important.

Ice Cleats

Yaktrax Pro Snow & Ice Shoe Cleats - $24.95

Geroline Mid-Sole Ice Cleats - $30.00

Physical Factors – Policies

- Policies and procedures are ways to protect employees.
- They are hard to remember when we need them the most!

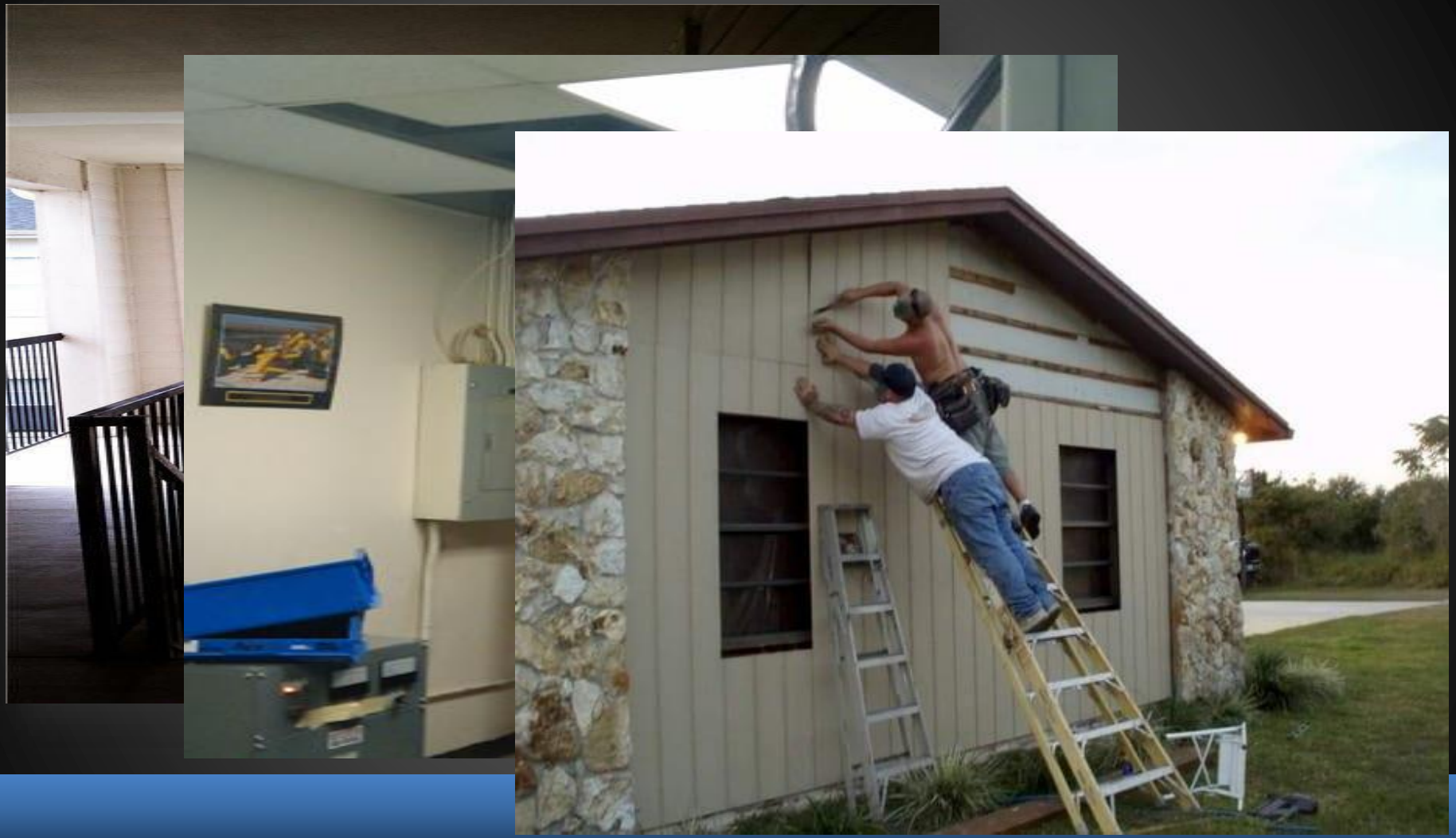
Physical Factors - Equipment

Step ladders are hinged ladders that must be used in the open, or "A" frame, position

Straight ladders are non-self-supporting ladders that include single section and extension ladders

Self-Supporting Ladders

- Portable self-supporting ladders can stand up on their own.
- Standard stepladders have a front section with steps for climbing and a back section with two rear legs, which give them their stability.
- It must have a metal spreader or locking device strong enough to securely hold the front and back sections in the open position.



A person's maximum **safe** reaching **height** is approximately 4 feet higher than the **height** of the **ladder**. For example, a typical person can **safely** reach 8 feet on a 4 feet **ladder**.

The highest permitted standing level on a **stepladder** is two **steps** down from the top.

Non Self-Supporting

- Non-self-supporting ladders must be leaned against a stable structure strong enough to support the weight of the ladder, user, tools, and materials being used by the worker on the ladder.

Ladder Angle (4 to 1 Ratio)

- To achieve the proper work angle, set the ladder base 1/4th the distance of the working height back from the vertical support.

Slip Resistant Feet

Firm Base

Soft Base!?!

Selection Is The Key!

- Step ladders are great when you're not going to be climbing very high.
- Choose a ladder with a height appropriate to the height needed for the job.

When accessing a roof or platform, the ladder must extend a minimum of three rungs above the elevation.

Discard Damaged Ladders

Duty Ratings

Preventing Fatal Elevated Falls

If ladders are so easy to use why do so many people fall from them?

Wastewater Treatment Incident - Murray Client


AHA Moment!
Traditional compliance approach is NOT having an impact here…

Decisions…The Way We Think…

- Let's look at an example of how the mind works and the way we think…

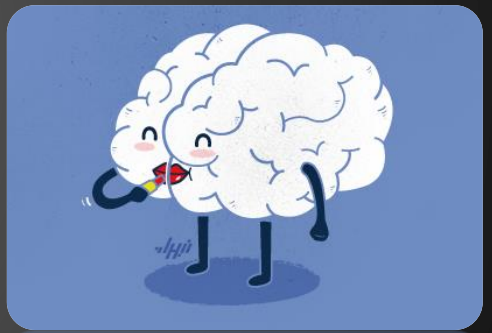
Mary’s mother

Mary's mother has four children: April, May, June and …?

If you answered "July," you've been tricked. The correct answer is Mary. Your brain is built to be efficient and looks for patterns in everything. Even though the answer is contained in the first two words of the riddle, your brain automatically goes to "July," because that's the next month.

The Mind

- How the mind works…
- Our brain looks for patterns, and our “automatic” systems take over..
- Easier – takes a lot less energy.
- We evaluate the world based on our past experiences.



Take A Minute And Read The Slide . . . . .

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90% Intuitive vs. 10% Conscious Thinking

- Intuitive Thinking
  - decisions are arrived at without conscious thought, – more of a reactionary response based upon input from prior experiences.

90% Intuitive vs. 10% Conscious Thinking

- Conscious Thinking
  - critical or analytical decision making
  - facts or data are applied and weighed, and
  - consequences / outcomes are considered.

90% Intuitive vs. 10% Conscious Thinking

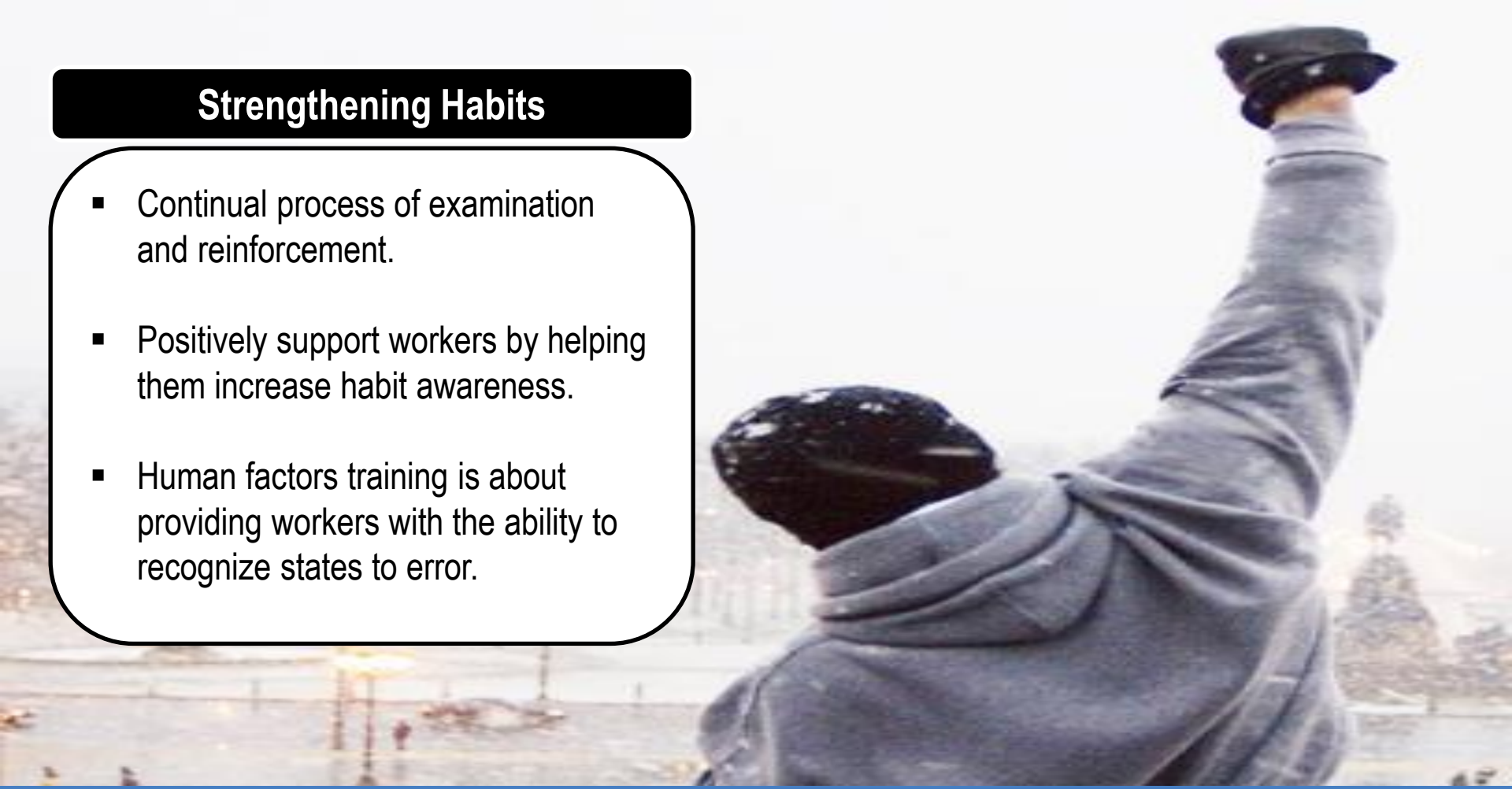
- Conscious Thinking
  - Thinking works best when you ask the following questions:
    - Does this make sense?
    - If so, why?
    - If not, why not?

BLR Survey

- 80% of slip, trip and fall incidents could have been prevented with stronger safety habits.
- When workers are in a rush their ability to make good decisions is seriously compromised.
- Reducing the risk is key.

Strengthening Habits

- Continual process of examination and reinforcement.
- Positively support workers by helping them increase habit awareness.
- Human factors training is about providing workers with the ability to recognize states to error.



Human Factors Training

- It must include several learning elements and blend them in a proven training format:
  - Address rushing, frustration, fatigue and complacency;
  - Sustainable plan
  - Provide supervisors with support

Summary

- Everyone is at risk.
- Requires more than adhering to compliance measures.
- Personal safety skills are key!

Questions, Comments or Concerns?